Land Stewardship Proposal

For the

Kennedy Meadows Planning Unit

Submitted by: USDA Forest Service
Stanislaus National Forest

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Executive Summary

It is the desire of the Forest Service to engage in the oversight of the Kennedy Meadows Planning Unit so that the Beneficial Public Values and Objectives (BPVOs) developed by the Stewardship Council are preserved and enhanced in perpetuity. It is obvious that this parcel is special. However, Kennedy Meadows is not solely about the 240 acres of the PG&E owned parcel, but also how it serves to accentuate and integrate with the existing access and uses in the surrounding National Forest lands within the Kennedy Meadows canyon from Highway 108 to the boundary of the Emigrant Wilderness.

The Forest Service proposes to manage the Kennedy Meadows parcel holistically with the adjacent Forest Service lands within the entire Kennedy Meadows/Middle Fork Stanislaus River landscape. This landscape would become the Kennedy Meadows Management Area (KMMA) which would include the area from Highway 108 to the boundary of the Emigrant Wilderness. The Forest Land and Resource Management Plan (Forest Plan) would be amended to incorporate this management area and specific management direction, standards, and guides would be developed incorporating the BPVOs. The KMMA would emphasize that, to the extent allowed

by law, management and decision making will strive for a balance of the natural, cultural, social and economic values within this landscape.

Recreation uses and activities would be managed to preserve traditional uses and the transitional experience that currently exists as visitors move from the developed facilities (Forest Service campgrounds, trailhead parking area, and the privately operated Resort) in the northern section of the canyon into the undeveloped primitive wilderness experience at the southern end.

The Forest Service seeks fee title for the Kennedy Meadows parcel. We are proposing two options. If neither option is accepted, the Forest Service still needs to secure appropriate trail and access easements as part of the donation process.

Option 1

In the spirit of collaboration and compromise, the Forest Service is proposing to split the parcel. In consideration of concerns related to the Resort facilities/services, traditional uses, and the desire for "local" management, the Forest Service proposes only seeking title to the southern portion of the parcel just beyond (south of) the water tank (see attached map for proposed boundary location) which would include the Upper Meadow area. This proposal would split off the portion of the parcel physically occupied by the Resort and Pack Station, allowing localownership and management of the operations of the commercial facilities and services provided by the Resort. The Forest Service would receive the undeveloped portions of the parcel, including meadow lands and riparian areas, as well as necessary easements for access for administration and for public use of the Huckleberry Trail.

This parcel split best addresses the interests expressed by the lessee and members of the local public who desire local control of the Resort and its activities. At the same time, this allows for consolidation of the non-developed portion of the parcel into the surrounding Forest lands. This option allows for the maximum protection of the beneficial public values for which the land is being donated.

Option 2

In this option, the Forest Service proposes to acquire fee title to the entire parcel. The Resort and Pack Station would be authorized and managed under a Special Use Permit, or if necessary, under the existing lease. Single ownership of the Kennedy Meadow parcel and the surrounding lands will provide more efficiencies, opportunities and consistency of management for the recreational, cultural and natural resource values within the Kennedy Meadows canyon landscape. A broader landscape level management approach will provide greater long term protection and sustainability of the Beneficial Public Values in and surrounding the Kennedy Meadows parcel. Public access to both the river canyon and the Wilderness would be protected in perpetuity since the lands would become a part of the public land base.

As a Federal land management agency, the Forest Service has a great capacity to manage the resources associated with the Kennedy Meadows parcel. The Forest maintains a local workforce of professional, technical and administrative expertise in a multitude of specialties and management functions and is also able to draw on the experience and expertise of over 1000 Forest Service professionals within California. The Forest Service also can draw upon the expertise of its research branch who are leaders in aquatic protection and climate change issues which will be key in the long term management and protection of Kennedy Meadows. Employee expertise includes wildlife and aquatic biologists, botanists, fuels planners, foresters,

archeologists, hydrologists, soils scientists, geologists, entomologists, ecologists, range conservationists, recreation specialists, landscape architects, interpretive/conservation education specialists, and engineers.

National Forests are America's great outdoors and rich natural resources. Conveyance to the Forest Service would ensure that Kennedy Meadows is managed as part of the larger landscape. The Forest Service has for the past 100 years and will continue into the future to manage and protect the lands surrounding Kennedy Meadows.

Organization Information

Legal Name:	USDA Forest Service, Stanislaus National forest
Address:	19777 Greenley Road
City:	Sonora
State:	California
Zip:	95370
Primary Telephone:	(209) 532-3671
Fax:	(209) 532-1890
Year Founded:	1905
Organization Tax ID:	Not Applicable

Organization Mission or Programmatic Focus

The U.S. Department of Agriculture Forest Service (Forest Service) is a Federal agency that manages public lands in national forests and grasslands. The Forest Service also has the largest forestry research organization in the world, and provides technical and financial assistance to state and private forestry agencies. Gifford Pinchot, the first Chief of the Forest Service, summed up the purpose of the Forest Service: "*to provide the greatest amount of good for the greatest amount of people in the long run*."

Established in 1905, the Forest Service manages 193 million acres of public lands, known collectively as the National Forest System, located in 44 States, Puerto Rico, and the Virgin Islands. The lands comprise 8.5 percent of the total land area in the United States. The natural resources on these lands are some of the Nation's greatest assets and have major economic, environmental, and social significance for all Americans.

The mission of the Forest Service is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." In short, it's "caring for the land and serving people." Congress directs the Forest Service to manage national forests for multiple uses and benefits and for the sustained yield of renewable resources such as water, forage, wildlife, wood and recreation.

The Forest Service also provides technical and financial assistance to private forest landowners through the states. Every state has its own forestry agency, and the Forest Service works with the State Foresters in all fifty states and five territories to help private landowners manage their lands in a sustainable manner and to address issues like habitat continuity and conservation of open space.

In addition, the Forest Service has one of the largest conservation research organizations in the world. We have seven research stations and 81 experimental forests nationwide, and decades of

data on forest cover, water, wildlife, wilderness, rangelands, and other resources. We also work with other countries to share conservation knowledge, to help forestland owners and managers around the world manage their forests and other resources in a sustainable manner.

With a national headquarters in Washington, D.C., the Forest Service operates through nine geographical regions around the country. There are 155 National Forests and 20 National Grasslands.

The National Forest Management Act of 1976 required the Secretary of Agriculture to assess forest lands and develop and implement a resource management plan for each unit of the National Forest System. The Stanislaus National Forest Land and Resource Management Plan (Forest Plan) and Environmental Impact Statement (EIS) was completed in 1991. The Sierra Nevada Forest Plan Amendment Final Supplemental Environmental Impact Statement and Record of Decision, completed in 2005, provide additional analysis and management direction for a wide range of activities, including old growth forest ecosystems, aquatic, riparian and meadow ecosystems, fire and fuel management, noxious weeds, and lower Westside hardwood ecosystems.

Forest Plan direction for national forest land surrounding the Kennedy Meadows planning unit provides management direction and goals that we believe are consistent with the Stewardship Council's Beneficial Public Values and Objectives (BPVO). Attachment E provides a synopsis of Forest Plan Direction applicable to the Kennedy Meadows Unit. A complete copy of the Stanislaus Forest Plan Direction is available at www.fs.fed.us/r5/stanislaus/. In addition, direction for the Middle Fork Stanislaus Proposed Wild and Scenic River Management Area is to provide semi-primitive non-motorized recreation opportunities. Existing recreational uses on the Kennedy Meadows parcel are consistent with this direction.

In 2002, the Stanislaus National Forest completed the Central Stanislaus Watershed Analysis (CSWA). The CSWA addresses the biological, physical and social-cultural dimensions of the ecosystem across approximately 300,000 acres consisting of five major watersheds in the central portion of the Stanislaus National Forest. The Kennedy Meadows PG&E parcel is within the Sonora Pass (75,067 acres) sub-watershed. The CSWA identifies key ecosystem elements, determines desired and existing conditions, develops management opportunities (from the difference or similarity between desired and existing conditions) and provides recommendations for achieving desired condition. Excerpts from CSWA for Sonora Pass watershed areas are summarized in Attachment E.

Law, policy, and regulation governing the management of public lands by the Forest Service, along with the local Stanislaus National Forest Management Plan and the Central Stanislaus Watershed Analysis provides significant protection and assurances for the sustainability and enhancement of the ecological and socioeconomic values in and adjacent to the Kennedy Meadows parcel for the use and enjoyment of the American people for present and future generations.

Regional Presence

The Kennedy Meadows Planning Unit is surrounded by public lands administered by the Stanislaus National Forest, Summit Ranger District. The Summit Ranger District manages approximately 270,000 acres of the 900,000 acre Stanislaus National Forest. The Forest has been managing these adjacent lands for over 100 years. The agency has a demonstrated history of

quality land resource management for a broad range of ecological, economic and social benefits, including such services and activities as: developed and dispersed recreation opportunities; wilderness and wild and scenic rivers management; motorized and non-motorized recreation experiences; trail and road construction and maintenance; special use permitted activities (resorts, organization camps, recreation residences, communication/electronic sites, events, outfitting and guiding services, etc.); mining, grazing and vegetation management; wildlife and aquatic species habitat protection and enhancement; protection of sensitive botanical resources; archeological and historical resource protection and management; wildland fire protection, prevention and suppression; interpretive and conservation education services; and law enforcement.

The Stanislaus National Forest receives an estimated 1,760,000 recreation visits annually (Source: National Visitor Use Monitoring data). Approximately 50% of the total Forest recreation use occurs on the Summit Ranger District. The Kennedy Meadows trailhead is the most popular access point for the Emigrant Wilderness with an estimated 4,435 Recreation Visitor Days (RVD's) annually. Thirty percent of visitors to the Emigrant Wilderness enter through the Kennedy Meadows trailhead. Of those visitors 22.2% are backpackers, 3.6% are outfitted and guided stock users and 4.7% are private stock users (Source: Emigrant Wilderness Management Plan EIS). (The other 70% of visitors to the Emigrant Wilderness use other trailheads, such as Crabtree, Gianelli and Coyote Meadows.) The Kennedy Meadows Resort is authorized under a Special Use Permit to conduct commercial livestock packing services on public lands administered by the Stanislaus National Forest.

The Stanislaus National Forest is located within four counties: Alpine, Calaveras, Mariposa, Tuolumne. Each District Ranger and the Forest Supervisor regularly communicate and interact with a variety of governmental and non-governmental organizations, including the Tribes, elected officials (County, State and Federal), user groups, environmental groups, permit holders and many other people interested in the management of their public lands. The Forest is not only a major employer, but also contributes to the local economies through the delivery of goods and services that support local and regional businesses, through contracts and permits issued for a wide range of goods and services and as a major provider of tourism opportunities.

The Forest Service's Kennedy Meadows Trailhead, located on the north boundary of the Pacific Gas and Electric Company (PG&E) parcel is a major entrance portal to the Emigrant Wilderness which is located adjacent to the south parcel boundary. The public must travel through the Kennedy parcel to access the Emigrant Wilderness. Currently there is no public easement in place for the trail through the parcel. However, when the new hydropower license for the Spring Gap-Stanislaus Project is issued by the Federal Energy Regulatory Commission (FERC), the trail may become a project feature to ensure/protect public access.

A road and bridge on this parcel also provide the only access to the Deadman Recreation Residence tract on the west side of the river on National Forest lands. No public easement across the parcel currently exists for this road and bridge. It is important to provide continued access to this tract.

The National Forest lands adjacent to the Kennedy Meadows parcel are designated as the Middle Fork Stanislaus Proposed Wild and Scenic River Management Area. The Forest Plan emphasis for this area is to manage Proposed Wild and Scenic Rivers and their immediate environments to preserve their free flowing condition and to protect their outstandingly remarkable values and to

provide opportunities for public recreation and other resources. Thus, the management direction for the adjacent National Forest lands is consistent with management objectives of the Stewardship Council's Volume II Land Conservation Plan. Existing recreation uses, including the Resort and Pack Station, are consistent with uses the Forest Service would authorize and encourage in this area.

Legal Compliance and Best Practices

Forest Service Vision

- We are recognized nationally and internationally as a leader in caring for the land and serving people.
- We are a multicultural and diverse organization.
- Employees work in a caring and nurturing environment where leadership is shared.
- All employees are respected, accepted, and appreciated for their unique and important contribution to the mission.
- The work is interesting, challenging, rewarding, and fun—more than just a job!
- We are an efficient and productive organization that excels in achieving its mission.
- Responsibility and accountability for excellence are shared by employees and partners.
- The American people can count on the Forest Service to perform.

"Caring for the Land and Serving People," captures the essence of the Forest Service mission. As set forth in law, the mission is to achieve quality land management under the sustainable multiple-use management concept to meet the diverse needs of people: It includes:

- Advocating a conservation ethic in promoting the health, productivity, diversity, and beauty of forests and associated lands.
- Listening to people and responding to their diverse needs in making decisions.
- Protecting and managing the National Forests and Grasslands so they best demonstrate the sustainable multiple-use management concept.
- Providing technical and financial assistance to State and private forest landowners, encouraging them to practice good stewardship and quality land management in meeting their specific objectives.
- Providing technical and financial assistance to cities and communities to improve their natural environment by planting trees and caring for their forests.
- Providing international technical assistance and scientific exchanges to sustain and enhance global resources and to encourage quality land management.
- Helping States and communities to wisely use the forests to promote rural economic development and a quality rural environment.
- Developing and providing scientific and technical knowledge aimed at improving our capability to protect, manage, and use forests and rangelands.
- Providing work, training, and education to the unemployed, underemployed, elderly, youth, and disadvantaged in pursuit of our mission.

To realize our mission and vision, the Forest Service follows 13 guiding principles:

- We use an ecological approach to the multiple-use management of the National Forests and Grasslands.

- We use the best scientific knowledge in making decisions and select the most appropriate technologies in the management of resources.
- We are good neighbors who respect private property rights.
- We strive for quality and excellence in everything we do and are sensitive to the effects of our decisions on people and resources.
- We strive to meet the needs of our customers in fair, friendly, and open ways.
- We form partnerships to achieve shared goals.
- We promote grassroots participation in our decisions and activities.
- We value and trust one another and share leadership.
- We value a multicultural organization as essential to our success.
- We maintain high professional and ethical standards.
- We are responsible and accountable for what we do.
- We recognize and accept that some conflict is natural and we strive to deal with it professionally.
- We follow laws, regulations, executive direction, and congressional intent.

Organizational Capacity and Experience

As a Federal land management agency under the U.S. Department of Agriculture, the Forest Service has a great capacity to manage the resources associated with Kennedy Meadows. The agency employs over 34,000 people. The Stanislaus National Forest (Forest) employs over 300 permanent employees and 100-200 additional temporary employees typically hired during the summer months. The Forest maintains a base of professional, technical and administrative expertise in a multitude of specialties and management functions and is also able to draw on the experience and expertise of over 1,000 additional Forest Service professionals within California. Employee expertise includes wildlife biologists, aquatic biologists, botanists, fuels planners, foresters, archeologists, hydrologists, soils scientists, geologists, entomologists, ecologists, range conservationists, recreation specialists, landscape architects, public affairs specialists, interpretive/conservation education specialists, geographic information specialists, financial managers, and engineers.

One of the greatest strengths of the Forest Service is the resource managers and specialists who live in the local communities and know and love the land, such as the employees of the Summit Ranger District. Despite the ups and downs of budgets and politics that any government agency will experience, resource managers get in their trucks each day and go out and take care of the land and serve people. For the Forest Service this has been a consistent and non-wavering fact for over 100 years. When budgets drop local resource managers always find a way to protect the resources; create partnerships, find grants, create efficiencies and engage the community and youth to help.

Provided below are three specific projects that illustrate the Forest's capacity to own, manage and enhance resource values associated with the Kennedy Meadows Planning Unit:

Stanislaus River Hydroelectric Re-licensing Project

The Forest participated in a five year collaborative process hosted by PG&E and Tri-Dam Project, who hold Federal Energy Regulatory Commission (FERC) licenses on the Middle and South Fork Stanislaus Rivers. The collaborative, Stanislaus Planning Action Team

(SPLAT), consisted of a wide range of local, federal and state agencies and non-governmental organizations. The SPLAT collaborative reached consensus agreements on resource measures for the new licenses and the FERC included these recommendations in the new licenses. Karen Caldwell, Summit District Ranger, was the Forest lead in this effort. In addition, the Forest provided personnel with expertise in most resource areas relevant to the various issues encountered during the relicensing to assist the SPLAT in assessing the information generated during the relicensing process. The Forest is fully familiar with the upcoming requirements under the new license for the Spring Gap-Stanislaus Project (Relief Reservoir is part of this project) as they relate to the Kennedy Meadow Planning Unit.

Granite Stewardship Project

Located on the Groveland Ranger District, the Granite Stewardship Project grew out of a desire to protect 25 year old plantations in the Granite Fire area near Cherry Lake. In 1998, after a year of intense collaboration, a group of concerned citizens (called "OBY" for Our Back Yard) provided the Forest with a set of desired forest ecosystem conditions for the Granite Fire area and activities to achieve them. Shortly thereafter, Congress passed legislation authorizing the Forest to award stewardship contracts and use the value of any logged timber to offset costs of other work in the project area. The Granite Stewardship Project was selected as a national "pilot" project to test these new authorities. Since then, the Forest has awarded a number of stewardship contracts, including thinning 1,300 acres of overcrowded plantations; decommissioning 14 miles of roads; and controlling noxious weeds on 120 acres (to name a few projects). Partnerships with State agencies and local interest groups have been crucial to the success of this project.

High Sierra Institute at Baker Station

Located on Highway 108 near Kennedy Meadows, the High Sierra Institute at Baker Station is a partnership between the Forest Service and the Yosemite Community College District. Baker Station, an historic highway maintenance station, was built in the 1930’s by the California Department of Public Works, Division of Highways as CalTrans was then called. The Baker Highway Maintenance Station was used by CalTrans as a high country maintenance station for Highway 108. After 50 years of continued service, ownership of the 12 rustic buildings was transferred to the Forest Service. The facility was used as a Forest Service work center for the following 20 years. During that time, lack of funding for upkeep resulted in such deterioration that Baker Station had to be closed. In 2000 when a decision to abandon the buildings seemed imminent, far-sighted individuals from the College District and the Stanislaus National Forest joined forces and created a new vision for the facility. Currently the High Sierra Institute is operated by the Yosemite Community College District under a special use permit. An experiential learning center, the Institute offers courses that are strongly tied to the surrounding forest environment.

Organizational Finances

The Stanislaus National Forest receives and allocates funding in a variety of resource areas that are relevant to management of the Kennedy Meadows parcel. Efficient management of Forest resources requires that individual staff managers collaborate and share funds to accomplish work. Work is also accomplished through public/private partnerships, grants and other agreements.

On September 30, 2008 President Bush signed the Consolidated Security, Disaster Assistance, and Continuing Appropriations Act, 2009 (Public Law 110-329). Spreadsheets (attached) provide the following financial information:

- Stanislaus National Forest expenses for fiscal years 2006-2008 (3 spreadsheets).
- Stanislaus National Forest expenses within National Forest (NFNF) funds for fiscal years 2006-2008 (3 spreadsheets).
- Stanislaus National Forest Fiscal Year 2009 budget allocation (1 spreadsheet).

Please note that additional funding allocations for FY09 are still be adjusted nationally and regionally. The Stanislaus anticipates some additional NFNF funds in this fiscal year.

Key Personnel

The National Forest System, one arm of the USDA Forest Service, consists of a hierarchy of four levels of organization: from the Washington Office, Regional Offices, Forest Supervisor Office and Ranger Districts. In general, Washington and Regional Offices set overall vision and policy, and the Forest and Ranger District accomplish specific projects to that meet agency goals. The history and culture of the Forest Service, which sets it apart from many other agencies, emphasizes decision making at the Forest and Ranger District level so that management can be tailored to local conditions.

The top level of management for the Forest Service is located in the Washington Office and managed by the Chief of the Forest Service, Gail Kimbell. Next are Regions which are managed by a Regional Forester. The Pacific Southwest Region (Region 5) includes National Forests in California and the Pacific Islands; managed by Regional Forester Randy Moore. There are 18 National Forests in California, each of which is managed by a Forest Supervisor. Each National Forest is composed of Ranger Districts, managed by a District Ranger, who has the closest connection to the actions occurring on the National Forest land under their direction.

The Kennedy Meadows parcel is located within the Summit Ranger District of the Stanislaus National Forest. The Summit Ranger District encompasses 270,000 acres of public land and is managed by District Ranger Karen Caldwell. Karen has been employed by the Forest Service for over 29 years and has been the District Ranger for the past 16 years. The Summit District Ranger would serve as the lead personnel for the Kennedy Meadows Planning Unit. Overall management of the Stanislaus National Forest is supervised by Forest Supervisor Susan Skalski and Deputy Forest Supervisor Kathy Hardy. Both have been employed by the Forest Service for over 25 years and have previously served as District Rangers on other National Forests. Ms Hardy would serve as the secondary contact for this project while Ms. Skalski would fulfill the role of Executive Director. Resumes for Ms. Skalski and Ms. Caldwell are found in Attachment D.

References

	Reference 1	Reference 2	Reference 3
Name	Beth Pendleton	Steve Felte	Tuck Coop
Title	Deputy Regional Forester, Resources	General Manager, Tri-Dam Project	Executive Director, California Alumni Association
Relationship	Forest Service Regional Office Line Officer	Stanislaus Planning Action Team (SPLAT), FERC licensee Beardsley/ Donnells Project	Recreation Special Use Permit Holder, Lair of the Golden Bear organization camp, Summit Ranger District
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State	California	California	California
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Conflict of Interest

The Forest Service is a non-voting member of the Stewardship Council and is represented on the Council by Christine Nota. Ms Nota will not represent the Forest Service during the negotiation.

Proposal Information

Overall Approach

Kennedy Meadows is a special place that has captured the hearts of many, both young and old. It is a place where memories are made, where families and friends and individuals alike spend time to rejuvenate the soul amidst the beauty of the mountains, the towering trees of the forest, the rushing waters of the river. It is a place where people come to hike and horseback ride, sleep in a simple cabin, watch cowboys work, fish, camp, photograph nature, daydream…..any of a myriad of pursuits that connect them to the great outdoors. They come from near and far, and for most, the hours or days they spend at Kennedy Meadows are vastly different from their day-to-day busy lives. They leave revitalized and appreciative that a place such as this still exists. Our future challenge is managing the “sense of place” that Kennedy Meadows provides reminiscent of the twentieth century, while meeting the needs of citizens of the twenty-first century and protecting the priceless resources of the river and meadow habitat.

It is the desire of the Forest Service to engage in the oversight of the Kennedy Meadows parcel so that the Beneficial Public Values and Objectives (BPVOs) are preserved and enhanced in perpetuity. It is obvious that this parcel is special. However, Kennedy Meadows is not solely about the 240 acres of the PG&E owned parcel, but also how it serves to accentuate and integrate with the existing access and uses in the surrounding National Forest lands within the Kennedy Meadows canyon from Highway 108 to the boundary of the Emigrant Wilderness. Thirty percent of visitors to the Emigrant Wilderness enter through the trailhead located here and will travel the length of the canyon through both Forest Service and private land. Many visitors are unaware

that they are traveling through both public and private lands. While some visitors choose the commercially provided activities of the Resort such as lodging, dining or horseback riding as their destination, many others enjoy the area on their own terms, traveling through to the Emigrant Wilderness and/or camping in the Forest Service developed campgrounds. Many hikers and equestrian users use their own provisions and take pride in their self-sufficiency. It is probably safe to say that most who visit will engage in both—a bit of self reliance enhanced by the services offered by the Resort and Pack Station. Day users, too, enjoy the area in a similar fashion.

The Forest Service proposes to manage the Kennedy Meadows parcel holistically with the adjacent Forest Service lands within the entire Kennedy Meadows/Middle Fork Stanislaus River landscape. This landscape would become the Kennedy Meadows Management Area (KMMA) which would include the area from Highway 108 to the boundary of the Emigrant Wilderness. The Forest Land and Resource Management Plan (Forest Plan) would be amended to incorporate this management area and specific management direction, standards, and guides would be developed incorporating the BPVOs developed by the Stewardship Council. The KMMA would emphasize that, to the extent allowed by law, management and decision making will strive for a balance of the natural, cultural, social and economic values within this landscape.

Recreation uses and activities would be managed to preserve traditional uses and the transitional experience that currently exists as visitors move from the developed facilities (Forest Service campgrounds, trailhead parking area, and the privately operated Resort) in the northern section of the canyon into the undeveloped primitive wilderness experience at the southern end. In addition, this portion of the Middle Fork Stanislaus River has long been identified as a premiere fly fishing reach due to the density of fish and the broad, open stream course. The Forest Service would work closely with the California Department of Fish and Game, PG&E, FERC, and other stakeholders, to ensure the outstanding angling values of this reach are preserved.

Just as recreation use in this landscape flows back and forth between the privately owned land and the publicly owned land, so do the natural resources and agricultural uses. The western portion of the Kennedy Meadows parcel (west side of the river) contains late-seral old-growth habitat that provides connectivity with similar habitat on neighboring National Forest. This is ecologically important for associated species such as Spotted Owl, Northern Goshawk, and pine marten.

The Kennedy Meadows parcel also contains the southern most portion of a gallery black cottonwood forest (which extends downstream (north) onto Forest Service lands) that is unique on the National Forest with respect to the size and extent of this community type. A gallery forest is a riparian-hardwood community comprised of very large trees. The large cottonwood trees provide a somewhat rare habitat element on the landscape especially important to high-canopy songbirds and large-bodied cavity nesters. Cottonwood rapidly colonizes disturbed areas and provides rapid stabilization to the flood-prone areas where it grows. Cottonwood also provides shade to stream banks and stream beds important for cooler stream temperatures for fish. The deciduous nature of cottonwood provides an annual flush of leaf material to streams that is utilized by aquatic organisms. The health of this and other riparian community types present along the creek contribute significantly to the productivity of the fishery.

The Forest Service has worked closely and collaboratively with PG&E, FERC and other stakeholders over many years to address the concerns related to streambank instability and poor

cottonwood recruitment in the Middle Fork Stanislaus River as part of the hydropower relicensing for the Spring Gap-Stanislaus Project. Additional studies are planned and the Forest Service will be actively involved in decisions and design of any measures implemented to improve in-channel and riparian conditions. Consolidated ownership of this river reach will allow for greater efficiencies and opportunities.

Other more site specific natural resource concerns within the Kennedy Meadows parcel include: the presence of non-native plants and noxious weeds, stream bank erosion and sedimentation into the river along the road/trail, meadow conditions, and affects of employee housing areas on the geomorphic and ecologic condition of Deadman Creek and its confluence with the Middle Fork Stanislaus River. Protection, enhancement and preservation of these high value natural resources would be a priority objective for the Forest Service.

Acquisition of the Kennedy Meadows parcel would allow the Forest to provide consolidated management of the ecological, cultural, historical, and recreational resources within the Middle Fork Stanislaus River watershed for the American public. Kennedy Meadows is an integral component to the lands managed by the Forest, not only complementing ecological resources located on the adjacent National Forest lands but also providing key recreational access to the Emigrant Wilderness.

Land Interests Sought

The Forest Service seeks fee title for the Kennedy Meadows parcel. We are proposing two options. If neither option is accepted, the Forest Service still needs to secure appropriate trail and access easements as part of the donation process.

Option 1

In the spirit of collaboration and compromise, the Forest Service is proposing to split the parcel. In consideration of concerns related to the Resort facilities/services, traditional uses, and the desire for “local” management, the Forest Service proposes only seeking title to the southern portion of the parcel just beyond (south of) the water tank (see attached map for proposed boundary location) which would include the Upper Meadow area. This proposal would split off the portion of the parcel physically occupied by the Resort and Pack Station, allowing County and/or Tuolumne County Resource Conservation District land ownership and management of the operations of the commercial facilities and services provided by the Resort. The Forest Service would receive the undeveloped portions of the parcel, including meadow lands and riparian areas, as well as necessary easements for access for administration and for public use of the Huckleberry Trail. The north and east side of the parcel occupied by the resort have been previously surveyed by the Forest Service, the remaining south and west sides would require survey.

This parcel split best addresses the interests expressed by the lessee and members of the local public who desire local control of the Resort and its activities. At the same time, this allows for consolidation of the non-developed portion of the parcel into the surrounding Forest lands. Together we believe this allows for the maximum protection of the beneficial public values for which the land is being donated.

The Forest Service would continue to authorize the Resort’s outfitting and guiding services on National Forest lands under a special use permit. The Forest Service would work closely and cooperatively with the land owner and lessee to ensure Beneficial Public Values on both parcels

are well coordinated, efficient and effective. The Forest Service desires to consolidate the riparian and meadow ecology values within this watershed/landscape.

A partnership ("Friends of Kennedy Meadows"), group council, or a recommending body similar to this, could be created to provide cross communication between managing organizations to allow a continuing flow of ideas, setting of priorities, and managing strategies to be discussed in public forum.

Option 2

In this option, the Forest Service proposes to acquire fee title to the entire parcel. The Resort and Pack Station would be authorized and managed under a Special Use Permit, or if necessary, under the existing lease. Single ownership of the Kennedy Meadow parcel and the surrounding lands will provide more efficiencies, opportunities and consistency of management for the recreational, cultural and natural resource values within the Kennedy Meadows canyon landscape. A broader landscape level management approach will provide greater long term protection and sustainability of the Beneficial Public Values in and surrounding the Kennedy Meadows parcel. Public access to both the river canyon and the Wilderness would be protected in perpetuity since the lands would become a part of the public land base. No surveys would be required for this option.

A partnership ("Friends of Kennedy Meadows") group council, or a recommending body similar to this, could be created to provide communication between local government(s), the Tribe, other federal/state agencies, stakeholders groups or individuals to allow a continuing flow of ideas, setting of priorities, and managing strategies which would be discussed in an open public forum.

Common to Options 1 & 2:

Under either option the Forest Service would be the organization best able to protect the beneficial public values of the meadow in perpetuity. As a Federal land management agency, the Forest Service has a great capacity to manage the resources associated with the Kennedy Meadows parcel. The Forest maintains a local workforce of professional, technical and administrative expertise in a multitude of specialties and management functions and is also able to draw on the experience and expertise of over 1000 Forest Service professionals within California. The Forest Service also can draw upon the expertise of its research branch who are leaders in aquatic protection and climate change issues which will be key in the long term management and protection of Kennedy Meadows. Employee expertise includes wildlife and aquatic biologists, botanists, fuels planners, foresters, archeologists, hydrologists, soils scientists, geologists, entomologists, ecologists, range conservationists, recreation specialists, landscape architects, interpretive/conservation education specialists, and engineers.

National Forests are America's great outdoors and rich natural resources. Conveyance to the Forest Service would ensure that Kennedy Meadows is managed as part of the larger landscape. The Forest Service has for the past 100 years and will continue into the future to manage and protect the lands surrounding Kennedy Meadows.

The Stewardship Council requires that the conveyed land be administered under a Conservation Easement or another form of assurance provided by agencies that cannot accept conservation easements by policy or law. The Forest Service has provided the Stewardship Council attorney with examples of two models of assurance documents: a Covenant and a Donation Agreement. Either model is acceptable to the Forest Service.

Both agreements recite that the management of the lands conveyed to Forest Service will be subject to a number of federal statutes that will specifically protect and enhance the meadow resources and the six beneficial public values. These include the Endangered Species Act, the National Historic Preservation Act, and the Archeological Resources Protection Act. In addition, the agreements rely on the detailed management objectives contained in the Stanislaus National Forest Land and Resource Management Plan (Forest Plan) as a vehicle for preserving the conservation values. The agreements contain assurances that:

- The Forest Plan (and any successor management plan) will refer specifically to the covenant or donation agreement;
- Any proposed modification of the Forest Plan would be preceded by notice and an opportunity for the donor and covenant holder to fully participate in the planning process;
- In any public proceedings regarding the modification of the Forest Plan, the Forest Service must disclose the existence of the covenant or donation agreement and the intention of the donor to effect permanent protection of the conservation values; and
- The Forest Service will assure that any modification to the Forest Plan will be consistent with the objectives recited in the covenant or donation agreement.

In addition, the Forest Service:

- Has no objection to having the covenant or donation agreement recorded with the County, covenant could be held by PG&E (as the donor) or a government agency, a donation agreement could be held by PG&E;
- Would be willing to amend the Forest Plan to conform to the specific management objectives identified in the Stewardship Council's Land Conservation Plan;
- Would agree that if title is ever transferred out of the federal government’s hands, the government would place equivalent deed restrictions on the lands to ensure permanent preservation of the conservation values, and
- Is able to accept lands subject to recorded easements for such purposes as access, use of laydown areas, etc.

Partners and Community Support

The Stanislaus National Forest Business Plan (October 2005) identified expansion of partnerships and relationships as one of four key strategies aimed at leveraging the Forest’s financial and personnel resources to accomplish key Forest goals and objectives. This strategy is aimed at increasing the Forest’s ability to take advantage of partnership opportunities with cooperating non-profit organizations, agencies, and other entities as a way to reduce costs or leverage Forest resources. There are three parts to this strategy: (1) nurturing and maintaining existing partnerships, (2) expanding partnerships, and (3) building internal capacity to maintain the Forest’s existing and future partnerships.

The Forest is focusing future partnerships in the following programs: hazardous fuels reduction, roads, interpretation, watershed restoration, campgrounds, trails, vegetation management, concentrated use areas, specially designated areas, and wildlife. Road access and watershed analysis are future investment needs that would benefit from partnership efforts. These program areas fit with enhancement activities provided in this proposal for the Kennedy Meadows Planning Unit.

A key action identified in the Business Plan is to identify candidates for future partnership development within programs and with individuals. In addition to establishing new partnerships, the Forest will nurture and maintain existing partnerships. Highlighted below are two of the Forest's many existing partnerships:

Stanislaus Wilderness Volunteers (SWV), currently over 45 members strong, contributed almost 6,000 hours in FY 2004. SWV members conduct wilderness patrols; serve at front desks to provide information and issue wilderness permits; post signs; work on restoration, rehabilitation, and wilderness education projects; and report on field conditions. All of these volunteer activities provide significant value to the Stanislaus' wilderness (specially designated areas) program. In addition, SWV members assist in gathering data for the monitoring required in the Emigrant Wilderness Plan. The SWV has received the Forest Service National Volunteer Program Award.

The **Clavey River Ecosystem Project** (CREP) is comprised of interested stakeholders from a variety of backgrounds (ranching, logging, recreation, OHV, education, environmental, and business) working together to produce a scientifically credible assessment and analysis of the Clavey River watershed. In 2000, CREP was chosen as a pilot project by the California Resources Agency to test the effectiveness of applying technical information from the Sierra Nevada Ecosystem Project. The CREP has received a significant grant funding from CalFed to conduct the watershed analysis and implementation activities.

Listed below are current (c) and potential partners (p) who the Forest would approach to help implement our Kennedy Meadows land stewardship proposal. Back Country Horsemen of California, Mid-Valley Unit (c); California Regional Environmental Education Community Network (CREEC) (c); Columbia College (c), Central Sierra Arts Council (c), Kennedy Meadows Resort (p), Modesto Junior College (c), Mother Lode Job Training (c), Office of Education (Tuolumne, Stanislaus, and San Joaquin Counties), Stanislaus Wilderness Volunteers (c), Sonora High School (c), Summerville High School (c), Tuolumne Band of the Mi-Wuk Indians (p), U.C. Merced (p), U.C. Cooperative Extension and 4H (p), WildLink (c), Youth Conservation Corps (p).

Preservation and Enhancement Measures

The Forest Service proposes to manage the Kennedy Meadows parcel holistically with the adjacent Forest Service lands within the entire Kennedy Meadows/Middle Fork Stanislaus River landscape. This landscape would become the Kennedy Meadows Management Area (KMMA) which would include the area from Highway 108 to the boundary of the Emigrant Wilderness. The Forest Land and Resource Management Plan (Forest Plan) would be amended to incorporate this management area and specific management direction, standards, and guides would be developed incorporating the Stewardship Council BPVOs. The following Forest Goals and Management Emphasis contained in the Forest Plan would apply.

Diversity—Maintain or increase diversity of plants and animals, with a balance of vegetation types currently represented on the Forest which best provide for meeting the resource goals and objectives of the Forest Plan.

Fish and Wildlife—Provide habitat for viable populations of all native and desired non-native wildlife, fish and plants. Maintain and improve habitat for Threatened and Endangered

species and give special attention to sensitive species to see that they do not become Federally listed as Threatened or Endangered.

Riparian—Manage riparian areas to protect or improve riparian area-dependent resources while allowing for management of other compatible uses.

Sensitive Plants—Manage sensitive plants to ensure continued population viability and prevent them from becoming Federally listed as Threatened or Endangered.

Middle Fork Stanislaus Proposed Wild and Scenic River—Manage the river corridor to preserve its notable values or features as part of, or for eventual inclusion in, the National Wild and Scenic River System. A wide range of resource activities are permitted depending upon the proposed classification of Wild, Scenic or Recreational. The KMMA lies within a 12 mile reach of the Middle Fork Stanislaus River from Relief Reservoir to Clark Fork which is classified as Recreational. Existing uses and facilities are consistent with Recreational classification.

Beneficial Public Value: Protection of the Natural Habitat of Fish, Wildlife, and Plants

Objective: Preserve and enhance habitat in order to protect special biological resources.

Forest Service Proposed Preservation and Enhancement Measures for Options 1 & 2:

- A Management Plan for the area would be completed within 2 years. This plan will include an analysis of the existing natural resource conditions and desired conditions, identify management actions and opportunities to move towards or to achieve desired conditions, and will establish an implementation schedule and monitoring plan. The KMMA Plan will include a full range of ecological resources including: wildlife (terrestrial and aquatic), botany, noxious weeds, hydrology, soils, vegetation, water quality, etc. This plan would become incorporated as an amendment to the Forest Plan and would serve to guide future management of the Kennedy Meadow parcel. The land management Stewardship Council BPVOs in LCP Volume II would be incorporated.
- Amphibian (presence/absence) survey would be completed in year 1. (Note: Mountain Yellow Legged Frog studies will be done by PG&E in the first three years after license issuance.)
- Wildlife surveys for Spotted Owl, Goshawk, Great Grey Owl and Marten would be completed in year 2.
- Botany and noxious weed survey would be completed in year 1.
- A road engineering assessment would be conducted in the first year to identify road maintenance and/or design needs to reduce and/or eliminate erosion and points of soil sedimentation into the river. A priority project will be developed to address active erosion areas. Once planning and design is complete, the Forest Service will seek grant funding for implementation.
- As a connected action to the road, the Forest Service will begin assessment and design for a stream bank stability project along the road below the Upper Meadow. This will require an environmental analysis as well as coordination with several agencies including the FERC, CDFG and the U.S. Army Corps of Engineers. Grant/partnership funding will be necessary for planning and implementation. (Note: PG&E will be conducting studies and

implementing restoration measures for riparian vegetation and streambank stability within the first 1-10 years after license issuance.)

- Forest Service will seek partners and volunteers to implement riparian hardwood restoration and enhancement projects. Additional opportunities for meadow enhancement and noxious weed eradication projects exist. Many of these types of projects are conducive to participation by youth groups such as Boy/Girl Scouts, High School Ecology Clubs, Tuolumne Mi-Wuk Tribal Youth, etc.

Forest Service Additional Proposed Preservation and Enhancement Measures for Option 2:

- The Forest Service in partnership with the Resort lessee/permit holder would develop a parking and road/trail plan. This plan would address existing erosion concerns specific to the Resort operations, facilities and uses, protection and enhancement of the lower meadow, improved signage and delineation of trails and destinations though the Resort area, and the formalization of public parking areas versus Resort customer parking areas.
- As a connected action, the Forest Service would work with the lessee/permit holder to develop a meadow restoration plan for the lower meadow (wet meadow between resort complex and the river) to enhance/protect meadow vegetation, the water table, and streambank stability. This plan would address current practices and uses including access to the picnic area, vehicle movement/uses, manure spreading, noxious weed and invasive plants, and grazing of livestock.
- The Forest Service in partnership with lessee/permit holder would explore opportunities to relocate some or all of the employee housing area. If Forest Service has land title, potential options for relocation outside of the Kennedy Meadows parcel could be explored as part of the larger KMMA landscape.
- The Forest Service would work with lessee/permit holder to remove waterlines, electrical lines and other attachments from trees.
- The Forest Service would work with lessee/permit holder to assess and address any concerns identified related to the existing water diversion behind the corral from Deadman Creek for irrigation purposes at the Resort.
- A manure management strategy would be developed and implemented with the lessee. Options to explore could include (but are not limited to) implementation of use of certified weed free hay (as possible and available), alternative technology (digester, energy production), composting, disposal sites, market ideas for the manure that would pay for hauling it off, Kennedy Meadow souvenir compost bags, and continuation of a spreading strategy, etc. Concerns related to costs, environmental effects, parasite prevention, etc. will need to be addressed. At a minimum, manure spreading within 100 feet of the river or any other tributary will be prohibited.
- Based on the bridge condition assessment completed by engineering representatives from the Forest Service and Tuolumne County Public Works (Attachment G) maintenance and improvements on the Deadman creek Bridge would be implemented over the net ten years to meet standards. The Forest Service would authorize the continuation of the existing privately owned bridge to the Deadman Flat Recreation Residence Tract in a Special Use Permit. Maintenance responsibilities for this bridge would remain with the property owners.

Beneficial Public Value: Preservation of Open Space

Objective: Preserve open space in order to protect natural and cultural resources, the wilderness character of the region, and the recreation setting.

Forest Service Proposed Preservation and Enhancement Measures for Options 1&2:

- A donation agreement or a covenant would be developed to limit future development to only that necessary to protect, support or enhance resource conditions and recreational uses, improvements and services. Any new development (infrastructure) would need to be consistent with the land management objectives in the Forest Plan for the Kennedy Meadows Management Area.

Beneficial Public Value: Outdoor Recreation by the General Public

Objective: Enhance recreational facilities and operations in order to provide additional public access, education, and recreation opportunities consistent with the carrying capacity of the area.

Forest Service Proposed Preservation and Enhancement Measures for Options 1&2:

- A recreation management plan for Kennedy Meadows would be prepared. It is likely that this plan would be incorporated as a part of the larger KMMA Plan discussed above. The above recommended assessments and possible enhancements outside of the resort area would be included. The overall recreation management theme for this area would be to preserve and enhance traditional recreation experiences and values consistent with historic uses of the area. Opportunities for improvements in signing, trail access and condition improvements, day use opportunities, interpretive and conservation opportunities, etc. would be incorporated in the plan to enhance visitor experiences and opportunities consistent with the overall theme.
- The Forest Service would coordinate and cooperate closely with the Resort owner and land owner to negotiate and establish road and trail maintenance responsibilities.
- The Forest Service would continue to authorize the Resort's outfitting and guiding services on national forest lands under a special use permit. This would include the use of the day ride trail.
- The Forest Service is requesting a formal easement for public access for the Huckleberry Trail (road) and the access to the Deadman Recreation Residence Tract.
- Group event activities would require authorization by issuing an Event Special Use Permit. Traditional group events (groups who have utilized this are for events in the past five years) would be authorized, as long as negative resource impacts are not present, or when short term impacts can be mitigated. New group uses in the upper meadow would be discouraged.
- The Forest Service proposes development of interpretive literature unique to the social, cultural and ecologic features and character of the Kennedy Meadow area. Strategically located interpretive signing is also proposed.
- The Forest Service will add the existing 1 hour ride trail(s) currently used by the Resort/Pack Station to the Forest Service trail system. (This trail is not a part of the Forest Service designed/maintained system, although it has likely been present for decades. Note that a portion of this trail is currently on Forest Service lands. See attached map.) A one time project to bring this trail up to appropriate standards to prevent resource damage is proposed. Trail work would be done to a standard that preserves the natural

and primitive visual feel of the area. Once completed, annual maintenance responsibilities would be negotiated with the Pack Station and work performance could include a variety or partner/volunteer participation. The trail rehabilitation project could be completed once a funding source is available.

Forest Service Proposed Preservation and Enhancement Measures for Option 2:

- The Forest Service would issue a 20 year term special use permit to the existing Kennedy Meadows Resort and Pack Station. (The Forest Service may accept a lease. In this case, a special use permit would be issued upon the expiration of the lease) The permit boundary would be limited to only the land necessary to support the actual or anticipated improvements and operations for the permitted use(s). (Thus, the Forest Service would not issue a permit for the full 240 acres. This is to the benefit of the permit holder since fees are calculated on a formula which looks at the number of acres occupied.)
- Once a permit is issued, the permit holder would be required to complete a master development plan within one year. This plan identifies possible future improvements and enhancements anticipated over the life of the permit. It is a holistic conceptual vision, not a site specific analysis, thus not subject to an environmental analysis. Implementing elements of the plan would require site specific environmental analysis at that time.
- Each year, the permit holder and Forest Service would agree on an Annual Operations and Maintenance Plan. This document becomes an amendment to the permit and is updated annually to reflect anticipated activities for the coming year.
- Responsibilities for trail maintenance, day use and overnight public parking, commercial resort parking, road maintenance, etc. would be negotiated with the current lessee and specified in the lease/permit or the annual operations and maintenance plan.
- A recreation management plan would be prepared and incorporated into the larger KMMA Plan discussed above. The Stewardship Council recommended assessments and possible enhancements would be included. The overall recreation management theme for this area would be to preserve and enhance traditional recreation experiences and values consistent with historic uses of the area. A primary objective to provide resort and outfitter guide services through private ownership and operation of facilities on this parcel would be included. Improvements in signing, trail access, day use facilities, etc. would be incorporated in the plan to enhance visitor experiences and opportunities consistent with the overall theme.
- Forest Service proposes to plan and implement a new trail from the Forest Service Trailhead parking lot to the intersection of Deadman Creek and the road (see map attachment). This trail would run parallel with the paved road on the east side. This would allow for livestock and foot traffic to travel between the trailhead and the first bridge without having to walk down a road which is open to vehicle traffic. In addition, it will enhance the visual experience for those leaving the trailhead in seek of a more primitive recreation experience. (Note: Extreme steep and rocky topography prohibits continuation of this trail behind the Resort.)
- The lessee or permit holder would be encouraged to assess and implement affordable energy efficiencies and/or other “green” practices to enhance visitor experiences, improve efficiencies and minimize negative affect(s) on resources. The Forest Service would work closely with the lessee to identify alternative technologies and potential funding sources for implementation.

- The Forest Service currently utilizes and supports many youth programs and activities. The Forest Service would continue to seek additional opportunities.
- The Forest Service proposes to assess the opportunity for a potential equestrian overnight camping area north of the Forest Service developed trailhead parking area (see attached map). This area could also be looked at as a potential option for relocation of some employee housing or an alternative location for traditional event activities that have been occurring adjacent to the Upper Meadow. A more thorough feasibility concept plan needs to be completed to assess the best use for this area.

Beneficial Public Value: Sustainable Forestry

Objective: Develop and implement forestry practices in order to contribute to a sustainable forest, preserve and enhance habitat, as well as to ensure appropriate fuel load management.

Forest Service Proposed Preservation and Enhancement Measures for Options 1&2:

- The KMMA Plan discussed above, would include an analysis of desired and existing vegetation conditions in this parcel. This plan would identify management needs and opportunities to ensure long-term forest health, including, protection from insect and disease, reducing fuel loading, and improving meadow and riparian health. Timber harvest for the purpose of maintaining a sustainable supply of wood is not compatible with the designation of the river and area as proposed Wild and Scenic River—Recreational. Timber harvesting is compatible and appropriate as a means to achieve long term health such as fuels reduction and salvage of diseased trees and hazard tree removal.

Beneficial Public Value: Agricultural Uses

Objective: Preserve and enhance pass-through grazing practices in order to support ongoing ranching activity, if this can be accomplished in balance with ensuring appropriate protection of natural resources.

Forest Service Proposed Preservation and Enhancement Measures for Options 1&2:

- It is the desire of the Stanislaus National Forest to ensure that the Kennedy Lake Cattle Allotment remains viable. The Forest Service proposes to incorporate the use of the upper Kennedy Meadow into the existing Kennedy Lake Allotment permit. Consistent with the National Environmental Policy Act an environmental analysis would be conducted prior to allowing use by cattle (within the first year). The standards and guides in the existing allotment permit and the Forest Plan would apply to the upper meadow (40% utilization, 20% browse, streamside trampling standards, etc.). The amendment would authorize 150 pair (the existing number) for one day onto the allotment (approximately July 1) and three to seven days coming off the allotment (approximately October 1-5). The upper Kennedy Meadow would be treated as a gathering pasture of the allotment.
- Annual monitoring would be completed. Allotment management plans are adjusted annually to respond to new information such as new direction, monitoring results, new species listings, etc.
- The Kennedy Lake Allotment is scheduled for new permit authorization in 2013. At that time a new environmental analysis will be completed by the Forest Service and monitoring data from the gathering pasture in the upper meadow will be used to determine whether the continued use of this meadow for gathering should continue. If

studies and monitoring data (including data from the PG&E license studies) indicate resource concerns that could not be mitigated, the Forest Service would work with the permit holder to identify an alternative on/off strategy or location.

Beneficial Public Value: Preservation of Historic Values

Objective: Identify and manage cultural resources in order to ensure their protection, as well as to support opportunities for public education.

Forest Service Proposed Preservation and Enhancement Measures for Options 1&2:

- The Forest Service has a Government-to-Government relationship with the Tuolumne Band of Me-Wuk Indians, as formalized in Programmatic Agreement between the two governments. In consultation and coordination with the Tribe, a cultural resource inventory of the Kennedy Meadows Planning Unit would be completed in the first year. Based on the results of the inventory, the Tribe and Forest Service will develop a Cultural Resources Management Plan for the protection and public education of all resources within the Unit.

Youth Investment Program Synergies

The Stanislaus National Forest has a long tradition of providing high quality Environmental Interpretation and Conservation Education with a strong focus on youth. This program, which has received National recognition and awards, is focused on our vision "to foster land stewardship values and environmental literacy for elementary through college level students that will create an enduring impact on young people's values and attitudes towards nature and their understanding and appreciation for their role in conserving natural resources. This effort will sustain our public lands for future generations and develop the next generation of conservation leaders." Kennedy Meadows provides a living laboratory that offers a four to six month window of accessibility for connecting students to the land. Due to the distance and driving time, overnight opportunities are desirable. The Forest Service proposes the following youth activities in the Kennedy Meadow canyon:

Conservation Education Overnight Experience ($10,490)

In May/June or September/October fourth & fifth grade students would participate in activities and curriculum tied to the California State Standards, they would learn about Leave No Trace principles, nature exploration and participate in stewardship projects in the Kennedy Meadows area. High school students will participate in stewardship projects, conduct biological inventories and learn about Leave No Trace principles.

Youth Stewardship Intern Program, Central California Consortium ($27,390)

Youth Stewardship Intern Program will expand our partnership with Central California Consortium. Under the supervision of Forest Service crew leaders, students serve for 6-8 weeks June through August performing conservation projects in the Kennedy Meadows area as well as the Emigrant Wilderness. Activities could include assisting wilderness rangers with Leave No Trace education, conducting biological inventories, restoring damaged campsites around Relief Reservoir, monitoring range conditions on the Kennedy Lake allotment, removing noxious weeds along the trails leading into the wilderness from Kennedy Meadows, and evaluating the

effects of recreational activities on the condition of the Emigrant Wilderness. Positions may offer stipend or be voluntary.

Me-Wuk Material Culture ($20,000)

Provide camping and locations for Me-Wuk elders to teach their youth about the material culture. Gathering sites can be re-established and utilized. Workshops will be offered to connect educators and interested parties to Me-Wuk lifeways through cultural immersion and hands-on learning as taught by local Me-Wuk cultural practitioners and the California Indian Basket Weavers Association. Field trips could also be conducted.

History Festivals ($7,500)

In September or October, opportunities for special events could be offered highlighting our agriculture heritage and living history, similar to the Foothill Farmlands Arts Festival.

All of these proposals will involve the partnership and support of other organizations that we partner with including: Backcountry Horsemen of California, CA Consortium, CA Regional Environmental Education Community Network (CREEC), Columbia College, Central Sierra Arts Council, Kennedy Meadows Resort, Modesto Junior College, Mother Lode Job Training, Office of Education (Tuolumne, Stanislaus, & San Joaquin), Stanislaus National Forest staff, Stanislaus Wilderness Volunteers, Student Conservation Association, Sonora High School, Summerville High School, Tuolumne Band of the Me-Wuk Indians, UC Merced, UC Cooperative Extension & 4H, WildLink, Youth Conservation Corp.

Budget and Funding Plan

Attached Excel spreadsheet.

Additional Resources and Funding Strategies

The Stanislaus National Forest proposes a three part strategy for leveraging funds and resources to manage Kennedy Meadows and implement enhancements in support of the Beneficial Public Values.

Strategy 1: Establish an interest bearing account for an endowment

The Forest Service proposes to partner with the National Forest Foundation (NFF) and/or the National Fish and Wildlife Foundation (NFWF) to establish an interest bearing account for an endowment to be used for planning and implementation of enhancement opportunities within the Kennedy Meadow parcel.

The National Forest Foundation (NFF) is the congressionally-chartered nonprofit partner of the Forest Service. (http://natlforests.org/conservation_partnerships.html) The NFF brings people together to protect our National Forests and Grasslands. As the nonprofit partner of the U.S. Forest Service, the goal of NFF is to engage citizens in community-based and national programs that promote the health and public enjoyment of the National Forest System. They also administer private gifts of funds and land for the benefit of the National Forests.

In helping the Forest Service fulfill its mission to "care for the land and serve people," NFF works in close collaboration with local people and communities. NFF believes that communities should play a leading role in determining the future of the 192 million acres that make up our

National Forests and Grasslands. The NFF is the only conservation organization focused on addressing the challenges that face National Forests. It stands apart from other organizations through its commitment to facilitating local involvement and encouraging grassroots participation in forest stewardship. The NFF provides financial support to partner organizations and raises funds to effectively double or triple the total contribution to numerous local conservation initiatives. Involving a variety of stakeholders in forest stewardship provides further leverage by expanding the number and quality of skills dedicated to ensuring successful outcomes, and builds a constituency for the National Forests.

The NFF provides funding opportunities through two programs. The Matching Awards Program (MAP) funds nonprofit organizations dedicated to addressing issues directly affecting natural resource issues on National Forests. The Community Assistance Program (CAP) funds newly forming organizations with grants of $5,000 to $15,000 for a variety of needs including: basic start-up and operating costs, materials and equipment, technical assistance, training, community outreach, obtaining 501(c)(3) status, program development, nonprofit management skill-building, and communications. CAP award recipients, once they demonstrate success in building organizational capacity and are able to raise non-federal match money, make natural fits to apply for MAP awards, and are encouraged to develop conservation projects that could be funded by the MAP.

The National Fish and Wildlife Foundation (NFWF) is a 501(c)(3) non-profit that preserves and restores our nation's native wildlife species and habitats. In 1984, Congress tasked NFWF with a mandate: direct public conservation dollars to the most pressing environmental needs and match those investments with private funds. NFWF works with individuals, foundations, government agencies, nonprofits, and corporations to identify and fund the nation's conservation challenges. NFWF funds are authorized through federal appropriations and raised through agreements with federal agencies, corporations, and from other foundations and individual philanthropists. http://www.nfwf.org/AM/Template.

NFWF provides funding on a competitive basis to projects that sustain, restore and enhance the Nation's fish, wildlife, plants and their habitats. NFWF plays the unique role of "neutral convener" among the various constituents of the conservation landscape due to its strong ties to federal agencies and a mandate to engage the private sector. NFWF receives, manages, and disburses funds that originate from court orders, settlements of legal cases, regulatory permits, licenses, and restoration and mitigation plans. NFWF acts as a fiduciary manager, working collaboratively with government and private-sector stakeholders to grow designated monies while encouraging that the funds are applied to the most effective conservation projects.

Strategy 2: Support and encourage the establishment of a community based "Friends of Kennedy Meadows" collaborative group

The Federal Advisory Committee Act (5 U.S.C. App.) formalized a process for establishing, operating, and overseeing a "federal advisory committee". This act limits the circumstances in which an Agency can establish an advisory group; however, the agency can participate in non-federally established groups for the purpose of sharing and/or obtaining information or viewpoints.

The Stanislaus National Forest supports and encourages the establishment of a "Friends of Kennedy Meadows" group in the private sector. Such a group could build on the local support and interests of Kennedy Meadows users; continue the relationships, cooperation, and

coordination begun in the eligible donee collaboration efforts; and provide a forum for communication, collaboration, partnerships, relationships, and fund raising. The Forest could provide support for this group by providing meeting space, facilitation, staff support, information, etc.

Strategy 3: Actively seek funding and/or leveraging opportunities through grants and governmental and private initiatives

There are many sources for the leveraging of resources and funding to implement projects on the ground including grants (internal and external to the Forest Service), partnerships, volunteers, internships, work study programs, and university graduate work. However, our experience has been that few sources exist for the planning and design of a project. The Forest Service would be seeking planning and design funding assistance from the Stewardship Council. This initial investment would provide the platform to implement many of the enhancement projects utilizing a variety of funding sources.

Attachments

1	Charter Documents	Not Applicable
2	Internal Revenue Service and/or Franchise Tax Board Determination Letters	Not Applicable
3	Letter from the executive director or equivalent officer of each organization approving submission of the Land Stewardship proposal and the organization's participation in the Stewardship Council's land conservation process for the subject Planning Unit	Attachment A
4	Operating Budget (current year)	Attachment B
5	Financial statements for the past three years	Attachment C
6	Tax Filings	Not Applicable
7	Land Trust Alliance Standards and Practices Organization Assessment and/or Accreditation	Not Applicable
8	Letters of Support	None Provided
9	Resumes	Attachment D
10	Management Direction—Stanislaus National Forest Plan Direction and Central Stanislaus Watershed Analysis information applicable to Kennedy Meadows Unit	Attachment E
11	Map	Attachment F
12	Kennedy Meadows Bridge Condition Assessment	Attachment G

Attachment A— Letter from the Forest Supervisor

United States Department of Agriculture **Forest Service** **Stanislaus National Forest**
19777 Greenley Road
Sonora, CA 95370
(209) 532-3671
FAX: (209) 533-1890
TTY/TDD: (209) 533-0765
http://www.fs.fed.us/r5/stanislaus

File Code: 1500
Date: December 16, 2008

Mary Adelzadeh
Regional Land Conservation Manager
Pacific Forest & Watershed Lands Stewardship Council

Dear Ms. Adelzadeh:

I am pleased to submit a Land Stewardship Proposal for the Kennedy Meadows Planning Unit. Acquisition of the Kennedy Meadows parcel is a high priority for the Forest Service and would be an incredible gift to the American public. Should the Forest Service acquire this parcel, you can be assured that Kennedy Meadows will be managed to maintain the Beneficial Public Values and Objectives identified by the Stewardship Council.

If you need more information or clarification of information within our submission, please feel free to contact District Ranger Karen Caldwell at (209) 965-3434 ext. 5317.

Again, thank you for this incredible opportunity.

Sincerely,

/s/ Susan Skalski
SUSAN SKALSKI
Forest Supervisor

Attachments

Attachment B—Operating Budget (current year)

Region 5 Stanislaus National Forest FY 2009 Planning and Budget Advice

Pick Unit/Forest from drop down cell >>>	16-Stanislaus							
	BLI	FY 2009 Base	FY 2009 Earmarks	FY 2009 Total Base Allocation	FY 2008 Base	FY 2008 Earmarks	FY 2008 Total Base Allocation	Dollar Change from FY 2008
State and Private Forestry								
FOREST LAND ENHANCEMENT PROGRAM	FLEP	0	0	0	0	0	0	0
FOREST LEGACY PROGRAM	LGCY	0	0	0	0	0	0	0
STATE FIRE ASSISTANCE	SPCF	0	0	0	0	0	0	0
FOREST HEALTH MANAGEMENT COOPERATIVE	SPCH	0	0	0	0	0	0	0
ECONOMIC ACTION PROGRAMS	SPEA	0	0	0	0	0	0	0
FOREST HEALTH MANAGEMENT FEDERAL LAND	SPFH	348	0	348	225	0	225	123
NFP - STATE FIRE ASSISTANCE	SPS2	0	0	0	0	0	0	0
NFP - VOLUNTEER FIRE ASSISTANCE	SPS3	0	0	0	0	0	0	0
NFP - FOREST HEALTH - FEDERAL LANDS	SPS4	0	0	0	71	0	71	(71)
NFP - FOREST HEALTH - STATE LANDS	SPS5	0	0	0	0	0	0	0
FOREST STEWARDSHIP	SPST	0	0	0	0	0	0	0
URBAN AND COMMUNITY FORESTRY	SPUF	0	0	0	0	0	0	0
VOLUNTEER FIRE ASSISTANCE	SPVF	0	0	0	0	0	0	0
State and Private Forestry Total		**348**	**0**	**348**	**296**	**0**	**296**	**52**
National Forest System								
K-V REGIONAL PROJECTS	CWK2	0	0	0	1,529	0	1,529	(1,529)
CENTENNIAL OF SERVICE CHALLENGE	NFEE	0	0	0	0	0	0	0
INVENTORY & MONITORING	NFIM	262	0	262	262	0	262	0
LANDOWNERSHIP MANAGEMENT	NFLM	164	50	214	151	60	211	3
MINERALS AND GEOLOGY MANAGEMENT	NFMG	44	0	44	36	0	36	8
REHABILITATION AND RESTORATION	NFN3	0	0	0	440	0	440	(440)
LAND MANAGEMENT PLANNING	NFPN	70	0	70	60	0	60	10
GRAZING MANAGEMENT	NFRG	110	0	110	113	0	113	(3)
RECREATION, HERITAGE & WILDERNESS	NFRW	958	0	958	910	0	910	48
FOREST PRODUCTS	NFTM	1,906	0	1,906	673	0	673	1,233
VEGETATION AND WATERSHED MANAGEMENT	NFVW	212	0	212	370	75	445	(233)
WILDLIFE AND FISHERIES HABITAT MANAGEMEI	NFWF	176	97	273	127	0	127	146
PURCHASER ELECT VEG TREATMENT	PEP2	0	0	0	200	0	200	(200)
National Forest System Total		**3,902**	**147**	**4,049**	**4,871**	**135**	**5,006**	**(957)**
Capital Improvement & Maintenance								
CONSTRUCTION EMERG SUPPLEMENT	CMES	0	0	0	0	0	0	0
FACILITIES	CMFC	121	0	121	117	0	117	4
INFRA IMPROVEMENTS - DEF MTNCE	CMII	0	0	0	0	0	0	0
INFRA IMPROVEMENTS - DEF MTNCE	CMLG	0	0	0	0	0	0	0
ROADS - CAPITAL IMPROV/MTCE	CMRD	770	0	770	777	0	777	(7)
TRAILS - CAPITAL IMPROV/MTCE	CMTL	174	0	174	164	0	164	10
CONSTR NONFED EXTERNAL REIMB	CP 09	237	0	237	249	0	249	(12)
Capital Improvement & Maintenance Total		**1,302**	**0**	**1,302**	**1,307**	**0**	**1,307**	**(5)**
Wildland Fire Management								
HAZARDOUS FUELS REDUCTION	WFHF	2,507	0	2,507	2,350	0	2,350	157
PREPAREDNESS	WFPR	7,764	0	7,764	7,764	0	7,764	0
SUPPRESSION	WFSU	0	0	0	0	0	0	0
NFP REHAB AND RESTORATION	WFW3	0	0	0	0	0	0	0
Wildland Fire Management Total		**10,271**	**0**	**10,271**	**10,114**	**0**	**10,114**	**157**
Other Appropriated Funds								
ACQ LANDS - SPECIAL ACTS	ACAC	0	0	0	0	0	0	0
GIFTS, DONATIONS, & BEQUESTS, USDA	GBGB	22	0	22	0	0	0	22
GIFTS, DONATIONS, & BEQUESTS FOR FOREST	GDGD	0	0	0	0	0	0	0
LAND ACQUISITION	LALW	0	0	0	0	0	0	0
RANGE BETTERMENT FUND	RBRB	0	0	0	0	0	0	0
ORGANIZATIONAL CAMPS	URCP	25	0	25	25	0	25	0
COMMERCIAL FILM RO & WO	URFA	0	0	0	0	0	0	0
COMMERCIAL FILM - COLLECTION COSTS	URFF	0	0	0	0	0	0	0
COMMERICAL FILM LOCAL ADMIN UNIT	URFM	2	0	2	2	0	2	0
COST RECOVERY LANDS MAJOR PROJ	URMJ	0	0	0	0	0	0	0
COST RECOVERY LANDS MINOR PROJ	URMN	0	0	0	0	0	0	0
Other Appropriated Funds Total		**49**	**0**	**49**	**27**	**0**	**27**	**22**

Region 5 Stanislaus National Forest FY 2009 Planning and Budget Advice

Pick Unit/Forest from drop down cell >>>	16-Stanislaus							
	BLI	FY 2009 Base	FY 2009 Earmarks	FY 2009 Total Base Allocation	FY 2008 Base	FY 2008 Earmarks	FY 2008 Total Base Allocation	Dollar Change from FY 2008
Perm & Trust								
BRUSH DISPOSAL	BDBD	90	0	90	125	0	125	(35)
CO-OPERATIVE WORK NON-AGREEMENT BASEI	CWF2	0	0	0	0	0	0	0
COOPERATIVE WORK - OTHER	CWFS	0	0	0	272	0	272	(272)
COOPERATIVE WORK, KV	CWKV	407	0	407	444	0	444	(37)
CONVEYANCE OF ADMIN SITES	EXSC	0	0	0	0	0	0	0
SITE SPECIFIC LANDS ACTS	EXSL	0	0	0	0	0	0	0
REGIONAL RECREATION ENHANCEMENT	FDAS	0	0	0	0	0	0	0
RECREATION ENHANCEMENT-COST OF COLLEC	FDCL	25	0	25	25	0	25	0
UNIT RECREATION ENHANCEMENT	FDDS	100	0	100	100	0	100	0
RECREATION FACILITIES DEFERRED MAINTENA	FDRF	0	0	0	0	0	0	0
REMOTE SENSING DATA	MRMS	0	0	0	0	0	0	0
ADMINISTRATIVE MAPS	MSEQ	9	0	9	31	0	31	(22)
MAPS FOR VISITORS AND OTHER REC	MVIS	1	0	1	8	0	8	(7)
TITLE II FUNDING	PSRS	0	0	0	0	0	0	0
OPERATIONS AND MAINTENANCE OF QUARTER	QMQM	37	0	37	40	0	40	(3)
RESTORATION OF IMPROVMNTS - FOREST LANI	RIRI	34	0	34	34	0	34	0
REFORESTATION TRUST	RTRT	382	0	382	220	0	220	162
STEWARDSHIP CONTRACTING	SSCC	0	0	0	0	0	0	0
TIMBER SALVAGE SALES	SSSS	200	0	200	350	0	350	(150)
BOTANICAL PRODUCTS	TPBP	0	0	0	0	0	0	0
TIMBER PIPELINE - RECREATION BACKLOG	TPCD	0	0	0	0	0	0	0
TIMBER PIPELINE - SALE PREP	TPPS	0	0	0	0	0	0	0
10% ROADS AND TRAILS FUND FOR STATES	TRTR	0	0	0	0	0	0	0
Perm & Trust Total		**1,285**	**0**	**1,285**	**1,649**	**0**	**1,649**	**(364)**
Non Appropriated Funds								
NURSERY/T. STK DIST/BARE ROOT	WCBT	0	0	0	0	0	0	0
NURSERY/PROD T. STK/CONTAINER	WCCP	0	0	0	0	0	0	0
FLEET EQUIPMENT RENTAL	WCFE	0	0	0	0	0	0	0
SEED SUPPLY	WCSP	0	0	0	0	0	0	0
SEED SUPPLY	WCWC	0	0	0	0	0	0	0
WCF ENTERPRISE ACTIVITIES	WCWE	0	0	0	0	0	0	0
Non Appropriated Funds Total		**0**	**0**	**0**	**0**	**0**	**0**	**0**
Transfer Funds								
FED HWY ADMIN EXPENSE	HTAE	0	0	0	4	0	4	(4)
FED HWY EMERGENCY RELIEF	HTER	0	0	0	0	0	0	0
FED HWY PUBLIC ROADS	HTRP	0	0	0	0	0	0	0
HAZARDOUS WASTE MANAGEMENT	HWHW	0	0	0	0	0	0	0
SCSEP	NFSA	0	0	0	0	0	0	0
SCSEP	NFSD	0	0	0	0	0	0	0
SOUTHERN NEVADA PUBLIC LANDS	SNPL	0	0	0	0	0	0	0
Transfer Funds Total		**0**	**0**	**0**	**4**	**0**	**4**	**(4)**
Grand Total		**17,157**	**147**	**17,304**	**18,268**	**135**	**18,403**	**(1,099)**

Attachment C—Financial Statements

FY2006 Stanislaus National Forest Expenses

Program	Program Name	Actual Authority	Obligations	Unpaid Expenditure	Paid Expenditure	Spent-to-Date	Remaining Allowance
BDBD	Program Total	$139,000	$0	$0	$112,613.22	$112,613.22	$26,386.78
CMFC	FACILITIES CAPITAL IMPRO/MTCE	$302,895	$64,091.17	$17,396.98	$220,316.36	$301,804.51	$1,090.49
CMII	INFRA IMPROVEMENT - DEF MTNCE	$2,480	$0	$0	$2,265.66	$2,265.66	$214.34
CMRD	ROADS CAPITAL IMPROVS/MAINTCE	$800,795	$349,558.64	$6,565.16	$433,601.42	$789,725.22	$11,069.78
CMTL	TRAILS CAPITAL IMPROVS/MTCE	$515,614	$85,510	$26,917.23	$486,899.69	$599,326.92	-$83,712.92
CP09	FACILITIES MAIN COST POOL	$244,000	$0	-$476.28	$241,446.27	$240,969.99	$3,030.01
CWFS	COOPERATIVE WORK, OTHER	$400,000	$224,504.40	$67,785.32	$472,640.72	$764,930.44	-$364,930.44
CWK2	K-V REGIONAL PROJECTS	$5,808,000	$1,708,198.91	$244,359.27	$3,625,400.01	$5,577,958.19	$230,041.81
CWKV	K-V SALE AREA PROJECTS	$2,917,000	$293,124.25	$11,372.84	$202,437.61	$506,934.70	$2,410,065.30
FDCL	REC ENHANCMNT-COST COLL/INDRCT	$10,000	$0	$3,374.80	$17,719.03	$21,093.83	-$11,093.83
FDDS	UNIT RECREATION ENHANCEMENT	$90,000	$2,605.11	$5,058.08	$34,309.06	$41,972.25	$48,027.75
GBGB	GIFTS AND BEQUESTS	$20,000	$0	$0	$4,102.87	$4,102.87	$15,897.13
HTAE	FED HWY ADM EXP	$8,000	$0	$0	$7,362.66	$7,362.66	$637.34
HTER	FED HWY EMERGENCY RELIEF	$20,000	$0	$0	$1,564.84	$1,564.84	$18,435.16
MSEQ	ADMINISTRATIVE MAPS	$15,000	$0	$0	$0	$0	$15,000
MVIS	MAPS FOR VISITORS & OTHER REC	$15,000	$0	$0	$0	$0	$15,000
NFIM	INVENTORY AND MONITORING	$136,000	$3,550.63	$2,458.51	$140,730.07	$146,739.21	-$10,739.21
NFLM	LANDOWNERSHIP MANAGEMENT	$117,034	$0	$2,806.58	$182,980.07	$185,786.65	-$68,752.65
NFMG	MINERALS MANAGEMENT	$161,200	$83,188	$1,640.19	$47,046.16	$131,874.35	$29,325.65
NFPN	LAND MANAGEMENT PLANNING	$55,000	$0	$3,685.90	$48,933.20	$52,619.10	$2,380.90
NFRG	GRAZING MANAGEMENT	$104,000	$6,977	$0	$99,683.31	$106,660.31	-$2,660.31
NFRW	RECREATION/HERITAGE/WILDERNESS	$922,464	$25,718.49	$40,335.84	$1,045,309.54	$1,111,363.87	-$188,899.87
NFTM	FOREST PRODUCTS	$718,000	$12,571.84	$16,264.23	$573,821.94	$602,658.01	$115,341.99
NFVW	VEGETATION & WATERSHED MGT	$787,000	$16,020.99	$63,897.38	$569,503.95	$649,422.32	$137,577.68
NFWF	WILDLIFE/FISHERIES HABITAT MGT	$59,300	$0	$6,610.73	$60,502.40	$67,113.13	-$7,813.13
NFSD	SCSEP PY 05 AVAIL 7/1 -9/30/05	$105,008	$8.90	$2,154.90	$57,356.99	$59,520.79	$45,487.21
PSCP	TITLE II (RAC) FUNDING	$30,248	$0	$0	$29,839	$29,839	$409
PSRS	TITLE II (RAC) FUNDING	$522,537	$90,972	$16.16	$70,334.78	$161,322.94	$361,214.06
QMQM	QUARTERS MAINTENANCE	$50,000	$0	$90.12	$111,175.41	$111,265.53	-$61,265.53
RBRB	RANGE BETTERMENT FUND	$33,000	$0	$7,261.84	$6,279.98	$13,541.82	$19,458.18
RIRI	RESTORATION OF IMPROVEMENTS	$18,000	$0	$0	$0	$0	$18,000
RTRT	RFORESTATION TRUST FUND	$491,000	$180,677	$1,984.75	$200,167.14	$382,828.89	$108,171.11
SSSS	TIMBER SALVAGE SALES	$222,000	$0	$2,921.29	$132,523.72	$135,445.01	$86,554.99
SPFH	FED LAND FOREST HEALTH MGMT	$235,000	$33,011	$3,046.62	$154,183.19	$190,240.81	$44,759.19
SPS4	FOREST HEALTH - FEDERAL LANDS	$100,000	$100,000	$0	$0	$100,000	$0
TPCD	TIMBER PIPELINE-REC BACKLOG	$7,550	$0	$2,684.50	$1,141.15	$3,825.65	$3,724.35
TRTR	10% ROADS AND TRAIL FUND	$160,500	$159,674	$0	$398.50	$160,072.50	$427.50
URMJ	COST RECOVERY LANDS MAJOR PROJ	$20,000	$0	$0	$0	$0	$20,000
URCP	ORGANIZATIONAL CAMPS	$9,000	$0	$0	$1,195.33	$1,195.33	$7,804.67
URFF	COMMERCIAL FILM- COLLCTN COST	$1,000	$0	$0	$0	$0	$1,000
URFM	COMMERCIAL FILM-LOCAL ADM UNIT	$6,000	$0	$0	$0	$0	$6,000
WFHF	HAZARDOUS FUEL REDUCTION	$895,800	$53,346.42	$1,678.56	$815,213.67	$870,238.65	$25,561.35
WFPR	PRESUPPRESSION AND FUELS	$6,439,000	$17,278.64	$150,971.47	$5,837,865.05	$6,006,115.16	$432,884.84
Total	Total	$23,713,425	$3,510,587	$692,863	$16,048,864	$20,252,314	$3,461,111

FY2007 Stanislaus National Forest Expenses

			Data							
Fund	Program	Unit	Actual Authority	Obligations	Unpaid Expenditure	Paid Expenditure	Commitments	Spent-to-Date	Remaining Allowance	% SPENT
BDBD	BDBD	0516	125,000	39,000	0	87,732	0	126,732	-1,732	101%
	BDBD Total		125,000	39,000	0	87,732	0	126,732	-1,732	101%
BDBD Total			125,000	39,000	0	87,732	0	126,732	-1,732	101%
CMCM	CMFC	0516	985,900	904,381	8,732	87,720	0	1,000,833	-14,933	102%
	CMFC Total		985,900	904,381	8,732	87,720	0	1,000,833	-14,933	102%
	CMII	0516	21,000	14,000	2,502	7,378	0	23,880	-2,880	114%
	CMII Total		21,000	14,000	2,502	7,378	0	23,880	-2,880	114%
	CMRD	0516	937,800	236,485	41,821	630,168	0	908,475	29,325	97%
	CMRD Total		937,800	236,485	41,821	630,168	0	908,475	29,325	97%
	CMTL	0516	173,986	0	0	219,904	0	219,904	-45,918	126%
	CMTL Total		173,986	0	0	219,904	0	219,904	-45,918	126%
CMCM Total			2,118,686	1,154,866	53,055	945,170	0	2,153,092	-34,406	102%
CMFM	CP09	0516	302,000	0	6,995	294,350	0	301,345	655	100%
	CP09 Total		302,000	0	6,995	294,350	0	301,345	655	100%
CMFM Total			302,000	0	6,995	294,350	0	301,345	655	100%
CWF2	CWF2	0516	526,000	0	1,536	20,097	0	21,632	504,368	4%
	CWF2 Total		526,000	0	1,536	20,097	0	21,632	504,368	4%
CWF2 Total			526,000	0	1,536	20,097	0	21,632	504,368	4%
CWFS	CWFS	0516	605,144	6,800	12,218	166,028	0	185,046	420,098	31%
	CWFS Total		605,144	6,800	12,218	166,028	0	185,046	420,098	31%
CWFS Total			605,144	6,800	12,218	166,028	0	185,046	420,098	31%
CWKV	CWK2	0516	171,000	14,152	0	163,941	0	178,093	-7,093	104%
	CWK2 Total		171,000	14,152	0	163,941	0	178,093	-7,093	104%
	CWKV	0516	3,193,378	1,989,236	30,536	353,898	0	2,373,669	819,709	74%
	CWKV Total		3,193,378	1,989,236	30,536	353,898	0	2,373,669	819,709	74%
CWKV Total			3,364,378	2,003,388	30,536	517,839	0	2,551,763	812,615	76%
FDFD	FDCL	0516	25,398	0	373	14,477	0	14,850	10,548	58%
	FDCL Total		25,398	0	373	14,477	0	14,850	10,548	58%
	FDDS	0516	244,300	2,100	6,098	85,693	0	93,891	150,409	38%
	FDDS Total		244,300	2,100	6,098	85,693	0	93,891	150,409	38%
FDFD Total			269,698	2,100	6,470	100,171	0	108,741	160,957	40%
GBGB	GBGB	0516	29,000	141	0	12,288	0	12,429	16,571	43%
	GBGB Total		29,000	141	0	12,288	0	12,429	16,571	43%
GBGB Total			29,000	141	0	12,288	0	12,429	16,571	43%
HTAE	HTAE	0516	5,000	0	0	777	0	777	4,223	16%
	HTAE Total		5,000	0	0	777	0	777	4,223	16%
HTAE Total			5,000	0	0	777	0	777	4,223	16%
HTER	HTER	0516	70,565	0	0	4,782	0	4,782	65,783	7%
	HTER Total		70,565	0	0	4,782	0	4,782	65,783	7%
HTER Total			70,565	0	0	4,782	0	4,782	65,783	7%
MAPS	MSEQ	0516	400	1,980	0	0	0	1,980	-1,580	495%
	MSEQ Total		400	1,980	0	0	0	1,980	-1,580	495%
	MVIS	0516	12,300	0	1,099	6,333	0	7,432	4,868	60%
	MVIS Total		12,300	0	1,099	6,333	0	7,432	4,868	60%
MAPS Total			12,700	1,980	1,099	6,333	0	9,412	3,288	74%
NFNF	DFAC	0516	0	0	-9,908	11,174	0	1,266	-1,266	#DIV/0!
	DFAC Total		0	0	-9,908	11,174	0	1,266	-1,266	#DIV/0!
	NFIM	0516	335,200	0	2,393	256,149	0	258,542	76,658	77%
	NFIM Total		335,200	0	2,393	256,149	0	258,542	76,658	77%
	NFLM	0516	291,900	118,834	1,633	137,065	0	257,531	34,369	88%
	NFLM Total		291,900	118,834	1,633	137,065	0	257,531	34,369	88%

			Data							
Fund	Program	Unit	Actual Authority	Obligations	Unpaid Expenditure	Paid Expenditure	Commitments	Spent-to-Date	Remaining Allowance	% SPENT
NFNF	NFMG	0516	81,700	0	606	51,843	0	52,449	29,251	64%
	NFMG Total		81,700	0	606	51,843	0	52,449	29,251	64%
	NFPN	0516	149,000	0	223	148,292	0	148,515	485	100%
	NFPN Total		149,000	0	223	148,292	0	148,515	485	100%
	NFRG	0516	102,500	0	15,693	99,029	0	114,722	-12,222	112%
	NFRG Total		102,500	0	15,693	99,029	0	114,722	-12,222	112%
	NFRW	0516	811,000	12,410	16,228	963,333	0	991,971	-180,971	122%
	NFRW Total		811,000	12,410	16,228	963,333	0	991,971	-180,971	122%
	NFTM	0516	2,628,000	111,307	143,055	2,173,660	0	2,428,021	199,979	92%
	NFTM Total		2,628,000	111,307	143,055	2,173,660	0	2,428,021	199,979	92%
	NFVW	0516	904,353	88,286	12,667	762,313	0	863,265	41,088	95%
	NFVW Total		904,353	88,286	12,667	762,313	0	863,265	41,088	95%
	NFWF	0516	118,000	19,706	10,500	86,603	0	116,809	1,191	99%
	NFWF Total		118,000	19,706	10,500	86,603	0	116,809	1,191	99%
NFNF Total			5,421,653	350,542	193,090	4,689,462	0	5,233,093	188,560	97%
NFSD	NFSD	0516	0	0	0	4,047	0	4,047	-4,047	#DIV/0!
	NFSD Total		0	0	0	4,047	0	4,047	-4,047	#DIV/0!
NFSD Total			0	0	0	4,047	0	4,047	-4,047	#DIV/0!
PSCP	PSCP	0516	409	0	0	0	0	0	409	0%
	PSCP Total		409	0	0	0	0	0	409	0%
PSCP Total			409	0	0	0	0	0	409	0%
PSRS	PSRS	0516	684,049	369,810	0	49,071	0	418,881	265,168	61%
	PSRS Total		684,049	369,810	0	49,071	0	418,881	265,168	61%
PSRS Total			684,049	369,810	0	49,071	0	418,881	265,168	61%
QMQM	QMQM	0516	45,000	0	0	0	0	0	45,000	0%
	QMQM Total		45,000	0	0	0	0	0	45,000	0%
QMQM Total			45,000	0	0	0	0	0	45,000	0%
RBRB	RBRB	0516	37,500	0	0	9,367	0	9,367	28,133	25%
	RBRB Total		37,500	0	0	9,367	0	9,367	28,133	25%
RBRB Total			37,500	0	0	9,367	0	9,367	28,133	25%
RIRI	RIRI	0516	37,000	0	0	5,195	0	5,195	31,805	14%
	RIRI Total		37,000	0	0	5,195	0	5,195	31,805	14%
RIRI Total			37,000	0	0	5,195	0	5,195	31,805	14%
RTRT	RTRT	0516	419,647	52,960	24,268	329,804	0	407,031	12,616	97%
	RTRT Total		419,647	52,960	24,268	329,804	0	407,031	12,616	97%
RTRT Total			419,647	52,960	24,268	329,804	0	407,031	12,616	97%
SFSF	SSSS	0516	312,000	0	17,538	219,424	0	236,962	75,038	76%
	SSSS Total		312,000	0	17,538	219,424	0	236,962	75,038	76%
SFSF Total			312,000	0	17,538	219,424	0	236,962	75,038	76%
SPSP	SPFH	0516	258,000	40,204	8,754	159,333	0	208,292	49,708	81%
	SPFH Total		258,000	40,204	8,754	159,333	0	208,292	49,708	81%
	SPS4	0516	122,000	121,995	0	0	0	121,995	5	100%
	SPS4 Total		122,000	121,995	0	0	0	121,995	5	100%
SPSP Total			380,000	162,199	8,754	159,333	0	330,287	49,713	87%
TRTR	TRTR	0516	811,248	472,162	18,027	225,378	0	715,568	95,680	88%
	TRTR Total		811,248	472,162	18,027	225,378	0	715,568	95,680	88%
TRTR Total			811,248	472,162	18,027	225,378	0	715,568	95,680	88%
URRF	URFM	0516	1,000	0	0	0	0	0	1,000	0%
	URFM Total		1,000	0	0	0	0	0	1,000	0%
URRF Total			1,000	0	0	0	0	0	1,000	0%
WFSU	WFSU	0516	0	4,449	31,900	1,578,232	0	1,614,580	-1,614,580	#DIV/0!
	WFSU Total		0	4,449	31,900	1,578,232	0	1,614,580	-1,614,580	#DIV/0!
WFSU Total			0	4,449	31,900	1,578,232	0	1,614,580	-1,614,580	#DIV/0!
WFWF	WFHF	0516	2,182,000	68,686	69,269	1,944,021	0	2,081,976	100,024	95%

			Data							
Fund	**Program**	**Unit**	Actual Authority	Obligations	Unpaid Expenditure	Paid Expenditure	Commitments	Spent-to-Date	Remaining Allowance	% SPENT
WFWF	WFHF Total		2,182,000	68,686	69,269	1,944,021	0	2,081,976	100,024	95%
	WFPR	0516	7,462,587	151,214	218,483	6,920,462	0	7,290,160	172,427	98%
	WFPR Total		7,462,587	151,214	218,483	6,920,462	0	7,290,160	172,427	98%
WFWF Total			9,644,587	219,901	287,752	8,864,484	0	9,372,136	272,451	97%
Grand Total			**25,222,264**	**4,840,298**	**693,237**	**18,289,364**	**0**	**23,822,899**	**1,399,365**	94%

FY2008 Stanislaus National Forest Expenses

			Data						
Fund	Program	Unit	Actual Authority	Obligations	Unpaid Expenditure	Paid Expenditure	Commitments	Spent-to-Date	% spent
BDBD	BDBD	0516	90,000	0	0	0	0	0	0%
	BDBD Total		90,000	0	0	0	0	0	0%
BDBD Total			90,000	0	0	0	0	0	0%
CMCM	CMFC	0516	121,000	0	0	5,651	0	5,651	5%
	CMFC Total		121,000	0	0	5,651	0	5,651	5%
	CMRD	0516	770,000	24,500	337	23,717	0	48,554	6%
	CMRD Total		770,000	24,500	337	23,717	0	48,554	6%
	CMTL	0516	176,000	0	0	9,373	0	9,373	5%
	CMTL Total		176,000	0	0	9,373	0	9,373	5%
CMCM Total			1,067,000	24,500	337	38,742	0	63,579	6%
CMFM	CP09	0516	237,000	0	0	2,081	0	2,081	1%
	CP09 Total		237,000	0	0	2,081	0	2,081	1%
CMFM Total			237,000	0	0	2,081	0	2,081	1%
CWF2	CWF2	0516	0	0	0	439	0	439	#DIV/0!
	CWF2 Total		0	0	0	439	0	439	#DIV/0!
CWF2 Total			0	0	0	439	0	439	#DIV/0!
CWFS	CWFS	0516	0	0	0	15,779	0	15,779	#DIV/0!
	CWFS Total		0	0	0	15,779	0	15,779	#DIV/0!
CWFS Total			0	0	0	15,779	0	15,779	#DIV/0!
CWKV	CWKV	0516	407,000	0	0	0	4,000	4,000	1%
	CWKV Total		407,000	0	0	0	4,000	4,000	1%
CWKV Total			407,000	0	0	0	4,000	4,000	1%
FDFD	FDCL	0516	25,000	0	0	0	0	0	0%
	FDCL Total		25,000	0	0	0	0	0	0%
	FDDS	0516	100,000	6,800	0	867	0	7,667	8%
	FDDS Total		100,000	6,800	0	867	0	7,667	8%
	FDRF	0516	0	0	0	265	0	265	#DIV/0!
	FDRF Total		0	0	0	265	0	265	#DIV/0!
FDFD Total			125,000	6,800	0	1,131	0	7,931	6%
GBGB	GBGB	0516	22,000	0	0	0	0	0	0%
	GBGB Total		22,000	0	0	0	0	0	0%
GBGB Total			22,000	0	0	0	0	0	0%
MAPS	MSEQ	0516	9,000	0	0	0	0	0	0%
	MSEQ Total		9,000	0	0	0	0	0	0%
	MVIS	0516	1,000	0	0	0	0	0	0%
	MVIS Total		1,000	0	0	0	0	0	0%
MAPS Total			10,000	0	0	0	0	0	0%
NFNF	DFAC	0516	0	0	-348	848	0	500	#DIV/0!
	DFAC Total		0	0	-348	848	0	500	#DIV/0!
	NFIM	0516	262,000	0	0	7,944	0	7,944	3%
	NFIM Total		262,000	0	0	7,944	0	7,944	3%
	NFLM	0516	214,000	0	0	4,599	0	4,599	2%
	NFLM Total		214,000	0	0	4,599	0	4,599	2%
	NFMG	0516	44,000	0	0	0	0	0	0%
	NFMG Total		44,000	0	0	0	0	0	0%
	NFN3	0516	0	0	0	1,635	0	1,635	#DIV/0!
	NFN3 Total		0	0	0	1,635	0	1,635	#DIV/0!
	NFPN	0516	70,000	0	2,666	1,214	0	3,881	6%
	NFPN Total		70,000	0	2,666	1,214	0	3,881	6%
	NFRG	0516	110,000	0	0	6,494	0	6,494	6%
	NFRG Total		110,000	0	0	6,494	0	6,494	6%
	NFRW	0516	958,000	13,555	0	45,150	0	58,705	6%
	NFRW Total		958,000	13,555	0	45,150	0	58,705	6%
	NFTM	0516	1,906,000	0	0	40,321	0	40,321	2%
	NFTM Total		1,906,000	0	0	40,321	0	40,321	2%
	NFVW	0516	212,000	0	0	12,337	0	12,337	6%
	NFVW Total		212,000	0	0	12,337	0	12,337	6%
	NFWF	0516	273,000	0	133	3,918	0	4,051	1%
	NFWF Total		273,000	0	133	3,918	0	4,051	1%
NFNF Total			4,049,000	13,555	2,451	124,461	0	140,468	3%
QMQM	QMQM	0516	37,000	0	0	0	0	0	0%
	QMQM Total		37,000	0	0	0	0	0	0%
QMQM Total			37,000	0	0	0	0	0	0%
RBRB	RBRB	0516	0	0	0	523	0	523	#DIV/0!
	RBRB Total		0	0	0	523	0	523	#DIV/0!
RBRB Total			0	0	0	523	0	523	#DIV/0!
RIRI	RIRI	0516	34,000	0	0	0	0	0	0%
	RIRI Total		34,000	0	0	0	0	0	0%
RIRI Total			34,000	0	0	0	0	0	0%
RTRT	RTRT	0516	382,000	0	0	14,489	0	14,489	4%
	RTRT Total		382,000	0	0	14,489	0	14,489	4%
RTRT Total			382,000	0	0	14,489	0	14,489	4%
SFSF	SSSS	0516	200,000	0	0	2,075	0	2,075	1%
	SSSS Total		200,000	0	0	2,075	0	2,075	1%
SFSF Total			200,000	0	0	2,075	0	2,075	1%
SPSP	SPFH	0516	348,000	0	232	9,038	0	9,271	3%
	SPFH Total		348,000	0	232	9,038	0	9,271	3%
	SPS4	0516	0	0	0	352	0	352	#DIV/0!
	SPS4 Total		0	0	0	352	0	352	#DIV/0!
SPSP Total			348,000	0	232	9,390	0	9,623	3%
TRTR	TRTR	0516	0	0	0	4,690	0	4,690	#DIV/0!
	TRTR Total		0	0	0	4,690	0	4,690	#DIV/0!
TRTR Total			0	0	0	4,690	0	4,690	#DIV/0!
URRF	URCP	0516	25,000	0	0	0	0	0	0%
	URCP Total		25,000	0	0	0	0	0	0%
	URFM	0516	2,000	0	0	0	0	0	0%
	URFM Total		2,000	0	0	0	0	0	0%

FY2008 Stanislaus National Forest Expenses

			Data						
Fund	**Program**	**Unit**	**Actual Authority**	**Obligations**	**Unpaid Expenditure**	**Paid Expenditure**	**Commitments**	**Spent-to-Date**	**% spent**
URRF Total			27,000	0	0	0	0	0	0%
WFSU	WFSU	0516	0	0	13,759	27,647	0	41,406	#DIV/0!
	WFSU Total		0	0	13,759	27,647	0	41,406	#DIV/0!
WFSU Total			0	0	13,759	27,647	0	41,406	#DIV/0!
WFWF	WFHF	0516	2,507,000	0	0	70,166	202,610	272,776	11%
	WFHF Total		2,507,000	0	0	70,166	202,610	272,776	11%
	WFPR	0516	7,764,000	16,148	3,427	227,700	21,567	268,843	3%
	WFPR Total		7,764,000	16,148	3,427	227,700	21,567	268,843	3%
WFWF Total			10,271,000	16,148	3,427	297,866	224,177	541,618	5%
Grand Total			**17,306,000**	**61,003**	**20,206**	**539,314**	**228,177**	**848,700**	**5%**

FY2006 NFNF Expenses

0516 STANISLAUS

Date: 08/21/2008

Fiscal Year: 2006

Time: 02:45 PM

Budget Fiscal Year: 06

Last Month of TROB Data Imported for this fiscal year Sep -- 2006

WPTR Report ID: trk 2

BLI	Base Pay	PRP	OPE	Days	TTT	Fleet	All Other	Total
STANISLAUS								
NFIM	119,072.74	0.00	0.00	457.00	1,633.50	351.94	25,681.03	146,739.21
NFLM	160,092.23	0.00	5,621.52	528.13	1,570.52	12,396.66	6,105.72	185,786.65
NFMG	41,150.76	0.00	0.00	133.16	2,100.81	1,871.05	86,751.73	131,874.35
NFPN	51,381.42	0.00	0.00	130.00	989.90	73.80	173.98	52,619.10
NFRG	85,657.95	1,683.50	0.00	395.06	1,281.59	7,922.68	10,114.59	106,660.31
NFRW	784,443.73	10,394.44	27,787.19	3,547.38	20,367.27	114,741.44	153,629.80	1,111,363.87
NFTM	472,277.22	1,806.06	9,595.52	2,629.84	57,749.15	34,308.96	26,921.10	602,658.01
NFVW	521,166.32	9,115.76	5,241.00	2,180.75	48,741.32	26,634.49	38,523.43	649,422.32
NFWF	38,160.45	2,923.58	400.00	170.28	3,631.23	14,043.80	7,954.07	67,113.13
Total	2,273,402.82	25,923.34	48,645.23	10,171.59	138,065.29	212,344.82	355,855.45	3,054,236.95
Total STANISLAUS	2,273,402.82	25,923.34	48,645.23	10,171.59	138,065.29	212,344.82	355,855.45	3,054,236.95

FY2007 NFNF Expenses

0516 STANISLAUS

Date: 08/19/2008

Fiscal Year: 2007

Time: 11:49 AM

Budget Fiscal Year: 07

Last Month of TROB Data Imported for this fiscal year Sep -- 2007

WPTR Report ID: trk 2

BLI	Base Pay	PRP	OPE	Days	TTT	Fleet	All Other	Total
STANISLAUS								
NFIM	228,890.93	7,337.28	5,022.49	708.72	2,256.34	10,434.71	4,600.62	258,542.37
NFLM	124,092.55	1,144.89	0.00	410.69	781.96	10,113.66	121,398.39	257,531.45
NFMG	31,186.13	24.72	0.00	99.75	1,446.72	1,002.87	18,788.69	52,449.13
NFPN	49,886.58	0.00	0.00	133.50	13.50	114.70	98,500.00	148,514.78
NFRG	102,183.09	2,360.57	459.76	371.69	2,543.21	6,408.53	766.94	114,722.10
NFRW	693,579.49	10,763.44	33,929.82	3,210.28	28,614.66	91,251.72	133,832.00	991,971.13
NFTM	1,850,561.78	30,998.12	19,749.77	7,792.09	181,212.56	193,647.11	151,851.72	2,428,021.06
NFVW	523,535.05	11,420.66	11,895.90	2,646.84	12,703.19	54,707.94	249,002.73	863,265.47
NFWF	64,933.54	787.48	0.00	251.56	28,175.08	4,880.25	18,032.60	116,808.95
Total	3,668,849.14	64,837.16	71,057.74	15,625.13	257,747.22	372,561.49	796,773.69	5,231,826.44
Total STANISLAUS	3,668,849.14	64,837.16	71,057.74	15,625.13	257,747.22	372,561.49	796,773.69	5,231,826.44

FY2008 NFNF Expenses

0516 STANISLAUS

Date: 11/21/2008

Fiscal Year: 2008

Time: 11:06 AM

Budget Fiscal Year: 08

Last Month of TROB Data Imported for this fiscal year Sep -- 2008

WPTR Report ID: trk 2

BLI	Base Pay	PRP	OPE	Days	TTT	Fleet	All Other	Total
STANISLAUS								
NFIM	227,514.45	3,415.08	5,756.58	721.97	2,052.23	456.32	1,132.72	240,327.38
NFLM	111,321.82	5,572.83	0.00	451.41	4,499.47	10,946.89	3,037.19	135,378.20
NFMG	70,385.46	12,847.93	2,189.27	263.59	10,946.93	15,874.08	84,164.39	196,408.06
NFN3	220,352.85	470.44	313.28	833.53	2,590.60	6,138.96	112,501.96	342,368.09
NFPN	58,114.07	0.00	0.00	151.00	325.46	0.00	183.88	58,623.41
NFRG	103,822.42	403.03	6.18	386.38	2,122.30	5,160.26	325.69	111,839.88
NFRW	798,645.26	20,209.25	11,926.25	3,183.69	57,892.87	74,561.00	99,427.07	1,062,661.70
NFTM	905,412.94	6,278.56	14,843.48	3,700.28	23,639.70	84,185.30	45,788.62	1,080,148.60
NFVW	388,525.08	12,516.37	581.77	1,451.41	2,615.60	10,767.52	12,804.60	427,810.94
NFWF	97,031.21	1,371.71	189.19	325.03	5,252.02	4,001.14	9,631.80	117,477.07
Total	2,981,125.56	63,085.20	35,806.00	11,468.28	111,937.18	212,091.47	368,997.92	3,773,043.33
Total STANISLAUS	2,981,125.56	63,085.20	35,806.00	11,468.28	111,937.18	212,091.47	368,997.92	3,773,043.33

Attachment D—Resumes

Susan Skalski

Stanislaus National Forest
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Education: Bachelor of Science, Natural Resource Management (Forestry), 1982, Colorado State University, Ft. Collins, CO; Executive Session in Natural Resources, 1993, Penn State, State College, PA; Executive Session (Intensive Semester), 1996, Lewis & Clark College, Portland, Oregon

Experience:

6/08-Present, Forest Supervisor, Stanislaus National Forest

Oversight, direction, and implement policy for the 900,000 acre Stanislaus National Forest. This includes all activities relating to natural resource management and protection of vegetation, wilderness, aquatic and terrestrial wildlife, minerals, grazing, soils, fire prevention and suppression, fuels, watersheds, recreation, heritage and scenic resources. Responsible for annual appropriation and distribution of $20-25 million to fund 300+ employees, infrastructure, fleet, contracts, shared partnerships, and resource. Develop relationships with Counties, State, other federal Agencies, partners, contractors, permit holders, special interest groups, industry representatives, researchers, elected officials, and visitors to the National Forest.

11/05-6/08, Deputy Forest Supervisor, Idaho-Panhandle National Forests

In a shared leadership capacity provided oversight, direction, and policy implementation for the 2.5 million acre Idaho-Panhandle National Forests. Included all activities relating to natural resource management and protection of vegetation, aquatic and terrestrial wildlife, minerals, grazing, soils, fire prevention and suppression, fuels, watersheds, recreation, heritage and scenic resources. Responsible for an annual appropriation and distribution of $25+ million to fund 300+ employees, infrastructure, fleet, contracts, shared partnerships, and many resource projects. Assisted the Forest Supervisor in developing relationships with Counties, State, other federal Agencies, partners, contractors, permit holders, special interest groups, industry representatives, researchers, elected officials, and visitors.

5/02-11/05, Legislative Affairs Specialist, Regional Office, Pacific Northwest Region

Served as the key contact between the Forest Service's Pacific Northwest (Oregon/Washington) Regional Office and Congressional Members. Developed relationships. Attended hearings and provided Congressional briefings and field visits. Wrote Congressional testimony for Agency and assisted in the preparation of visits by the President, Cabinet officials and Members of Congress.

2/99-5/03, District Ranger, Kaibab National Forest, Williams Ranger District

Provided oversight, direction, and implemented policy. Financial responsibly for an annual budget of $2.5 million to fund 65+ employees to accomplish resource projects. Developed relationships and partnerships for Ranger District.

Karen Jo Caldwell

#1 Pinecrest Lake Road
Pinecrest CA, 95364
209-965-3434
kcaldwell@fs.fed.us

Education: Bachelor of Science Forestry, Outdoor Recreational Resource Management emphasis, 1977, Southern Illinois University

Experience: **5/92 to present; District Ranger, Stanislaus National Forest, Summit Ranger District**

Agency administrator responsible for all management, protection and utilization of a broad range of Forest resources including: vegetation, terrestrial and aquatic wildlife, recreation, minerals, grazing, soils, watersheds, fire prevention, wildland fire suppression, fuels management, cultural resources, and visual resources. The District encompasses approximately 300,000 acres of public lands which includes 150,000 acres of federally designated Wilderness and 30 miles of designated and proposed Wild and Scenic Rivers. Manage/supervise a workforce of 60 permanent positions with an additional summer temporary workforce of 35. Serve as full member of the Stanislaus National Forest Leadership Team which develops and implements policy and direction for Forest-wide resources and activities.

9/90-5/92, District Ranger, Six Rivers National Forest, Gasquet Ranger District

Agency administrator responsible for all management, protection and utilization of a broad range of Forest resources including: vegetation, terrestrial and aquatic wildlife, recreation, minerals, grazing, soils, watersheds, fire prevention, wildland fire suppression, fuels management, cultural resources, and visual resources. The District encompasses approximately 350,000 acres of public lands which includes 330,000 acres of the federally designated Smith River National Recreation Area. Manage/supervise a workforce of 35 permanent positions with an additional summer temporary workforce of 15. Annual operating budget of $2.2 million. Serve as full member of the Six Rivers National Forest Leadership Team which develops and implements policy and direction for Forest-wide resources and activities.

8/88-9/90, Consent Decree Specialist, Stanislaus National Forest

Management and oversight responsibility for implementation of the Regional Consent Decree program for the Forest.

6/81-8/88, Forester, Stanislaus National Forest, MiWok Ranger District

Forester on the Mi-Wok Ranger District for the Small Timber Sales Program. Duties included: stand exams, environmental analysis document preparation, timber sale preparation, layout, and contract administration.

12/79-6/81, Young Adult Conservation Corps Crew Leader, Cleveland National Forest

Crew leader for a Young Adult Conservation Crew (YACC) located on the Palomar Ranger District. Responsible for safety and supervision of an eleven person work crew between the ages of 16 and 22 years performing a wide range of natural resource work.

Attachment E—Management Direction

Stanislaus National Forest
Summary of Forest Plan Direction

The following information represents a summary of the Forest Plan Direction[1] that applies within the Kennedy Meadow area that would: **Preserve and Enhance Habitat in Order to Protect Special Biological Resources**

Forest Goals

Diversity

Maintain or increase diversity of plants and animals, with a balance of vegetation types currently represented on the Forest which best provide for meeting the resource goals and objectives of the Forest Plan.

Fish and Wildlife

Provide habitat for viable populations of all native and desired non-native wildlife, fish and plants. Maintain and improve habitat for Threatened and Endangered species and give special attention to sensitive species to see that they do not become Federally listed as Threatened or Endangered.

Riparian

Manage riparian areas to protect or improve riparian area-dependent resources while allowing for management of other compatible uses.

Sensitive Plants

Manage sensitive plants to ensure continued population viability. and prevent them from becoming Federally listed as Threatened or Endangered.

Special Areas

Preserve the integrity of the botanic, cultural, geologic, scenic, and recreation features for which the areas were established.

Wild and Scenic Rivers

Manage Wild and Scenic Rivers and their immediate environments to preserve their free flowing condition and to protect their outstandingly remarkable values. Provide opportunities for public recreation and other resources based on the classification of each river segment.

Management Goals and Strategies

Aquatic, Riparian, and Meadow Ecosystems and Associated Species

Goals

The strategy for aquatic management provides broad goals (listed below), which are endpoints toward which management moves watershed processes and functions, habitats, attributes, and populations. The goals provide a comprehensive framework for establishing desired conditions at larger scales, including river basin, watershed, and landscape scales. Moving ecosystem conditions toward these goals will restore and maintain the physical, chemical and biological integrity of the region's waters as mandated by the Clean Water Act, and will support the Forest Service's mission to provide habitat for riparian - and aquatic-dependent species under the National Forest Management Act, Organic Act, Safe Drinking Water Act, Endangered Species Act, and Electric Consumers Protection Act. The following goals are part of the Aquatic Management Strategy:

- **Species Viability**: Maintain and restore habitat to support viable populations of native and desired non-native plant, invertebrate and vertebrate riparian-dependent species. Prevent new introductions of invasive species. Where invasive species are adversely affecting the viability of native species,

[1] USDA 2005. Forest Plan Direction. July 2005. Forest Service, Stanislaus National Forest, Sonora, CA.

work cooperatively with appropriate State and Federal wildlife agencies to reduce impacts to native populations.

- **Plant and Animal Community Diversity**: Maintain and restore the species composition and structural diversity of plant and animal communities in riparian areas, wetlands, and meadows to provide desired habitats and ecological functions.
- **Special Habitats**: Maintain and restore the distribution and health of biotic communities in special aquatic habitats (such as springs, seeps, vernal pools, fens, bogs, and marshes) to perpetuate their unique functions and biological diversity.

Strategy

The aquatic, riparian, and meadow ecosystem strategy has the following key elements:

- a description of desired conditions for aquatic, riparian, and meadow habitats developed from the AMS goals;
- a set of land allocations, specifically riparian conservation areas and critical aquatic refuges, that delineate aquatic, riparian, and meadow habitats, which are to be managed consistent with the following riparian conservation objectives (RCOs) and associated standards and guidelines;

Riparian Conservation Objective 2: Maintain or restore: (1) the geomorphic and biological characteristics of special aquatic features, including lakes, meadows, bogs, fens, wetlands, vernal pools, springs; (2) streams, including in stream flows; and (3) hydrologic connectivity both within and between watersheds to provide for the habitat needs of aquatic-dependent species. (RCO 2 is linked to the following AMS Goals: 2 Species Viability; 3 Plant and Animal Community Diversity; 4 Special Habitats; 5 Watershed Connectivity; 6 Floodplains and Water Tables; 8 Streamflow Patterns and Sediment Regimes; 9 Streambanks and Shorelines).

Riparian Conservation Objective 3: Ensure a renewable supply of large down logs that: (1) can reach the stream channel and (2) provide suitable habitat within and adjacent to the RCA. (RCO 3 is linked to the following AMS goals: 2 Species Viability; 3 Plant and Animal Community Diversity).

Riparian Conservation Objective 4: Ensure that management activities, including fuels reduction actions, within RCAs and CARs enhance or maintain physical and biological characteristics associated with aquatic- and riparian-dependent species. (RCO 4 is linked to the following AMS Goals: 2 Species Viability, 7 Watershed Condition).

Riparian Conservation Objective 5: Preserve, restore, or enhance special aquatic features, such as meadows, lakes, ponds, bogs, fens, and wetlands, to provide the ecological conditions and processes needed to recover or enhance the viability of species that rely on these areas. (RCO 5 is linked to the following AMS goals: 1 Water Quality, 2 Species Viability, 3 Plant and Animal Community Diversity, 4 Special Habitats; 7 Watershed Condition; 9 Stream Banks and Shorelines).

Riparian Conservation Objective 6: Identify and implement restoration actions to maintain, restore or enhance water quality and maintain, restore, or enhance habitat for riparian and aquatic species. (RCO 6 is linked to all AMS goals)

Forestwide S&Gs

Fish and Wildlife

Management Practices	General Direction	Standards and Guidelines
Fish and Wildlife Habitat Administration (5-A)	Provide habitat for diverse and viable populations of all native and desired non-native wildlife and fish and all native plants. Maintain and improve habitat for Federally listed Threatened and Endangered species and give special attention to sensitive species to see that they do not become Threatened or Endangered. Cooperate with State and Federal agencies in meeting mutual goals.	Management practices will allow for medium to high quality habitat for management indicator species, where potential allows, according to current habitat capability models for these species. Ensure that habitat needs of sensitive species are considered and that habitat needs of Federally listed Threatened and Endangered species are met. Cooperate with the California Department of Fish and Game, U.S. Fish and Wildlife Service and other concerned agencies in

Management Practices	General Direction	Standards and Guidelines
		the preparation and implementation of Federal and State Endangered Species recovery plans, the California Fish and Wildlife Management Plan (Sikes Act) and other species habitat plans.
Stream and Lake Fisheries – Structural Improvements and Maintenance (5-B)	Provide medium to high quality habitat for resident trout species (rainbow, brown, and brook trout) according to the habitat capability models for these species.	Provide for fish passage on streams where fish migrate, in accordance with FSM 2606.32, Region 5 Supplement 38.
Stream and Lake Fisheries – Non-Structural Improvements and Maintenance (5-C)	Provide medium to high quality habitat for resident trout species (rainbow, brown, and brook trout) according to the habitat capability models for these species.	Maintain high water quality values in accordance with the Standards and Guidelines for watershed. Retain streamside vegetation so that at least 60% of the stream surface is shaded from 11 AM to 4 PM from June 1 to September 30 to maintain water temperatures at less than 65 degrees for those perennial streams which do not normally exceed this temperature.
Habitat Connectivity for Old Forest Associated Species (5-E)	Minimize old forest habitat fragmentation. Assess potential impacts of fragmentation on old forest associated species (particularly fisher and marten) in biological evaluations. Assess the potential impact of projects on the connectivity of habitat for old forest associated species. Consider retaining forested linkages (with canopy cover greater than 40 percent) that are interconnected via riparian areas and ridgetop saddles during project-level analysis. If fishers are detected outside the southern Sierra fisher conservation area, evaluate habitat conditions and implement appropriate mitigation measures to retain suitable habitat within the estimated home range. Institute project-level surveys over the appropriate area, as determined by an interdisciplinary team. Identify areas for acquisition, exchange, or conservation easements to enhance connectivity of habitat for old forest associated species.	

Sensitive Plants

Management Practices	General Direction	Standards and Guidelines
Sensitive Plants Interim and Recovery Management (12-A)	Provide for protection and habitat needs of sensitive plants, so that Forest activities will not jeopardize their continued existence.	Protect sensitive plants from activities which might cause them to become Federally listed as Threatened or Endangered. Identify populations of sensitive plants which occur in areas planned for timber sales or other projects. Modify planned projects to avoid or minimize adverse impacts to sensitive plants. Where projects may jeopardize a sensitive plant species perform a Biological Evaluation, botanical investigation and develop management guidelines, as necessary, for the species involved. Prepare species management guidelines for all sensitive species in order of the degree of risk posed by management activities. Conduct surveys and monitoring necessary to detect potentially damaging disturbances, changes in known populations and locations of new populations.

Management Area Direction

Wild and Scenic Rivers and Proposed Wild and Scenic Rivers

Management Emphasis

Management emphasis for these areas is to manage selected river corridors to preserve their notable values or features as part of, or for eventual inclusion in, the National Wild and Scenic River System. Direction provides for management of recommended segments in accordance with the Wild and Scenic Rivers Act of 1968 as guided by FSH 1909.12, Chapter 8, and the 1982 Guidelines for River Management (USDA/USDI). Proposed Wild and Scenic Rivers within Wilderness will be managed under dual designation. No timber harvest is scheduled; however, a wide range of resource activities are permitted depending upon the proposed classification of Wild, Scenic or Recreational.

Designated and proposed Wild and Scenic Rivers, along with immediate environments, will be managed to preserve their free flowing condition and protect their outstandingly remarkable values. To the extent of Forest Service authority, no development of hydroelectric power facilities or other water resource developments would be permitted. Opportunities for public recreation and other resource uses are based on the classification of each identified river segment.

Description

This Management Area generally contains those National Forest lands within 1/4 mile on either side of approximately 40 miles of existing Wild and Scenic Rivers and 160 miles of proposed Wild and Scenic Rivers. Wild and Scenic Rivers and Proposed Wild and Scenic Rivers are displayed on Map I-4. Appendix E (Wild and Scenic River Study) of the EIS contains detailed descriptions of each proposed Wild and Scenic River.

Proposed Wild and Scenic Rivers

Middle Fork Stanislaus River

This area includes 41.5 miles of eligible segments of the Middle Fork Stanislaus River and its tributaries, Deadman and Kennedy Creeks. It also includes all lands within 1/4 mile of each segment. The area is located in the east and central portions of the Forest. The following classifications are recommended for this proposed Wild and Scenic River:

Segment	**Length** (mi)	Classification
1. Deadman Creek	8	Recreational
2. Kennedy Creek	8	Wild
5. Relief Reservoir - Clark Fork	12	Recreational
6. Clark Fork - Donnell Reservoir	3	Wild
12. Sand Bar - NF Stanislaus	10.5*	Wild

Management Practices	General Direction	Standards and Guidelines
Fish and Wildlife		
Fisheries Habitat Improvement and Maintenance - Structural Improvements, Streams and Lakes (5-B)	Conduct activities, as allowed under the Wild and Scenic Rivers Act, to maintain fisheries improvement structures as necessary, protecting the Wild and Scenic River values.	Utilize natural materials for all improvements. Emphasize maintenance of the watershed to prevent or control erosion.
Wild and Scenic Rivers		
Wild and Scenic River Inventory and Planning (19-A)	Complete formal recommendations for proposed Wild and Scenic Rivers. Complete legislative packages for recommended Wild and Scenic Rivers as necessary. Complete Wild and Scenic River Management Plans for rivers designated as Wild and Scenic Rivers.	Develop plans using the Limits of Acceptable Change (LAC) methods.
Wild and Scenic River Management (19-B)	Manage according to the requirements of the Wild and Scenic Rivers Act of 1968, as amended and according to the guidance provided by FSH 1909.12, Chapter 8, and the 1982 Final Revised Guidelines for River Management (USDA/ USDI). Wild and Scenic Rivers, along with their immediate environments, will be managed to preserve their free flowing condition and to protect and enhance their Wild and Scenic River values. Implement Limits of Acceptable Change (LAC) and limit use as necessary.	No development of hydroelectric power facilities would be permitted for (1) projects exempted from licensing by the Federal Energy Regulatory Commission or (2) projects on rivers designated through sections 2, 3 and 5(a) of the Wild and Scenic Rivers Act. The Forest Service will recommend to FERC that a project on a river found eligible and suitable for inclusion in the Wild and Scenic Rivers System should not licensed because it is inconsistent with the purposes for which the National Forest was created or acquired and, if necessary, impose conditions on any license issued for a project on that river that fully protect its outstandingly remarkable characteristics and free-flowing nature. Use permits and/or field observations to collect visitor data. Control use as follows: When LAC standards are exceeded for a site or area, implement appropriate management actions to remedy the situation.
	Wild and Scenic River management will be	Close, rotate, or rehabilitate campsites to allow for site recovery.

	consistent with adjoining National Forest, National Park and Bureau of Land Management Wild and Scenic River management. Allow commercial uses by permit only after an evaluation shows that such use will not compromise Wild and Scenic River values.	Require parties with recreation stock to carry feed when conditions warrant. Restrict stock use from steep and rocky terrain. Grant permits to collect native plants only when needed to meet administrative or research needs. Limit commercial permits for outfitter guides to activities that meet specific public needs and cannot be provided outside Wild and Scenic River areas. Do not issue permits for training activities or recreation events. The above Standards and Guidelines are consistent with and will be used in conjunction with the management plans for each Wild and Scenic River.
Proposed Wild and Scenic River Management (19-C)	Protect and enhance the Wild and Scenic River characteristics. To the extent of Forest Service authority, no development of hydro-electric power facilities would be permitted.	Manage the same as designated Wild and Scenic Rivers.

Land Allocations

Riparian Conservation Areas

Designation

Riparian conservation area (RCA) widths are described below. RCA widths may be adjusted at the project level if a landscape analysis has been completed and a site-specific RCO analysis demonstrates a need for different widths.

Perennial Streams: 300 feet on each side of the stream, measured from the bank full edge of the stream.
Seasonally Flowing Streams (includes intermittent and ephemeral streams): 150 feet on each side of the stream, measured from the bank full edge of the stream.
Streams in Inner Gorge[2]: top of inner gorge.
Special Aquatic Features[3] **or Perennial Streams with Riparian Conditions extending more than 150 feet from edge of streambank or Seasonally Flowing streams with riparian conditions extending more than 50 feet from edge of streambank**: 300 feet from edge of feature or riparian vegetation, whichever width is greater.
Other hydrological or topographic depressions without a defined channel: RCA width and protection measures determined through project level analysis.

Desired Conditions

Water quality meets the goals of the Clean Water Act and Safe Drinking Water Act; it is fishable, swimmable, and suitable for drinking after normal treatment.

Habitat supports viable populations of native and desired non-native plant, invertebrate, and vertebrate riparian and aquatic-dependent species. New introductions of invasive species are prevented. Where invasive species are adversely affecting the viability of native species, the appropriate State and Federal wildlife agencies have reduced impacts to native populations.

Species composition and structural diversity of plant and animal communities in riparian areas, wetlands, and meadows provide desired habitat conditions and ecological functions.

The distribution and health of biotic communities in special aquatic habitats (such as springs, seeps, vernal pools, fens, bogs, and marshes) perpetuates their unique functions and biological diversity.

Spatial and temporal connectivity for riparian and aquatic-dependent species within and between watersheds provides physically, chemically and biologically unobstructed movement for their survival, migration and reproduction.

The connections of floodplains, channels, and water tables distribute flood flows and sustain diverse habitats.

[2] Inner gorge is defined by stream adjacent slopes greater than 70 percent gradient
[3] Special Aquatic Features include: lakes, wet meadows, bogs, fens, wetlands, vernal pools, and springs

Soils with favorable infiltration characteristics and diverse vegetative cover absorb and filter precipitation and sustain favorable conditions of stream flows.

In-stream flows are sufficient to sustain desired conditions of riparian, aquatic, wetland, and meadow habitats and keep sediment regimes as close as possible to those with which aquatic and riparian biota evolved.

The physical structure and condition of stream banks and shorelines minimizes erosion and sustains desired habitat diversity.

The ecological status of meadow vegetation is late seral (50 percent or more of the relative cover of the herbaceous layer is late seral with high similarity to the potential natural community). A diversity of age classes of hardwood shrubs is present and regeneration is occurring.

Meadows are hydrologically functional. Sites of accelerated erosion, such as gullies and headcuts are stabilized or recovering. Vegetation roots occur throughout the available soil profile. Meadows with perennial and intermittent streams have the following characteristics: (1) stream energy from high flows is dissipated, reducing erosion and improving water quality, (2) streams filter sediment and capture bedload, aiding floodplain development, (3) meadow conditions enhance floodwater retention and groundwater recharge, and (4) root masses stabilize stream banks against cutting action.

Standards and Guidelines

Designate riparian conservation area (RCA) widths as described above. The RCA widths displayed may be adjusted at the project level if a landscape analysis has been completed and a site-specific RCO analysis demonstrates a need for different widths.

Evaluate new proposed management activities within CARs and RCAs during environmental analysis to determine consistency with the riparian conservation objectives at the project level and the AMS goals for the landscape. Ensure that appropriate mitigation measures are enacted to (1) minimize the risk of activity-related sediment entering aquatic systems and (2) minimize impacts to habitat for aquatic- or riparian-dependent plant and animal species.

Identify existing uses and activities in CARs and RCAs during landscape analysis. At the time of permit reissuance, evaluate and consider actions needed for consistency with RCOs.

As part of project-level analysis, conduct peer reviews for projects that propose ground-disturbing activities in more than 25 percent of the RCA or more than 15 percent of a CAR.

Riparian Conservation Objective	Standards and Guidelines
Riparian Conservation Objective 1: Ensure that identified beneficial uses for the water body are adequately protected. Identify the specific beneficial uses for the project area, water quality goals from the Regional Basin Plan, and the manner in which the standards and guidelines will protect the beneficial uses.	For waters designated as "Water Quality Limited" (Clean Water Act Section 303(d)), participate in the development of Total Maximum Daily Loads (TMDLs) and TMDL Implementation Plans. Execute applicable elements of completed TMDL Implementation Plans. Ensure that management activities do not adversely affect water temperatures necessary for local aquatic- and riparian-dependent species assemblages. Limit pesticide applications to cases where project level analysis indicates that pesticide applications are consistent with riparian conservation objectives. Within 500 feet of known occupied sites for the California red-legged frog, Cascades frog, Yosemite toad, foothill yellow-legged frog, mountain yellow-legged frog, and northern leopard frog, design pesticide applications to avoid adverse effects to individuals and their habitats. Prohibit storage of fuels and other toxic materials within RCAs and CARs except at designated administrative sites and sites covered by a Special Use Authorization. Prohibit refueling within RCAs and CARs unless there are no other alternatives. Ensure that spill plans are reviewed and up-to-date.
Riparian Conservation Objective 2: Maintain or restore: (1) the geomorphic and biological characteristics of special aquatic features, including lakes, meadows, bogs, fens,	Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by identifying roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths. Implement corrective actions where necessary to restore connectivity. Ensure that culverts or other stream crossings do not create barriers to upstream or downstream passage for aquatic-dependent species. Locate water drafting sites to avoid adverse effects to in stream flows and depletion of pool habitat. Where possible, maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows, wetlands, and other special aquatic features. Prior to activities that could adversely affect streams, determine if relevant stream characteristics are within the range of

Riparian Conservation Objective	Standards and Guidelines
wetlands, vernal pools, springs; (2) streams, including in stream flows; and (3) hydrologic connectivity both within and between watersheds to provide for the habitat needs of aquatic-dependent species.	natural variability. If characteristics are outside the range of natural variability, implement mitigation measures and short-term restoration actions needed to prevent further declines or cause an upward trend in conditions. Evaluate required long-term restoration actions and implement them according to their status among other restoration needs. Prevent disturbance to streambanks and natural lake and pond shorelines caused by resource activities (for example, livestock, off-highway vehicles, and dispersed recreation) from exceeding 20 percent of stream reach or 20 percent of natural lake and pond shorelines. Disturbance includes bank sloughing, chiseling, trampling, and other means of exposing bare soil or cutting plant roots. This standard does not apply to developed recreation sites, sites authorized under Special Use Permits and designated off-highway vehicle routes. In stream reaches occupied by, or identified as “essential habitat” in the conservation assessment for, the Lahonton and Paiute cutthroat trout and the Little Kern golden trout, limit streambank disturbance from livestock to 10 percent of the occupied or “essential habitat” stream reach. Cooperate with State and Federal agencies to develop streambank disturbance standards for threatened, endangered, and sensitive species. Use the regional streambank assessment protocol. Implement corrective action where disturbance limits have been exceeded. At either the landscape or project-scale, determine if the age class, structural diversity, composition, and cover of riparian vegetation are within the range of natural variability for the vegetative community. If conditions are outside the range of natural variability, consider implementing mitigation and/or restoration actions that will result in an upward trend. Actions could include restoration of aspen or other riparian vegetation where conifer encroachment is identified as a problem. Cooperate with Federal, Tribal, State and local governments to secure in stream flows needed to maintain, recover, and restore riparian resources, channel conditions, and aquatic habitat. Maintain in stream flows to protect aquatic systems to which species are uniquely adapted. Minimize the effects of stream diversions or other flow modifications from hydroelectric projects on threatened, endangered, and sensitive species. For exempt hydroelectric facilities on national forest lands, ensure that special use permit language provides adequate in stream flow requirements to maintain, restore, or recover favorable ecological conditions for local riparian- and aquatic-dependent species.
Riparian Conservation Objective 3: Ensure a renewable supply of large down logs that: (1) can reach the stream channel and (2) provide suitable habitat within and adjacent to the RCA.	Determine if the level of coarse large woody debris (CWD) is within the range of natural variability in terms of frequency and distribution and is sufficient to sustain stream channel physical complexity and stability. Ensure proposed management activities move conditions toward the range of natural variability.
Riparian Conservation Objective 4: Ensure that management activities, including fuels reduction actions, within RCAs and CARs enhance or maintain physical and biological characteristics associated with aquatic- and riparian-dependent species.	Within CARs, in occupied habitat or “essential habitat” as identified in conservation assessments for threatened, endangered, or sensitive species, evaluate the appropriate role, timing, and extent of prescribed fire. Avoid direct lighting within riparian vegetation; prescribed fires may back into riparian vegetation areas. Develop mitigation measures to avoid impacts to these species whenever ground-disturbing equipment is used. Use screening devices for water drafting pumps. (Fire suppression activities are exempt during initial attack.) Use pumps with low entry velocity to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. Design prescribed fire treatments to minimize disturbance of ground cover and riparian vegetation in RCAs. In burn plans for project areas that include, or are adjacent to RCAs, identify mitigation measures to minimize the spread of fire into riparian vegetation. In determining which mitigation measures to adopt, weigh the potential harm of mitigation measures, for example fire lines, against the risks and benefits of prescribed fire entering riparian vegetation. Strategies should recognize the role of fire in ecosystem function and identify those instances where fire suppression or fuel management actions could be damaging to habitat or long-term function of the riparian community. Post-wildfire management activities in RCAs and CARs should emphasize enhancing native vegetation cover, stabilizing channels by non-structural means, minimizing adverse effects from the existing road network, and carrying out activities identified in landscape analyses. Post-wildfire operations shall minimize the exposure of bare soil. Allow hazard tree removal within RCAs or CARs. Allow mechanical ground disturbing fuels treatments, salvage harvest, or commercial fuelwood cutting within RCAs or CARs when the activity is consistent with RCOs. Utilize low ground pressure equipment, helicopters, over the snow logging, or other non-ground disturbing actions to operate off of existing roads when needed to achieve RCOs. Ensure that existing roads, landings, and skid trails meet Best Management Practices. Minimize the construction of new skid trails or roads for access into RCAs for fuel treatments, salvage harvest, commercial fuelwood cutting, or hazard tree removal. As appropriate, assess and document aquatic conditions following the Regional Stream Condition Inventory protocol prior to implementing ground disturbing activities within suitable habitat for California red-legged frog, Cascades frog, Yosemite toad, foothill and mountain yellow-legged frogs, and northern leopard frog. During fire suppression activities, consider impacts to aquatic- and riparian-dependent resources. Where possible, locate incident bases, camps, helibases, staging areas, helispots, and other centers for incident activities outside of RCAs or CARs. During pre-suppression planning, determine guidelines for suppression activities, including avoidance

Riparian Conservation Objective	Standards and Guidelines
	of potential adverse effects to aquatic- and riparian-dependent species as a goal. Identify roads, trails, OHV trails and staging areas, developed recreation sites, dispersed campgrounds, special use permits, grazing permits, and day use sites during landscape analysis. Identify conditions that degrade water quality or habitat for aquatic and riparian-dependent species. At the project level, evaluate and consider actions to ensure consistency with standards and guidelines or desired conditions.
Riparian Conservation Objective 5: Preserve, restore, or enhance special aquatic features, such as meadows, lakes, ponds, bogs, fens, and wetlands, to provide the ecological conditions and processes needed to recover or enhance the viability of species that rely on these areas.	Assess the hydrologic function of meadow habitats and other special aquatic features during range management analysis. Ensure that characteristics of special features are, at a minimum, at Proper Functioning Condition, as defined in the appropriate Technical Reports (or their successor publications): (1) "Process for Assessing PFC" TR 1737-9 (1993), "PFC for Lotic Areas" USDI TR 1737-15 (1998) or (2) "PFC for Lentic Riparian-Wetland Areas" USDI TR 1737-11 (1994). Prohibit or mitigate ground-disturbing activities that adversely affect hydrologic processes that maintain water flow, water quality, or water temperature critical to sustaining bog and fen ecosystems and plant species that depend on these ecosystems. During project analysis, survey, map, and develop measures to protect bogs and fens from such activities as trampling by livestock, pack stock, humans, and wheeled vehicles. Criteria for defining bogs and fens include, but are not limited to, presence of: (1) sphagnum moss (Spagnum spp.), (2) mosses belonging to the genus Meessia, and (3) sundew (Drosera spp.) Complete initial plant inventories of bogs and fens within active grazing allotments prior to re-issuing permits. Locate new facilities for gathering livestock and pack stock outside of meadows and riparian conservation areas. During project-level planning, evaluate and consider relocating existing livestock facilities outside of meadows and riparian areas. Prior to re-issuing grazing permits, assess the compatibility of livestock management facilities located in riparian conservation areas with riparian conservation objectives. Under season-long grazing: - For meadows in early seral status: limit livestock utilization of grass and grass-like plants to 30 percent (or minimum 6-inch stubble height). - For meadows in late seral status: limit livestock utilization of grass and grass-like plants to a maximum of 40 percent (or minimum 4-inch stubble height). Determine ecological status on all key areas monitored for grazing utilization prior to establishing utilization levels. Use Regional ecological scorecards and range plant list in regional range handbooks to determine ecological status. Analyze meadow ecological status every 3 to 5 years. If meadow ecological status is determined to be moving in a downward trend, modify or suspend grazing. Include ecological status data in a spatially explicit Geographical Information System database. Under intensive grazing systems (such as rest-rotation and deferred rotation) where meadows are receiving a period of rest, utilization levels can be higher than the levels described above if the meadow is maintained in late seral status and meadow-associated species are not being impacted. Degraded meadows (such as those in early seral status with greater than 10 percent of the meadow area in bare soil and active erosion) require total rest from grazing until they have recovered and have moved to mid- or late seral status. Limit browsing to no more than 20 percent of the annual leader growth of mature riparian shrubs and no more than 20 percent of individual seedlings. Remove livestock from any area of an allotment when browsing indicates a change in livestock preference from grazing herbaceous vegetation to browsing woody riparian vegetation.
Riparian Conservation Objective 6: Identify and implement restoration actions to maintain, restore or enhance water quality and maintain, restore, or enhance habitat for riparian and aquatic species.	Recommend restoration practices in: (1) areas with compaction in excess of soil quality standards, (2) areas with lowered water tables, or (3) areas that are either actively down cutting or that have historic gullies. Identify other management practices, for example, road building, recreational use, grazing, and timber harvests that may be contributing to the observed degradation.

Executive Summary

General Description

The Central Stanislaus Watershed Analysis (CSWA) is a large-scale ecosystem analysis document that provides recommendations to help guide future resource management in the center portion of the Stanislaus National Forest. CSWA addresses the biological, physical and social-cultural dimensions of the ecosystem across approximately 300,000 national forest acres consisting of five major watersheds. These watersheds have been subdivided into nine landscapes to comply with management direction in the Sierra Nevada Forest Plan Amendment of 2001.

The CSWA watersheds and landscapes are as follows:

Watershed (5^{th} field Hydrologic Unit Code)	Landscape(s)
Upper Middle Fork Stanislaus River (118,810 ac)	Sonora Pass (75,067 ac)
	Clark Fork (43,743 ac)
Lower Middle Fork Stanislaus River (107,204 ac)	Beardsley-Donnells (77,691 ac)
	Sand Bar (29,513 ac)
South Fork Stanislaus River (68,520 ac)	Pinecrest (28,346 ac)
	Lyons (40,174 ac)
Stanislaus River (31,143 ac)	Rose Creek (31,143 ac)
North Fork Tuolumne River (63,558 ac)	Dodge Ridge (29,742 ac)
	Duckwall (33,816 ac)

These watersheds and landscapes are in the center of the forest, trending east west along the State Highway 108 corridor, and include national forest and private lands from the western to the eastern boundaries of the Stanislaus National Forest. CSWA ranges in elevation from about 1,200 feet to almost 12,000 feet on the Sierra Nevada crest. The CSWA area includes all major vegetation types in the Sierra Nevada, represents the principal recreation and tourism corridor on the forest, contains substantial hydroelectric power generation and is complemented by a wide band of land managed as wilderness or near-natural character near the Sierra Nevada crest.

Hydroelectric power projects licensed by the Federal Energy Regulatory Commission (FERC) that are found within the boundaries of CSWA include (1) the Spring Gap-Stanislaus Project in the Middle and South Forks of the Stanislaus River, owned by Pacific Gas and Electric Company (FERC #2130) and (2) the Beardsley-Donnells Project on the Middle Fork Stanislaus River, owned by the Oakdale and South San Joaquin Irrigation Districts (FERC # 2005). The existing licenses for both projects expire at the end of 2004.

Purposes of CSWA

There are two principal purposes for the Central Stanislaus Watershed Analysis:

1. Ecosystem Management

   To follow the intent of Forest Service policy regarding ecosystem sustainability, the Stanislaus National Forest established a program to delineate and prioritize forest watersheds for conducting ecosystem analyses. CSWA represents the first such analysis aimed at providing recommendations for future management at an appropriate ecosystem scale.

2. Hydroelectric Power Generation Relicensing

   The CSWA boundaries were drawn to include watersheds that contain the two major hydropower projects on the Stanislaus National Forest that were to begin the FERC relicensing process shortly after the start of the watershed analysis. Thus, CSWA is intended to provide a landscape-scale view of relevant ecosystem conditions and opportunities in advance of hydropower relicensing. CSWA will provide information and rationale to help the Forest Service exercise its authority under Section 4(e) of the Federal Power Act to condition hydropower projects. The Stanislaus National Forest is a participating member of the relicensing process (more information can be obtained from the relicensing website www.stanrelicensing.com).

CSWA Background

The Central Stanislaus Watershed Analysis grew out of the initial forest-wide effort at conducting ecosystem analyses begun in 1995. Analysis watersheds were delineated and prioritized and a schedule was established for completion of watershed analysis. Funding for analysis was provided in part by the national hydropower relicensing initiative that began in 1997. Forest funds supplemented the national effort and CSWA was initiated in late 1998.

The CSWA interdisciplinary team worked on the analysis while conducting other work priorities and attending to high priority emergencies such as wildfire. Public involvement was included during the analysis and helped frame the context for many of the CSWA recommendations.

At the time CSWA was initiated, the analysis scale was 5th field watersheds, or watersheds of approximately 40,000 to 250,000 acres. CSWA proceeded at that scale for the bulk of the analysis. However, the Sierra Nevada Forest Plan Amendment (SNFPA) of January 2001 provided additional direction for large-scale analyses. It set a hierarchy for analysis that included, in descending order of size, river basin, watershed and landscape scales. Since CSWA had begun at the watershed scale, it was complementary to subdivide it into landscapes. That step was done and formed the scale of the final

analysis. Although CSWA began as a watershed analysis, it conforms to the scale recommendations for landscape analysis in the SNFPA. Thus, CSWA is both a watershed and landscape analysis.

The CSWA Document

Methods

The CSWA team adopted the Region 5 ecosystem management guide, *Sustaining Ecosystems, A Conceptual Framework* (Manley et el. 1995), for conducting this landscape analysis.

The strength of this methodology is that it is based on an ecosystem model that provides consideration for all dimensions of ecosystems—the physical, biological and social-cultural. The latter was a major consideration in the CSWA project due to the extensive tourism and commerce in the area. *Sustaining Ecosystems* provides an ecological base for producing the outcome of the analysis; that is, addressing ecosystem processes, components and structures and integrating their interrelationships into analysis recommendations.

The Central Stanislaus Watershed Analysis consisted of identifying key ecosystem elements, determining desired and existing conditions, developing management opportunities (from the difference or similarity between desired and existing conditions) and providing recommendations for achieving desired condition.

The CSWA team found the logic path in the *Sustaining Ecosystems* methodology clear and useful for integration of elements among resource management functions.

Products and Uses

The product of CSWA, as with other ecosystem analyses, is a set of recommendations to help guide future management by analyzing spatial and temporal scales appropriate for managing ecosystems. Watersheds and landscapes provide essential context to both smaller and larger scales. For example, ecosystem analysis can form the rationale for Forest Plan amendments as well as helping to determine important projects and priorities among them.

CSWA is not a decision document. It provides recommendations that may be used to guide later decisions. It is a plan-to-project effort, meaning that it complements the Forest Plan by providing additional information to help determine applicable resource management actions.

CSWA recommendations are provided for each of the nine landscapes.
The recommendations are divided into four principal categories: Potential Projects; Inventories and Monitoring; Plans, Analyses and Guides; and Forest Plan Amendments. Potential Projects are organized by seven resource subheadings: landscape scale

vegetation management, patch/site scale vegetation management, soil productivity, aquatic/riparian, recreation sites/activities, trails and roads and land acquisition.

The CSWA recommendations can be used to develop a program of work integrated across resource functions over a multi-year period. This includes project planning and amending or revising the Forest Plan.

User Guide

There are six chapters in the CSWA document. The first two, Introduction and Watershed Analysis Process, set the stage for the remainder of the document. The succession of Chapters 3, 4 and 5 form the logic path leading toward the product of the document in Chapter 6. Chapter 3 describes the 30 desired conditions established for the CSWA area. Chapter 4 describes the existing conditions across CSWA. Chapter 5, the analysis of each of the nine CSWA landscapes, compares desired and existing conditions and provides management opportunities resulting from the comparison. The outcome of these three chapters is Chapter 6, Recommendations, presented by landscape and by category and subheading for each landscape.

Chapter 6 may be read alone first if desired. However, to understand the rationale for the recommendations the preceding three chapters should be reviewed.

There is also an appendix section that houses reference information or refers the reader to its location. Due to the large volume of information used in CSWA much of it has been assigned to files, a substantial portion of which can be obtained via the forest's GIS data dictionary.

Relationship to Other Documents

The CSWA document is related to existing forest planning documents such as the Forest Plan, as amended, and future planning efforts at the project and Forest Plan scale. Specific documents wholly or partially in CSWA that bear a relationship include the Emigrant Wilderness Plan, the North District Ecosystem Management Analysis, the Motor Vehicle Plan Amendment and the Forest Service Roads Analysis Process.

CSWA Tasks Remaining

Ecosystem analyses should be considered living documents in that there is a continuous learning process about ecosystems. It is a certainty that more will be known in five or ten years than is now known. In that context, feedback from recommendations implemented should be used to update this analysis as time goes on. In addition, there are key tasks that remain to be done that were not completed due to time and funding considerations. They do not substantively affect the utility of CSWA but are items that should be conducted in the near future.

1. **Continue to integrate Chapter 6 recommendations.** The recommendations developed by synthesis of the CSWA team can still benefit by further integration. This should be done during annual District and/or Forest program of work planning. The most local management level is likely the best for such efforts.

2. **Establish priorities.** Priorities for projects, inventories and other further CSWA-related work are also best addressed at the most local level, and should follow further integration of CSWA recommendations among resource functions.

3. **Complete Roads Analysis.** The Forest Service Road Analysis Process should be completed. This process was established after CSWA was partially completed and it was determined at that time that fully conducting Roads Analysis would lead to substantial delays in completing CSWA. The framework for Roads Analysis has been established for CSWA, however, since the road inventory completed for CSWA includes all levels of classified roads plus all unclassified roads. In addition, substantial analysis of the roads inventory has been incorporated into CSWA at this time. In addition, a model process for conducting Roads Analysis was tested on two subwatersheds during the CSWA process.

Summary of Key Findings

The most common finding of CSWA is that none of the ecosystem elements analyzed meet desired conditions. Many elements are at desired condition in the portions of the CSWA area (i.e., wilderness and near-natural) while others are at desired condition in a portion of the area. *The overarching theme for the future of the CSWA landscapes is ecosystem restoration.*

The key findings described below are organized by the categories that appear in Chapter 6, Recommendations. A consolidated summary follows to provide perspective on the most important ecosystem features that should be addressed in the future.

Landscape Scale Vegetation Management

Landscape scale vegetation refers to the dominant forest vegetation across the landscape, often known as matrix lands, and includes both near-stream and upland areas. In CSWA, it largely means conifer forests, though oak and oak-grassland and sub alpine areas are present at the lowest and highest elevations.

With the combination of long-term fire suppression, restricted vegetation management across broad landscapes and historic emphasis on harvest of large trees, the existing condition of vegetation in much of the CSWA area below about 7,000 feet represents a substantial departure from desired condition.

Stand density exceeds thresholds of concern in a substantive portion of CSWA, especially at low and mid elevations. This creates a strong threat to forest health from insect and disease mortality as well as fire. Seral stage distribution is currently not at a

condition favorable to restoration of Old Forest characteristics; there are too many stands with small trees that are growing minimally due to overstocking. Species composition is not at potential natural vegetation—there is too much white fir and not enough sugar pine, ponderosa pine and black oak.

These vegetative conditions have led to severe fire hazard potential in much of the CSWA area. The nine CSWA landscapes can be categorized into three groups of three each to illustrate the condition. Three adjacent low to mid elevation landscapes—Duckwall, Lyons and Dodge Ridge—have a combined high and very high fire hazard rating over about 80% of their land area. The Rose Creek, Sand Bar and Beardsley-Donnells landscapes have a high/very rating over about 50% of their combined area. Only the three high country landscapes—Pinecrest, Clark Fork and Sonora Pass—have a fire hazard rating that is at or near desired condition, with about 10% at a high/very high rating. Thus, two thirds of the CSWA landscapes have a high potential for large and severe wildfire.

This analysis involved looking beyond static fire hazard characteristics, to examining the current condition of the ecosystem with respect to potential natural vegetation and fire regime characteristics. Analyzing the landscape in this manner provides not only a "snapshot" of current fire hazard relative to other areas, but also provides a method to assess conditions relative to what is believed to have been the natural state of a particular area. As a result, desired condition and the departure from it can be determined more site-specifically, based on indicator values that are appropriate for a given area.

As a result of the CSWA vegetative conditions and fire hazard, wildlife habitat for Old Forest dependent species is not at desired condition and is at a high risk of loss by fire. Small and medium trees (less than 24" dbh) dominate the landscape; many in overstocked stands that are not growing at a normal rate toward the large tree size that constitutes desired habitat components. Many overstocked stands that are within spotted owl Protected Activity Centers (PAC's) have a very high fire hazard due to ladder fuels. Until trees are managed to allow accelerated growth and the fire hazard is reduced, old forest conditions will not suitably progress from existing toward desired conditions.

The condition of landscape scale vegetation, though poor from the tree stand, fire management and wildlife standpoint, represents an opportunity to integrate planning efforts among these resource programs to improve conditions. This will benefit the physical, biological as well as the social-cultural parts of the ecosystem, the latter by contributions to the local economy from conducting vegetative treatments that help move forest vegetation toward desired condition to benefit other resource values.

Patch/Site Scale Vegetation Management

Patches and sites are relatively small areas within the matrix lands; in CSWA these are typically meadows, aspen stands, springs, sites containing noxious weeds, etc.

There is a moderate to high frequency of meadows in the upper elevations of the CSWA area. Of the small percentage of meadows that have been assessed using current vegetative methods, less than 15% are at desired condition (high ecological status). Based on observations, it is estimated that many of the unmeasured meadows will rate at a moderate ecological status. While only a small percentage of meadows are at desired condition, there remains a good opportunity for improving the moderate status sites toward high in reasonable time.

Based on observation and limited inventory, the quaking aspen plant community is declining. It is a high priority to complete the inventory and restore degraded aspen stands.

True riparian plant species along some stream corridors have been suppressed over time as conifer cover has increased. This interrelationship with landscape scale vegetation presents an opportunity to improve both in the future.

Noxious weeds are increasing across the CSWA area and there is limited ability to control their spread. CSWA provides recommendations for intervention to minimize or prevent spread of existing populations and eradicate new populations upon discovery.

Soil Productivity

At the landscape level, soil productivity remains good but there are problem areas. The Wrights Creek subwatershed in the Dodge Ridge landscape, for example, remains noticeably degraded as a result of past fire and reforestation site preparation. Other sites with reduced soil porosity occur and numerous areas have roads constructed on sensitive soils that are severely eroding.

Aquatic/Riparian

Dams and diversions on large perennial streams have affected the streamflow regime across much of CSWA below about 7,000 feet by increasing vegetative density in tributary watersheds.

Streams with dams and diversions have dewatered some stream reaches while augmenting seasonal flow in other reaches. Any departure from natural flow regime has consequences, and the CSWA area is no exception. Alteration of stream channel morphology and riparian vegetation has occurred in gravel bed river reaches, and flow/temperature changes have altered habitat for sensitive native aquatic species.

The flow regime in watersheds without dams but with overstocked vegetation is changed especially in summer, as a result of increased plant transpiration reducing water available for streamflow. Modest decreases in flow reduce the opportunity for desired aquatic habitat and riparian vegetation to be achieved.

Stream channel morphology is altered in nearly all low-gradient stream reaches with fine-grained streambanks in CSWA. These reaches, mostly in meadows, are the most sensitive of any type of stream reach to disturbance. They have been directly impacted by grazing and recreation, and indirectly by other land uses such as roads, timber harvest and reforestation.

There are native aquatic species at risk throughout CSWA. In the lower elevations, the foothill yellow legged frog, western pond turtle and hardhead (a native warm water fish) have seen habitat reduced. In the high elevations, populations of the Yosemite toad and mountain yellow legged frog have been substantially reduced, the latter largely a result of fish stocking. Desired non-native fish are at or near desired condition due to stocking programs.

Water quality is excellent over the CSWA area with certain localized exceptions. CSWA provides recommendations for monitoring to determine current status of "hot-spot" areas with past or potential problems.

Trails and Roads

The non-motorized trail network in CSWA is generally good and the analysis developed ways to improve the non-wilderness portion of it. One opportunity is the construction of the Old Mono Road trail between Pinecrest and Kennedy Meadows near the present Highway 108 alignment. A motorized trail network is present and CSWA has provided recommendations for improvements.

The road system in CSWA is excessive in many areas. Road density and stream crossings are too high relative to desired conditions in six of the nine landscapes. Some roads are built on highly erodible soils. Some road design standards acceptable when roads were built are now understood to be problems in many areas. Much of the road system is "hydrologically connected"; that is, road drainage is directly connected to streams. There are many opportunities to reduce road problems and at the same time lessen the backlog of maintenance that is currently under funded.

Recreation Sites and Activities

While recreation is an extremely important aspect of the social-cultural dimension of the CSWA area, there are numerous management problems in maintaining a desired user experience and providing for future demand.

Facility conditions are not at desired condition at many developed sites due to age and deferred maintenance from lack of funds. Forest Service presence at developed sites is a problem—many visitors report that they would like to know that a Ranger is present in the area for safety and forest information. Again, due to limited resources, presence of uniformed employees has decreased over time.

There are two principal developed recreation areas that are in demand of improvements—Pinecrest and the Herring Creek Reservoir area. Existing conditions and future demands for the Pinecrest Basin are being addressed in the Pinecrest Plan NEPA analysis at this time. The Herring Creek Reservoir area remains a legacy problem of overcrowding, inadequate camping and sanitation facilities, poor roads, and a small, unmanaged reservoir that is badly silted in.

Dispersed recreation sites were identified as part of the CSWA road inventory. The data reveal a wide variation in the number, clustering and condition of sites across CSWA. Improvements in the management of dispersed recreation are warranted.

Land Acquisition

The CSWA team established a desired condition to acquire available non-federal lands that are of high ecological or recreational value. There are several small in-holdings that have been identified that will provide the opportunity for the forest to meet its mission of improving conditions for wildlife, scenic and recreational values.

Plans, Analyses and Guides

The CSWA team identified that the Forest fire management plan needs to be completed, that Roads Analysis for CSWA should follow this document, that road design guides and sensitive plant species guides should be developed, and that an interpretive/public information plan should be prepared and annually updated.

Land and Resource Management Plan Amendments

As a result of the CSWA team integrating ecosystem elements as a step in this analysis, it became apparent that some key plan amendments are necessary to achieve important desired conditions. The CSWA team recommends the following plan amendments:

1. Establish streambank stability standards and guidelines.
2. Establish large woody debris (LWD) standards and guidelines for streams.

Conclusion

The CSWA team developed 30 desired conditions for the physical, biological and social-cultural aspects of the analysis area. Comparing those with the existing conditions for each revealed that improvement opportunities are present in nearly all cases in some locations within CSWA. Moving the landscape toward desired condition is fundamental to ecosystem sustainability. In that context, paramount considerations include:

1. Landscape Scale Vegetation Management—It is essential to actively manage vegetation across the landscape to achieve a broad spectrum of desired conditions in all dimensions of the ecosystem.

2. Dams and Diversions—Adjustment of streamflow as an outcome of the hydropower relicensing process is necessary to maintain or restore conditions of favorable water flows for channel maintenance, riparian vegetation and native aquatic species.
3. Meadows and Aspens—Less than about 15% of meadows in CSWA are at desired condition when the combination of vegetative status and stream channel morphology is considered. Aspens are at risk. Management attention is needed in both these unique and valuable components of the CSWA ecosystem.
4. Roads—The excessive number of roads and road design problems that create resource damage need to be addressed as soon as practical.
5. Recreation—A projected increase in demand and aging facilities indicates that increased attention to developed and dispersed recreation management is highly warranted.
6. Forest Plan Amendments—Key vegetation management amendments are essential in order to progress toward watershed, wildlife, vegetative and fire management desired conditions.

Chapter V.9
Sonora Pass Landscape Analysis

Introduction

The Sonora Pass Landscape occurs in the eastern section of the Central Stanislaus Watershed Analysis (CSWA) area. Elevations range from approximately 6,000 feet at Brightman Flat to 11,570 feet on Leavitt Peak. Portions of the landscape occur in the Emigrant Wilderness and in a section proposed for addition to the Carson-Iceberg Wilderness. Outside of Pinecrest, the Brightman Flat-Dardanelle recreation area, along Highway 108, receive the highest recreation use within the CSWA area. Refer to Map 12 as needed to identify specific locations as they are referenced in the following chapter.

Historical Context

Through time, Sonora Pass has served as a travel route over the Sierra Nevada. For hundreds of years, the MiWok, Piute and other native people traveled, traded, hunted, and fished the area. Although not a popular route, the Sonora Pass area was used as a travel-way for emigrants crossing the Sierra. The Bartleson-Bidwell Party of 1841 was the first group of non-native emigrants to cross the Sierra in the vicinity of today's Sonora Pass. Through the last half of the 19th century, high Sierra passes, including Sonora Pass, provided the travel route for sheep and cattle grazing between the Central Valley of California and the east slope of the Sierra Nevada.

The first wagon train of emigrants did not travel this course until 1852. This is when the Clark-Skidmore Party—also known as the Elizabethtown-California Company—straggled over the crest at a location about eight miles south of today's Sonora Pass. After initially abandoning their wagons and then retrieving them, probably at Leavitt or Walker Meadow, the group passed through what is now Relief Valley, behind Dodge Ridge, down through the North Fork Tuolumne area, and finally into Sonora and Columbia. The journey from Elizabethtown, Ohio to Columbia had taken them a tortuous four months and three days. Word of their woes over the challenging route did nothing to promote its popularity in a year when an estimated 52,000 emigrants crossed the plains by various routes into California.

In 1861 and 1862, Robert Wallace surveyed part of the route that was ultimately chosen for the Sonora-Mono Road. After a number of false starts, the route east of the Clark Fork confluence was re-surveyed in 1863. The Sonora-Mono Wagon Road was completed in November 1864. By the latter 1890s the road had been sorely neglected and was described as "a hard thoroughfare to travel." Local advocates believed they had a very good chance of bringing this road under the state highway system when Tuolumne

County's J. B. Curtain was elected to the Senate. Largely as a result of Curtain's efforts, in 1901, the upper section of the Sonora-Mono Wagon Road, from Long Barn to Bridgeport, became part of the State Highway system as Route 13 (Turner and Elliott 1995).

It was the construction of Relief Reservoir, rather than trans-Sierra trade—on the cusp of the availability of mass-produced automobiles—that provided the stimulus that kept the upper Sonora-Mono Road viable. In 1908, as dam related construction commenced, improvements were made from Sonora to Baker's Station. By this juncture, interests on both sides of the Sierra pressed for this wagon road to become a state highway.

Landscape Analysis

Hydrologic Hierarchy

Aquatic Animal Species

Desired Condition #1: All native aquatic species, including Forest Service designated sensitive species, are present in viable populations and occur in greater than 70% of their historically occupied habitats.

Existing Condition: Presence and breeding surveys for amphibians were conducted in the Sonora Pass landscape. Seven populations of Yosemite toad were found. Mountain yellow-legged frog was located at eight locations, and Pacific chorus frog was found in 10 locations. This landscape is within the elevation range of Yosemite toad, mountain yellow-legged frog and Mt. Lyell salamander. There is a population of Mt. Lyell salamander at Sonora Pass.

Relief Reservoir inundated meadow habitat when the dam was built. The exact amount of meadow inundated is unknown. Topographic maps of the area indicate that the inundated habitat was likely to be suitable for mountain yellow-legged frog and Yosemite toad. Because this meadow remains inundated, we are not able to restore native amphibian species to this particular site.

There have been sightings of merganser, mallard and various other waterfowl species in this landscape. There may be habitat for harlequin duck. Surveys have not been conducted specific to waterfowl or osprey. There is limited habitat for osprey due to the elevation of available hunting habitat.

There have been no macro invertebrate surveys within the landscape.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Native aquatic species	Presence/ successful breeding Occupied habitat	• 476 acres surveyed. • Yosemite toad, mountain yellow-legged frog and Pacific chorus frog found. • Relief Reservoir inundated historic amphibian habitat.	• Survey un-surveyed areas. • Reintroduce species in unoccupied historic habitat. • Protect occupied Yosemite toad habitat. • Maintain and enhance current mountain yellow-legged frog populations. • Mitigate loss of historic amphibian habitat during FERC relicensing process.
Waterfowl and Osprey	Nest sites occupied and successfully fledge young	Unknown nesting.	• Gather incidental sightings of waterfowl and osprey. • Survey suitable waterfowl habitat.
Aquatic macro invertebrate	Biotic Condition Index	Unknown	Conduct surveys.

Desired Condition #2: Habitat for federal threatened and endangered species is in excellent condition and recovery plan requirements are met.

Not applicable for this landscape.

Large Woody Debris in Streams

Desired Condition #3: The amount and distribution of wood in stream channels enhances stream stability and aquatic habitat complexity.

Existing Condition: The amount of large woody debris (LWD) in the Middle Fork Stanislaus River is below desired condition. LWD in the Relief Reach of the Middle Fork, between Relief and Donnells Reservoirs, was evaluated in 2000 as part of the current hydropower relicensing project on the river. LWD was found to be less than the amount desired in the Forest Land and Resource Management Plan. This confirmed long-term observation of the reach, comparison with the adjacent Clark Fork of the Stanislaus and knowledge that LWD has been periodically removed from locations along the Middle Fork.

Based on long-term observation, LWD in tributaries to the Middle Fork Stanislaus is at or near desired condition. Processes that result in wood recruitment to streams are nearly intact. Growth and decay of trees, windthrow, avalanche and the natural fire regime have not been substantially altered in the vast majority of

this high elevation landscape. Some of these tributaries may be candidates for inventorying LWD for reference conditions.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
LWD	Pieces/100m of stream, by Channel Type	LWD deficient in the MFK Stanislaus River (2, 3-SPLAT) LWD at or near desired condition throughout remainder of landscape (2).	• Improve the amount of LWD in MFK Stanislaus River. • Maintain LWD at desired condition in tributaries to the MFK Stanislaus River. • Increase knowledge of LWD reference conditions.

Information source: 1—Limited field observations; 2—Long term field observations; 3—Data supported observations

Sediment

Desired Condition #4: The delivery and transport of stream sediment is balanced so that stream channels are not excessively aggrading or degrading over time.

Existing Condition: The sediment regime in the Sonora Pass landscape is in a near natural condition except in the Middle Fork Stanislaus. -The degree of alteration of streambed sediment in the Middle Fork is a data gap pending completion of studies for the current hydropower relicensing project. Relief Reservoir has trapped sediment for most of the 20th century and streambank erosion in the low gradient segments of the Relief Reach has contributed to change.

Natural erosion rates and in-stream transport and deposition of sediment in tributaries of the Middle Fork remain nearly intact except in localized low gradient reaches. These reaches, though individually important, represent a small percentage of stream mileage in the landscape. Some of the Middle Fork tributary stream reaches may serve as reference sites for further understanding of particle size distribution and pool sediment.

Roads have not had noticeable effect on the sediment regime in this landscape. The road density and the frequency of road crossings in all five subwatersheds in the landscape are at desired condition. There is a concern within the Eagle Creek sub-watershed, however, regarding the Eagle Meadow road location in the vicinity of the Eagle and Long Valley Creek crossings. While the road has been in place for many decades, streambank erosion could be reduced by road

improvements. Inventory of hydrologically connected road segments in this area would be the best focus for filling the HCS data gap that exists in this landscape.

The Sonora Pass landscape has the second lowest fire hazard rating of any of the CSWA landscapes. Seventy-five percent is rated low, much due to the low density of vegetation in the upper elevations of the landscape. The lower elevations, along the Middle Fork Stanislaus have fire hazards deserving consideration for fuels treatment.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Roads	Road density <2.5 mi/mi^2; < 1 stream crossing/mi of stream; HCS < 0.25 mile/mile$^{2.}$	Road density <2.5 in all 5 sub-watersheds (3). Crossings >1 in all 5 sub-watersheds (3). HCS - data gap.	Maintain roads at desired condition.
Wildfire	Hazard Rating: >50% of landscape is low; <25% is high or very high	75% low hazard (3).	• Reduce wildfire hazard in the lower elevation portions of this landscape where hazard is moderate, high or very high.
Particle Size Distribution	Streams with dams and diversions: intra-reach sediment well distributed & PSD similar to comparable unimpaired streams; Unimpaired streams: PSD highly similar to reference streams.	Streams with dams and diversions: intra-reach data gap pending SPLAT study; PSD data gap. Unimpaired streams: Limited observations indicate PSD data gap.	• Increase knowledge of stream sediment transport and deposition patterns in MFK Stanislaus. • Increase knowledge of PSD and pool sediment reference conditions in applicable streams.
Pool Depth	Residual pool depth is highly similar to reference streams.	Limited observations indicate pool depth data gap.	Increase knowledge of pool sediment.

Information source: 1—Limited field observations; 2—Long term field observations; 3 – Data supported observations

Stream Channel Morphology

Desired Condition #5: Stream channels have a single-thread pattern, small cross sections, stable banks and connectivity with their floodplains.

Existing Condition: Channel morphology is altered to some extent in nearly all-low gradient stream reaches with fine-grained streambanks in the Sonora Pass landscape. The most frequent indicator of alteration is reduced streambank stability, but many have increased entrenchment and enlarged cross sections as well. Stream flow regulation for hydropower and historic and/or current grazing are the principal land uses along these reaches. Some of these reaches have the potential for active restoration but in other cases, such as in wilderness passive restoration will likely be the preferred method of moving them toward desired condition. The areas of most concern are Eagle Meadow (stream channel, road and recreation) and the Middle Fork Stanislaus River between Kennedy Meadows and Brightman Flat (effects of streamflow regulation). The condition of the Kennedy Canyon area has not been observed in recent years and, as the largest wetland on the Stanislaus National Forest, should be evaluated in the near future.

Long-term observations of moderate and steep gradient channels in this landscape show them to be at or near desired condition. There have few management related disturbances to affect them since much of the landscape where moderate and steep gradient streams exist is wilderness, near natural or roadless.

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Morphology Condition Index (MCI)	DC is achieved when: Indicators 1-3 are met or nearly met in low gradient reaches with fine-grained streambanks Indicators 1-3 are met or nearly met in moderate gradient reaches with coarse-grained streambanks Indicator 4 is met in high gradient reaches.	Low gradient reaches: Nearly all low gradient reaches do not meet all 3 indicators (2, 3-SCI). Moderate gradient reaches: All 3 indicators are met (2). Steep Gradient streams: Indicator 4 is met (2).	• Move applicable stream reaches toward desired condition and maintain condition of those at desired condition.

Information source: 1—Limited field observations; 2—Long term field observations; 3—Data supported observations

Water Quality

Desired Condition #6: Water quality in streams, lakes and special aquatic habitats (springs, fens, etc.) is excellent so that all beneficial uses of water are achieved.

Existing Condition: Water quality in the Middle Fork Stanislaus River meet BPO's based on studies recently completed for the current hydropower relicensing project. Tributaries of the Middle Fork likely meet BPO's since their sub-watersheds are largely wilderness, near-natural or otherwise have low intensity management. A concern exists about water quality in Kennedy Creek due to concentrated recreation use and grazing. Water quality is a data gap here and should be evaluated in the near future.

Acid neutralizing capacity (ANC) was sampled in selected lakes in this landscape in 2000 as part of a Sierra Nevada pilot program to determine sensitive lakes that could be monitored for long-term air pollution effects on lake water chemistry in Class 1 Wilderness. The Emigrant Wilderness is a Class 1 Wilderness (Wildernesses established prior to 1977), a portion of which is in the Sonora Pass landscape. Sensitive lakes are those with an ANC of <50 ueq/l. Such lakes have a low buffering capacity against increases in acid deposition. Nine lakes were sampled, all of which had ANC values of <50 ueq/l. Six of these lakes had ANC values of <20 ueq/l, placing them in a group of the most acid-sensitive lakes in the Sierra Nevada.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
California CVRWQCB Regulations	Meet Basin Plan Objectives (BPO)	MFK Stanislaus River meets BPO's (2, 3-SPLAT). Tributaries of the MFK Stanislaus likely meet BPOs but concern exists in Kennedy Creek (2).	• Maintain excellent water quality where at desired condition. • Increase knowledge of water quality in Kennedy Creek.
Acid Neutralizing Capacity (ANC) in Class 1 Wilderness Lakes	ANC $\geq$ baseline in lakes sensitive to acid deposition (ANC <50).	Nine lakes with low ANC: 1 between 25-50 ueq/l, 6 between 10-25 ueq/l and 2 < 10 ueq/l.	Maintain ANC at or above baseline.
Municipal Water Supplies	Identify and Manage Principal Local Municipal Watersheds	N/A	N/A

Information source: 1—Limited field observations; 2—Long term field observations; 3—Data supported observations

Water Quantity

Desired Condition #7: The flow regime in streams with dams and diversions provides favorable conditions of water flows to maintain proper channel morphology and riparian vegetation, and provides suitable habitat for native and desired non-native aquatic species.

Existing Condition: Flow regime in the Middle Fork Stanislaus River in this landscape has been altered for about 90 years. Relief Reservoir, completed in 1910, was one of the earliest impoundments in the Sierra Nevada. The design intent of the project was to use the river as an open conduit to route stored water about 35 miles downstream to Sand Bar and then place it into a diversion that supplies a penstock-powerhouse facility to generate electricity. The streamflow regulation scenario was to release water in the summer-fall period, the time of most hydropower demand. The use of the natural river channel as the conveyance resulted in an unusual impaired hydrograph—increasing flows at a time of year when flows are naturally decreasing. This flow regulation scenario continued until the late 1950's when Beardsley and Donnells Reservoirs were constructed on the Middle Fork between Relief Reservoir and the Sand Bar Diversion. Since then, the summer-fall flow augmentation in the Middle Fork occurs upstream of Donnells Reservoir since water is diverted immediately below Donnells. This area of current flow alteration, the Relief Reach, has a substantial amount of low gradient channel with fine-grained streambanks since the river courses through a valley comprised of glacial deposition.

The increase in summer-fall flows is substantial compared with the natural hydrograph. Mean monthly streamflow is increased over natural flow rates by about 12% in July, 90% in August, 160% in September and 100% in October. Streamflow is nearly doubled over the course of this four-month period. These flows result in water temperatures that are lower than those that would occur in a naturally flowing river. The large flow increase occurs at a time when the decline in the natural hydrograph provides the means for riparian vegetation reproduction and establishment. The streambed remains inundated when emergence of stream margins is important. The altered flow regime produces additional sheer stress on the stream channel during this period, increasing the erodibility of the fine-grained streambank segments of the river. At present, the altered flow regime between November and May averages out to be at about desired condition. Variation is from about 10% to 40%.

This section of the Middle Fork Stanislaus River provides habitat for introduced brown and rainbow trout and brook char. Since amphibian surveys have not been conducted it is unknown what species currently occupy this stretch of river. There is potential habitat for Yosemite toad in the meadows and mountain yellow-legged frog in streams and meadow lakes.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Streamflow	In gravel bed stream reaches, streamflow is within 10% of unimpaired daily flow hydrograph from June through October, and is within an average of 20% the remainder of the year.	In Relief Reach of the MFK Stanislaus River: During June through October mean monthly-impaired flow is about 75% above unimpaired (increases to about 90% from July through October). Remainder of year mean monthly-impaired flow is about 20% below impaired (3-SPLAT).	• Adjust flow regime in Relief Reach of MFK Stanislaus River.
Aquatic Species Habitat	Suitable habitat for each life stage of native and non-native species.	Introduced brown and rainbow trout present, unknown amphibian presence	• Provide favorable flows for trout habitat during re-licensing • Provide favorable flows for amphibians if they occur in the landscape

Information source: 1—Limited field observations; 2—Long term field observations; 3—Data supported observations

Desired Condition #8: The stream flow regime in streams without dams and diversions are highly similar to a natural flow regime.

Existing Condition: Infiltration at the sub-watershed scale in this landscape is at desired condition. There is very little reduced soil porosity in either of the two sub-watersheds.

The Stand Density Index exceeds threshold values in only 28% of the landscape, similar in magnitude to the Pinecrest landscape. Stand Density Index is exceeded in the lower elevations of the landscape. Large expanses of this landscape are not a stand density problem from the watershed process standpoint. Thus, evapotranspiration in this landscape is very near desired condition.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Infiltration	Natural rate over >90% of sub-watershed.	>90% at the sub-watershed scale (2, 3).	Maintain high level of infiltration in sub-watersheds.
Evapotranspiration	SDI is < threshold values.	28% of landscape exceeds the SDI threshold values (3)	Reduce Stand Density in lower elevations of landscape.

Information source: 1—Limited field observations; 2—Long term field observations; 3—Data supported observations

Terrestrial Hierarchy
Fire

Desired Condition #9: Fire functions as a natural process, approximating the characteristics of the historic fire regime to the extent possible considering the effects on people, property, and natural resources.

Desired Condition #10: The spread and intensity of wildland fire is interrupted over the landscape and the potential for large severe wildfires is low, allowing for the safe and effective protection of people, property, and natural resources.

Existing Condition: Very few fires over 10 acres have been recorded in the Sonora Pass landscape over the past century. A total of 233 fires have burned 139 acres between 1970 and 2000, 66% of them lightning-caused. Relative fire occurrence is low over most of the landscape, and moderate along the highway corridor where a greater percentage of human-caused fires have occurred.

The historic fire regime for the Sonora Pass landscape is primarily fire regime III, long return interval, mixed severity fire. On the south-facing slopes along the Stanislaus River, montane shrub is sustained by infrequent, stand-replacement severity fire (Fire Regime IV). At lower elevations in the mixed conifer and along the river, fires may have been more frequent and of lower severity (fire regime I), promoting more of a Jeffrey pine and sugar pine component there.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Condition Class (CC)	CC1	CC1—97% CC2—3% in fire regime I, low elevation conifer along Stanislaus River	• Move CC2 areas toward CC1 by reducing surface and ladder fuels • Maintain CC1 areas in desired condition
Potential impacts of fire	No negative	CC1—Not likely • CC2—Some potential: along Hwy 108 corridor, Long Valley, Eagle Meadow, • Old forest emphasis 1/3 of landscape, • 3 PACS with moderate or low fire hazard characteristics	• Identify potential impacts during preparation of the Fire Management Plan • Prioritize mitigation measures to reduce potential impacts
Fire hazard - defense	Low –90%	Low: 47% Mod: 24% High: 24% Very high: 5% Higher hazard along highway corridor, especially on the west	Reduce moderate, high, and very high hazard to low by reducing surface and ladder fuels
Fire hazard - outside	Low - 40% (strategically placed to break up high hazard)	Low: 77% Mod: 9% High: 4% Very high: 10%	• Maintain low hazard areas in desired condition • Reduce higher hazard areas to low as needed by reducing surface and ladder fuels
Suppression effectiveness	Hand crews effective in high value areas (4’ flame length)	In WUI along Hwy 108 some potential for >4’ flame lengths	Reduce potential flame length where necessary by removing or rearranging surface fuels
Crown fire potential	Surface only	Some passive crown fire potential in lower elevation conifer along Stanislaus River	Reduce crown fire potential by reducing surface and ladder fuels, and/or increasing the crown to base height

In summary, the existing condition of the Sonora Pass landscape as it relates to the fire element is good. There are many natural barriers to fire spread, as approximately 40% of this landscape is barren of vegetation. What little restorative treatment is needed, should be focused on efforts to allow naturally occurring fires to be managed for resource benefits. Maintenance of areas where existing condition is at desired condition may also involve some fuels management, primarily prescribed fire.

Plant Species

Desired Condition #11: Designated noxious weeds and other undesired invasive plant populations have been removed and establishment of new weed populations is prevented.

Existing Condition: This landscape is currently, so far as known, in satisfactory condition. No state-listed noxious weed populations are currently confirmed in this landscape. Yellow starthistle was found in the rosette stage at the Sonora Pass Trailhead. We have received unconfirmed reports of a small population of yellow starthistle on private land at Kennedy Meadows. Some of the highest known infestations of cheatgrass occur near this recreation area and Relief Reservoir. Heavy recreational traffic presents a constant potential source of new populations both from the east and west side of the Sierra Nevada.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Noxious weeds and undesired invasive plants	0 occurrences	0 occurrences?	• Monitor, map and record any new occurrences. • Implement preventative actions to minimize spread of weeds.
Established weed populations	All populations are treated and eradicated.	0 occurrences	None identified

Desired Condition #12: All threatened, endangered and sensitive (TES) terrestrial and aquatic plant and plantlike species are maintained as viable populations.

Existing Condition: It is unknown whether sensitive plant species occur in the Sonora Pass landscape, primarily because very few surveys have been conducted in this area. However, habitat for sensitive plant species exists. The potential exists for *Bruchia bolanderi, Cypripedium montanum, Epilobium howellii, Hulsea brevifolia, Hydrothyria venosa, Lomatium stebbinsii, Meesia triquetra, M. uliginosa,* and *Orthotrichum spjutii* to occur in the area.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
TES plant species	Populations of TES species are present, protected and contributing to the maintenance of species viability	Unknown	• Survey un-surveyed areas • Protect known populations when found

Desired Condition #13: Important populations of plant species traditionally used by Native Americans are recorded, restored, and maintained in a usable condition.

Existing Condition: Traditional Native American plants occur throughout this landscape, however, the extent and specific locations are not documented. Without specific information about the plant species and locations in this landscape, specific management actions that would enhance the plant species cannot be identified or initiated at this time.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Traditional Plant Populations	Important populations are recorded, protected and available for use	Unknown	Record locations of traditional use plants when they are found.
Populations Restored	Populations of traditional plants are reintroduced or increased, if absent from or under-represented in current compared to potential natural vegetation.	Unknown	When traditional use plant populations are found, work with Native American partners to identify actions that would restore (if necessary), enhance or maintain the population.
Traditional Plant Populations Maintained	90% of known important populations are determined to be in a usable state.	Unknown	Unknown at this time.

Soil Productivity

Desired Condition #14: Soil porosity, biology and nutrient supply have a high similarity to native soil and PNV conditions. Conditions apply to at least 85%

of hill slopes, 95% of Riparian Conservation Areas, and an average of 90% for a sub-watershed.

Existing Condition: Most of the Sonora Pass Landscape is at high elevations where fire regime, soil conditions, and Potential Natural Vegetation are relatively unaltered. Exceptions are in Ecological Units (EU) 304 and 331, in certain meadow areas, and possible in older clearcut areas at high elevations.

EU 304 is an extensive alluvial flat-conifer unit that follows the Upper Middle Fore of the Stanislaus River (Refer to map in Appendix B). Changes in stream hydrology have probably also altered certain soil characteristics. Unit 331 is an extensive upper montane shrub unit on steep, rocky, granitic slopes. Natural fire would occasionally burn through this brush type. Fire would thin and rejuvenate shrub species and provide openings for Jeffery pine seedlings. Today, the vegetation is dense and more subject to a high intensity burn which could damage the soil. Wildlife values are high in this unit when natural fire is allowed to thin and rejuvenate shrubs.

There are older timber harvest units in the Brightman area, for example, that may not be at desired condition relative to soil porosity, large downed woody material, available nitrogen, or soil biology. The Juniper Mine is a site where existing soil conditions are less than desired.

There are many meadows in this glaciated landscape. Some meadows or parts of meadows will have organic surface layers that would classify as a fen or bog. Such meadows are identified in the Sierra Nevada Forest Plan Amendment (USDA 2001) as special features to inventory and protect. Certain meadows in the Eagle Creek sub-watershed are known to have headcuts and gullies present.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Soil Porosity	>90% of natural porosity	Does not meet DC in older plantations. May not meet DC where multiply entry tractor logging has occurred.	• Subsoil skidtrails as stands are thinned
Large Downed Woody Material	Logs per acre >20 inch diameter	Meets DC in much of the landscape; May not meet DC where multiply entry tractor logging has occurred; Lack of LWM in plantations	• Create large woody material where needed for wildlife and soil productivity

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Evidence of Soil Organisms	Presence of bio-indicators and natural soil structure	Mostly at DC; May not be at DC in plantations	• Survey for status of soil organisms in plantations • See opportunities for managing surface organic matter below
Surface Organic Matter	Litter, duff, small woody material is 50% of natural	Nitrogen availability may be low in plantations located in the red fir zone where tractor piling removed surface organics; Soil and surface organics subject to severe burn behavior in dense brush of unit 331	• Test for N availability. Thin stands and fertilize where N is low. • Rx burn unit 331 to maintain Jeffery pine, cycle nutrients, re-establish natural fire regime, and improve wildlife habitat and diversity
Topsoil	Organic matter content is 85% of natural	Generally meets DC	

Desired Condition #15: Soil erosion rates do not exceed the natural erosion rate for the Ecological unit.

Existing Condition: See discussion for DC#14 above.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Surface Cover (hillslopes)	50 to 70% surface cover that prevents accelerated erosion	Surface cover is generally at DC. Erosion on old skidtrails; Jupiter mine does not meet topsoil and surface cover DCs	• Improve surface cover where needed for erosion control • Stabilize eroding skidtrails • Restore Jupiter mine
Surface Cover (RCAs)	75% surface cover that prevents accelerated erosion	Generally meets DC; Some accelerated erosion in dispersed camping sites; Headcuts in some meadows of Eagle Creek sub-watershed; Some meadows have thick organic layers and would qualify as fens and bogs	• Monitor surface cover and accelerated erosion in RCAs • Survey dispersed camping sites. Treat or relocate camp sites that are eroding • Treat headcuts in meadows • Inventory fens and bogs

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Roads and OHV Trails on Sensitive Soils	Miles of native surface roads and trails on sensitive soils	Accelerated erosion on native surface roads, skidtrails, and trails, particularly on sensitive soils	• Implement Roads Analysis and ID native surface roads and trails on sensitive soils • Re-route, decommission, re-construct roads and trails with high erosion potential

Terrestrial Animal Species

Desired Condition #16: Habitat for all native terrestrial species, including Forest Service designated sensitive species, is available in a spatial pattern on the landscape to maintain viable populations.

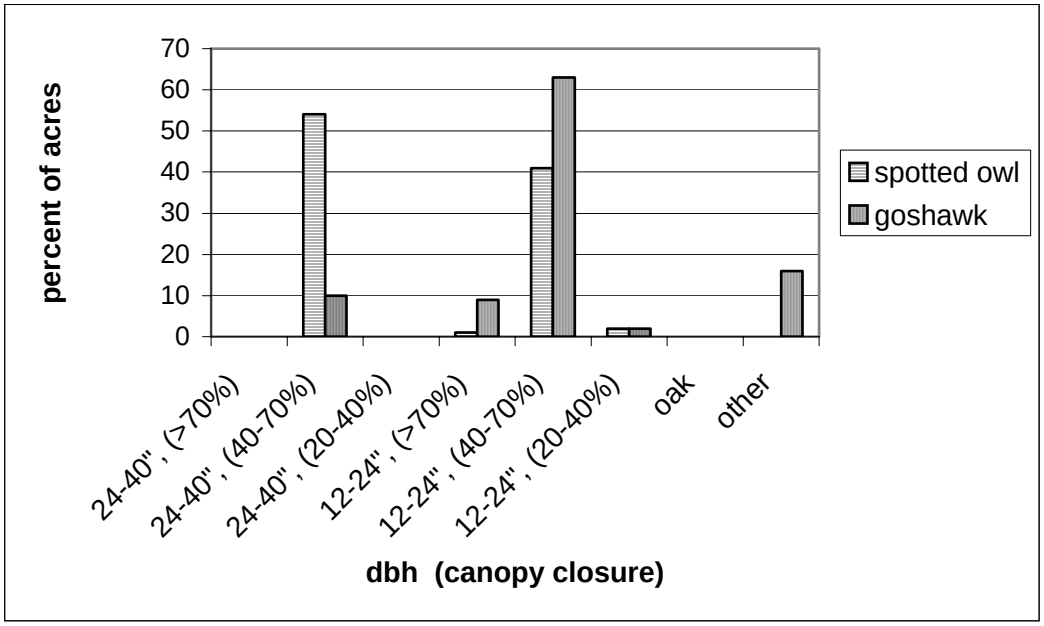
Existing Condition: Western red bat, Townsend's big eared bat, pallid bat, fisher, marten, Sierra Nevada red fox, wolverine, California spotted owl, goshawk, peregrine falcon and mule deer are known to occur or have the potential to occur in this landscape.

Peregrine falcon—There is potential habitat for this species in the Sonora Pass landscape. No sightings have been reported.

Old forest associated species—Within the Sonora Pass landscape, 33% of the area is mapped as OFEA. Approximately 13% of the OFEA exhibits old forest characteristics in size of trees and canopy cover. Thirty percent of the OFEA is not suitable for forest production. This leaves 57% of the OFEA acres to improve to meet old forest desired conditions.

There are 3 California spotted owl PACs within the Sonora Pass landscape. There are 4 northern goshawk PACs. Based on the current vegetation data, there are no acres of habitat that meet the desired condition within the designated PACs. The PACs were designated using aerial photo interpretation of photos taken in 1997 and 2000. It is likely that at least some of the acres in PACs are currently at desired condition. Figure 18 displays the percentage of PAC acres by vegetation size and canopy closure.

Figure 18: Sonora Pass Protected Activity Centers Vegetation Data



Great gray owl—This landscape include a great gray owl PAC at Eagle Meadow. The PAC is 99 acres, with 77% of the acres containing trees in the 12 to 24"dbh range.

Mule deer—This landscape provides summer (fawning) habitat for the Stanislaus and Tuolumne deer herds. Over 50% of this landscape is within wilderness (designated or proposed). The 1984 Stanislaus deer herd management plan indicated that low fawn recruitment was the primary factor limiting recovery of the deer herd (Maddox 1984). One factor affecting low fawn recruitment is the decline in forage quality on summer, winter and transitional ranges. Approximately 14% of the landscape is found in oak/hardwood, early succession trees, and meadow and chaparral types.

Montane meadows are an important component of summer range for mule deer, providing forage and cover for both the doe and the fawn. A number of large meadows occur in this landscape: Upper and Lower Relief Valleys, Saucer, Kennedy Lake, Lunch, Eagle, Long Valley, Sardine, Red Rock, and Haypress Meadows. In addition, there are numerous small meadows associated with seeps, springs and creeks. The current condition of these areas as foraging habitat, as well as the availability and condition of cover and fawning habitat, is unknown. Portions of two cattle allotments (Eagle Meadow/Long Valley and Cooper) occur in this landscape.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Old forest associated species, peregrine falcon, great gray owl, mule deer, bats	Presence/ Successful breeding	Known presence and breeding for spotted owl over some of the area, some data for goshawk. Four fisher, 15 marten, 2 wolverine and 2 red fox sightings. Limited surveys for bat species. Some information for mule deer.	• Conduct surveys for presence and breeding of forest carnivores and bat species • Conduct additional surveys for goshawk • Monitor known breeding locations
Old forest associated species habitat	Presence of late succession habitat- OFEA (Forest carnivore) Spotted owl PACs, 300 acres of >24" trees with >70% canopy Northern goshawk PACs, 200 acres of >24" trees with >70% canopy	OFEA habitat: 33% of landscape in OFEA; 13% of OFEA in CWHR types 5D/5M; 30% of OFEA not capable of growing old forest Three spotted owl PACs entirely within landscape; All PACs over 300 acres; 0 acres currently at desired condition. Four goshawk PACs within landscape; 2 PACs below 200 acres; 1 PAC at 387 acres; 0 acres currently at desired condition.	• Increase acres of OFEA that exhibit old forest characteristics • Increase acres of habitat within both spotted owl and goshawk PACs that meet desired conditions • Increase size of 2 goshawk PACs to 200 acres, decrease size of 1 PAC
Peregrine falcon habitat	Nest sites protected from disturbance	Suitable eyrie sites exist. No known nesting.	Conduct surveys at suitable eyrie sites.
Great gray owl habitat	PAC of 50 acres plus meadow needed to provide prey	99 acre PAC at Eagle Meadow	Assess condition of habitat within PAC.
Mule Deer Habitat	Early succession habitat	14% of landscape in potential foraging habitat. Current condition unknown.	Assess habitat availability and condition. Relationship with range ecological status?
Bat Habitat	Identified occupied habitat is described	Surveys have not been completed to identify occupied habitat.	• Conduct bat surveys • Collect habitat data at occupied sites.

Desired Condition #17: Habitat for federal threatened and endangered species in excellent condition and species and recovery plan requirements is met.

Not applicable for this landscape.

Vegetation Mosaic

Desired Condition #18: Vegetation type and species distribution approach Potential Natural Vegetation (PNV).

Existing Condition: Vegetation types have been changed by timber harvest and by the absence of periodic fire. The portion within the Emigrant Wilderness Area, vegetation change is only associated with fire suppression and recreation use. In portions of the remaining area, over many decades, harvesting removed high-value pines, in advance of predicted mortality. More recently, in response to increasingly sophisticated management strategies, harvesting created openings where most of the existing vegetation was removed and replaced, largely, by planted conifer seedlings. Additionally, in the absence of periodic wildfire, shade-tolerant conifers, primarily white fir, established themselves within existing stands, sometimes becoming the dominant species.

The presence of white pine blister rust in this landscape has reduced the frequency of sugar pine. This pressure, combined with the continual threat of mountain pine beetle-related mortality, is a major concern. Despite the increasing availability of rust-resistant planting stock, significant efforts to reestablish the species have not occurred. Western white pine, also susceptible, has not been significantly affected as yet.

At this time, vegetation types within the landscape do not meet desired species composition, in particular: (a) there is too much white fir in some vegetation types; (b) sugar pine is below desired levels in some vegetation types, and (c) meadow vegetation is below historic levels.

Table 16 below lists the desired conditions and existing vegetation types, for comparison. Refer to the discussion about vegetation mapping in Chapter IV before drawing conclusions from the table. Species composition, within any particular landscape, should be based on local field inventories. Nevertheless, the table provides several starting points that should be evaluated.

Table 16. Desired Condition and Existing Condition of Vegetation Series in Sonora Pass Landscape

Vegetation Series	Desired Potential Natural Vegetation (PNV)	Existing Vegetation (CALVEG)
Mixed Conifer	60-80% Mixed Conifer	72% Mixed Conifer
Mixed Conifer/White Fir	30-50% Mixed Conifer 30-50% White Fir	64% Mixed Conifer 0% White Fir
Ponderosa Pine/Mariposa Manzanita/Annual Grassland	30-50% Ponderosa Pine 30-50% Mariposa Manzanita 20-40% Annual Grassland	0% Ponderosa Pine 0% Manzanita 99% Barren
White Fir	60-80% White Fir	40% Mixed Conifer - Fir
Jeffrey Pine/Rock Outcrop/White Fir/Lodgepole Pine	30-40% Jeffrey Pine 10-30% Rock Outcrop 20-30% White Fir 20-30% Lodgepole Pine	1% Jeffrey Pine 2% Barren 7% Mixed Conifer - Fir 33% Lodgepole Pine
Jeffrey Pine/Rock Outcrop	50-70% Jeffrey Pine 20-40% Rock Outcrop	11% Jeffrey Pine 24% Barren
Lodgepole Pine	60-80% Lodgepole Pine	23% Lodgepole Pine
Lodgepole Pine/White Fir/Upper Montane Meadow	30-50% Lodgepole Pine 20-40% White Fir 20-40% Upper Montane Meadow	38% Lodgepole Pine 0% White Fir 0% Upper Montane Meadow
Red Fir	60-80% Red Fir	46% Red Fir
Red Fir/Jeffrey Pine	30-50% Red Fir 20-40% Jeffrey Pine 10-20% Rock Outcrop	7% Red Fir 2% Jeffrey Pine 13% Rock Outcrop
Red Fir/Lodgepole Pine	40-60% Red Fir 30-50% Lodgepole Pine	19% Red Fir 54% Lodgepole Pine
Red Fir/Jeffrey Pine/Lodgepole Pine/Rock Outcrop	20-40% Red Fir 20-40% Jeffrey Pine 20-40% Lodgepole Pine 10-30% Rock Outcrop	33% Red Fir 20% Jeffrey Pine 19% Lodgepole Pine 9% Rock Outcrop
Rock Outcrop/Lodgepole Pine	30-60% Rock Outcrop 30-60% Lodgepole Pine	% Rock Outcrop % Lodgepole Pine
Undifferentiated Montane Shrubland/Jeffrey Pine/Mixed Conifer	40-60% Montane Shrubland 20-40% Jeffrey Pine 10-20% Mixed Conifer	22% Montane Mixed Shrub 9% Jeffrey Pine 17% Mixed Conifer -Fir
Dry Volcanic Meadow/Red Fir	40-60% Dry Volcanic Meadow 20-40% Red Fir	19% Barren 36% Red Fir
Dry Volcanic Meadow/ Mountain Mule Ear	40-60% Dry Volcanic Meadow 40-60% Mountain Mule Ear	88% Barren or Grass 1% Montane Mixed Shrub
Dry Volcanic Meadow/Mountain Mule Ear/Jeffrey Pine/Red Fir	20-30% Dry Volcanic Meadow 20-30% Mountain Mule Ear 20-30% Jeffrey Pine 20-30% Red Fir	55% Barren or Grass 9% Montane Mixed Shrub 3% Jeffrey Pine 21% Red Fir
Lodgepole Pine/Whitebark Pine/Rock Outcrop	20-40% Lodgepole Pine 20-40% Whitebark Pine 20-40% Rock Outcrop	21% Lodgepole Pine 12% Subalpine Conifer 19% Rock Outcrop

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
PNV	See Table 16 above.	Higher % fir in the Mixed Conifer Series. Loss of meadows in Upper Montane Meadow Series.	• Reduce fir species composition in Mixed Conifer Series by thinning. • Increase meadows in Upper Montane Meadow Series by burning and/or thinning.
Species Composition—sugar pine	5-25% sugar pine canopy cover within Jeffrey Pine, Mixed Conifer, and White Fir Series.	7-12% sugar pine	Increase sugar pine species composition within the listed vegetation series, with the higher percentage in the mixed conifer series.
Species Composition—white fir	$\leq$ 45% basal area white fir in Mixed Conifer Series	13-53% white fir	Decrease white fir species composition in stands that show > 45% basal area white fir using stand exam data.

Desired Condition #19: Seral stages exist in an arrangement that provides for the long-term development and replacement of key wildlife habitat structure.

Existing Condition: The seral stage distribution indicates that size class 4 acreage far exceeds the desired level. All other size classes are at levels below the desired value.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Wildlife Habitat Relationship (WHR) Size Class 1	5%	0%	
Wildlife Habitat Relationship (WHR) Size Class 2	5%	0%	
Wildlife Habitat Relationship (WHR) Size Class 3	15%	10%	
Wildlife Habitat Relationship (WHR) Size Class 4	20%	77%	• Reduce stand density to increase growth to seral stage 5. • Regenerate portions to provide for earlier seral stages.

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Wildlife Habitat Relationship (WHR) Size Class 5	55%	13%	

Desired Condition #20: Stand Density is below identified thresholds to minimize insect/drought-related mortality.

Existing Condition: Currently, the average SDI value for strata covering 28% of the landscape are above, or projected to approach, threshold values. Specific data to support these statements can be found Appendix *. The table below describes the existing conditions for this landscape, as it relates to the desired condition for this element. As much of this landscape is within the Emigrant Wilderness area, opportunities for direct action are limited. Outside this area, prescribed fire, alone, may not be a suitable treatment approach in stands, as fire behavior would be expected to kill significant numbers of desired trees.

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Stand Density Index (SDI) for Mixed Conifer-Fir	SDI $\leq$ 300	F3N SDI = 336 F4N SDI = 283	Thinning or prescribed fire in stands where inventories show SDI is approaching, or has exceeded, the threshold.
Stand Density Index (SDI) for Red Fir	SDI $\leq$ 440	R3G SDI = 384	
Stand Density Index (SDI) for Lodgepole Pine	SDI $\leq$ 205	A3N SDI = 312 A3P SDI = 192	
Stand Density Index (SDI) for Mixed Conifer-Pine	SDI $\leq$ 333	M3N SDI = 304 M3P SDI = 443 M4N SDI = 302	

Desired Condition #21: Vegetation in Riparian Conservation Areas (stream corridors and special aquatic features such as meadows, aspen stands, lakes, ponds, springs, fens and bogs) is highly similar to natural potential.

Existing Condition: Riparian vegetation condition is variable in the Sonora Pass landscape. Long–term streamflow regulation, grazing and recreation have affected true riparian trees and shrubs in stream corridors and other wetland sites.

In the higher elevation portions of this landscape where concentrated grazing does not occur the riparian plant communities are at or near desired condition. Natural

regenerative processes are nearly intact. Aspen stands and willow communities have been affected where they exist in areas of concentrated grazing. Aspen suckers and willows, especially in the late summer and fall, are very palatable. Annual grazing of aspen shoots and willow seedlings has affected seral stage development. Areas of concern include Kennedy Canyon and Eagle Meadow.

Where low gradient stream reaches with fine-grained streambanks occur along the Middle Fork of the Stanislaus River, true riparian species composition and seral stage development have been altered. As a result of about 90 years of a regulated streamflow regime downstream of Relief Reservoir, a shift in understory species frequency has occurred that favors mountain alder over willow species. Stream margin substrate is now inundated during much of the summer period when willows can regenerate. There also is an apparent gap in seral stage distribution of cottonwood trees. Late seral stage trees remain but early and mid seral stages occur with reduced frequency. Optimum replenishment of cottonwoods occurs where streamflow regime alterations are absent or minimized.

Location and condition of special aquatic features are not fully known. They are believed to be frequent in this landscape and are thus important both as features and inventory projects. Kennedy Canyon is one of the most notable special features in the landscape since it is the largest wetland on the Stanislaus National Forest.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Meadow vegetation	High ecological status in wet and moist meadows. Approaching high status in dry meadows.	1453 acres of meadow. 287 acres of meadow have been surveyed since 1990. Of those, 55 acres are in good/high ecological status, 86 acres in fair/moderate status, and 26 acres in poor/low status.	• Ensure that uses and disturbances to meadow and streamside vegetation occur within parameters that achieve and maintain high ecological status. • Restore degraded meadow conditions, as opportunity exists.

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
True Riparian Trees and Shrubs	Species composition highly similar to PNV; Seral stage distribution relatively uniform.	True riparian trees and shrubs at or near DC in riparian areas without streamflow regulation or concentrated grazing (2). True riparian trees and shrubs not at DC in the Relief Reach of the MFK Stanislaus River due to flow regime alteration (2, 3). In aspen stands and willow communities with concentrated grazing, seral stage distribution is not at DC but magnitude of change is a data gap (2). Location of some special aquatic features is a data gap (meadows, aspen stands, ponds, springs, fens and bogs). Of special note is Kennedy Canyon, the largest wetland on the Stanislaus National Forest.	• Maintain true riparian species where desired condition exists. • Move species composition and seral stage distribution toward desired condition where altered and feasible to accomplish. • Increase knowledge of location and condition of special aquatic features (meadows, aspen stands, ponds, springs, fens and bogs).

Social/Cultural Hierarchy
Economics

Desired Condition #22: Ecosystem management activities and recreation contribute to the economic viability of the local community.

Existing Condition: Economic contributions have traditionally come from Recreation-related activities, primarily along the Highway 108 corridor and Emigrant Wilderness. Resource condition surveys may generate rehabilitation projects, especially at recreation facilities in Riparian Conservation Areas. Other projects may come from dealing with the deferred maintenance backlog at recreation facilities. (Refer to Desired Condition Statements #10, 11, 18, 19, 20, 21 and 28).

Information and Education

Desired Condition #23: The Stanislaus National Forest provides accurate and timely natural and cultural resource information and education.

Existing Condition: The Columns of the Giants, an interpretive site that includes a ½ mile interpretive trail (also designated a National Recreation Trail), two kiosks and two vault toilets, is found in this landscape. In addition, two other interpretive signs occur along the highway above Kennedy Meadows. A rustic trail and interpretive handout are used to highlight the worlds largest Jeffrey Pine, near Douglas Flat picnic area. Most signs and kiosks are 30 to 40 years old and in need of repair or replacement.

As a highly visited area, this landscape has excellent potential for expanding interpretation and education. The Columns of the Giant reconstruction has been funded through the Capital Improvement Program for renovation in 2003.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
User preferences	User preference "baseline" data is collected and will be updated every 5 years.	No baseline data exists.	Collect Baseline User Preference data as a first critical step in improving information and education.
Interpretive Program Implementation	The Stanislaus National Forest Interpretive Plan will be updated to include user preference information	Interpretive Plan is not up-to-date.	Include update and annual review of Interpretive Plan in annual program of work. Integrate Baseline Data in Interpretive Plans.
Interpretive Services Offered	Interpretive services increase at a rate commensurate with population demographics	Programs offered have been relatively static over the years.	Build in annual increase in programs offered/people served, as per demographics.
Written and Oral Information	Information provided at Forest Service sites is $\geq$ 90% accurate.	Information is often out-of-date. A system to identify resource message needs does not exist.	Integrate interpretive and public information programs and information sharing protocols with all resources.

Desired Condition #24: The Forest Service provides public assistance at all developed and dispersed recreation areas and sites.

Existing Condition: Forest service public assistance is very limited in this landscape. All developed campgrounds are maintained and managed by concessionaires. Most visitations by Forest Service personnel are related to administration of the concession permits, fire prevention or scattered OHV use.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Visitation Standards	All recreation sites and settings are visited at a frequency determined by Meaningful Measures	Very low visitation rates from uniformed Forest Service personnel.	• Increase visitation frequency by redirecting funding to this area, as other sources come into play in other areas, such as FERC 4E, cooperative funding with outside sources. • Increase visitation by utilizing volunteers or Forest Service personnel from other functions such as Fire Prevention.

Desired Condition #25: Noxious weed populations on land adjacent to the Forest are removed or under control, lessening the potential for weeds spreading into the Forest.

The following table compares desired condition with existing condition and lists of opportunities for DC#25.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Weed Management Areas	The Stanislaus NF is an active participant in Tuolumne, Calaveras, Mariposa and Alpine County Weed Management Areas	The Stanislaus National Forest participates in the Tuolumne and Calaveras County Weed Management Areas.	Full participation in Weed Management Area programs, projects and grants.

Land Use

Desired Condition #26: Isolated private lands of high ecological, recreational, cultural or aesthetic value are part of the public land base.

Existing Condition: Kennedy Meadows and the Sanguinetti parcels have been identified as potential candidates for acquisition.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Identified properties	All lands acquired	Some high value lands are in private ownership	• Prioritize parcel acquisition • Maintain and enhance relationships with groups who assist in this activity (e.g. Nature Conservancy, Trust For Public Land, etc.)

Desired Condition #27: Recreation opportunities are provided and facilities are well maintained, accessible, appropriate to the setting, and meet future population demands in an environmentally sound way.

Existing Condition: The dominant social-cultural themes in the Sonora Pass area revolve around recreation. Besides Pinecrest, this is the most heavily visited recreation area in the CSWA area. The Middle Fork of the Stanislaus and State Highway 108 provide the primary attraction and access to the majority of the recreation facilities. Developed recreation opportunities include 177 campsites in 7 campgrounds, a picnic area, 3 trailheads, a resort, an organization camp, a private resort/campground, private pack station (operating on public land as an outfitter-guide) and 150 recreation residences. Many facilities such as Dardanelle Resort, Kennedy Meadows Resort (on private land) and many recreation residences were built prior to 1950 and are eligible for historical status. Camping, fishing, hiking and sightseeing are the primary activities with some hunting during the fall. The Sonora Pass Landscape has the most snowmobile use, with activity concentrated along Highway 108 and the Eagle Meadow/Haypress areas. The Eagle Meadow area is a popular dispersed camping destination for hunters, horse users, 4-wheel drive enthusiasts and those who enjoy dispersed camping opportunities. The only designated camping area is the Eagle Horsecamp, which has no facilities. The main portal to the Emigrant Wilderness is near Kennedy Meadows. Several private lots and cabins are interspersed along the Eagle Meadow Road between Eagle Creek and Haypress Meadow.

The present Forest Service owned facilities were generally constructed in the 1960's and 70's. Resource degradation near rivers and streams as well as a desire to provide a more "modern", automobile-friendly camping experience, led to the development of many of the existing campgrounds. Because their creation predates most accessibility laws, they do not meet current standards for Universal Design. Most have reached or exceeded their designed lifecycle of 30 years (FSH 7309.11, 1995). The current deferred maintenance backlog for the Forest Service sites in this area is $700,000 and the annual maintenance shortfall is $60,000 (USDA Forest Service INFRA Developed Site Inventory, 2000)

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
User Preferences	Recreation opportunities and facilities meet present and future user preference needs.	Design, form and function of existing facilities meet preference needs of the 1960's and 70's. Some upgrading for accessibility has been accomplished	• Conduct recurring, focused Visitor Surveys. • Utilize general surveys and literature searches. • Implement updated design standards, were available. Develop new Design Standards, where appropriate, to reflect user preferences. • Develop a Facility Management Plan that prioritizes the "what, where and how" of facilities. Include changes needed to mitigate negative impacts on natural resources. • Complete accessibility upgrades.
Population Demographics	Visitor participation reflects demographics of the service area	Data Gap. Suspect diversity of service area is not reflected in existing user groups	• Monitor demographic trends and uses to establish baseline use data. • Where possible and appropriate, incorporate demographic trends in facility and program development.
Facility Occupancy	Recreation facilities are constructed within 3 years of determining that occupancy/use has exceeded 90% seasonally adjusted capacity for two consecutive years.	Little opportunity along Highway 108 to increase capacity during high use periods. Unknown if public is willing to go somewhere else. Low visitation during off-season.	• Monitor use levels. • Concentrate facility upgrades and change in areas of highest use. • Construct new facilities to meet this demand at alternate sites, if it is determined this will be effective and environmentally sound (meets Desired Conditions of other elements) • Maximize funding sources: Capital Improvement Program; cooperative funds
Facility Condition	Meets Forest Service Meaningful Measures Standards/INFRA Accessibility Guidelines	Facilities functional but out of date & in poor condition. Some accessibility upgrades have been completed.	• Establish priorities using Meaningful Measures and INFRA data. • Maximize funding for maintenance of facilities: Appropriated funds; Fee Offset; Fee Demo; Volunteers; Capital Improvement Program

Desired Condition #28: Federal Energy Regulatory Commission (FERC) licenses contain adequate mitigations for project induced recreation activities and facilities.

Existing Condition: Relief Reservoir is part of the Spring Gap-Stanislaus hydroelectric project. It is a popular quasi-wilderness destination. (The Emigrant Wilderness surrounds most of the reservoir and the only public access is by trail). There are trail and campsite impacts related to visitation, especially from day-use, which should be considered for inclusion in FERC 4(e) conditions.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Facilities and activities financed	100% financing of facilities and activities attributable to present and projected demand generated by FERC projects.	No financial contribution by PG&E for any induced impacts at Pinecrest or affected areas. PG&E maintenance cabin at the edge of the Emigrant Wilderness. Numerous user-created trails exist between the Huckleberry Trail and the reservoir. Large camp area at Grouse Creek and at other locations near the reservoir.	• Identify clear present and future project induced impacts. • Prioritize importance and "ownership" of all impacts. • Set Licensee responsibilities in FERC 4(e) requirements to include removal of maintenance cabin and management of user-created trails and campsites (among others).

Desired Condition #29: The road system provides adequate access for public and administrative uses.

Existing Condition: See Chapter IV.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Needed roads	Miles of road retained	Unknown	• Implement Roads Analysis procedures as outlined in the SNFP amendment: level 3 to 5 roads w/in 2 years; level 1-2 roads w/in 5 years.
Unneeded Roads	Miles of Road decommissioned	Unknown	• Implement Roads Analysis procedures as outlined in the SNFP amendment: level 3 to 5 roads w/in 2 years; level 1-2 roads w/in 5 years.
Roads Maintained	Miles of roads maintained to standard	Unknown	• Implement Roads Analysis procedures as outlined in the SNFP amendment: level 3 to 5 roads w/in 2 years; level 1-2 roads w/in 5 years.

Desired Condition #30: The trail system outside wilderness connects communities and accesses other popular locations.

Existing Condition: Existing trail opportunities generally lead from trailheads (Kennedy Meadows, Sonora Pass and Blue Lakes) to the Emigrant Wilderness. The Kennedy Trailhead is the most popular on the Stanislaus. While this is very popular, trail emphasis is to be directed outside the wilderness. The non-wilderness trails include Seven Pines, St. Mary's Pass, Bloomer Lake, Eagle Creek and Silver Mine Creek 4-wheel drive. No trails connect the many recreation destinations along Highway 108. There is a heavy trail maintenance backlog. Suggestions for potential trails are shown on Map J-1 in Appendix J.

Analysis:

DESIRED CONDITION		EXISTING CONDITION	OPPORTUNITIES
Indicator	**Measure**		
Community-linked trail opportunities	Miles of non-motorized community-linking trail constructed	Community-linking trails do not exist.	Construct community-linking trails as identified through public involvement (see Map J-1)
Motorized and non-motorized trails outside wilderness	Miles of trail constructed	Trails exist that primarily access the Emigrant Wilderness and Eagle Meadow. Some OHV use occurs near East Flange and Silver Mine Creek. Most OHV use is restricted to level 2 roads.	• Construct trails identified through public involvement (see Map J-1). • Decommission or discourage use on trails that receive minimal use (Data Gap).
Motorized and non-motorized trails maintained	Miles of trail maintained to standard	Landscape-specific data is lacking, but there is a heavy forest-wide trail maintenance backlog.	• Use Meaningful Measures/INFRA maintenance standards as baseline. • Prioritize maintenance activities toward heavily used trails. • Utilize 4E requirements to ensure Relief trails are maintained to standard.

Chapter VI.9
Recommendations for Sonora Pass Landscape

#	Potential Projects	Program Lead
Landscape Scale Vegetation Management		
1-1	In the defense zone around developed areas along the Highway 108 corridor, reduce surface and ladder fuels and remove excess crown fuels using primarily hand and/or mechanical treatment. (Refer to Desired Conditions 9, 10)	Fire
1-2	Assess the defense zones in the Long Valley/Eagle Meadow area and implement any necessary hazard fuel reduction. (Refer to Desired Conditions 9, 10)	Fire
1-3	Outside of the defense zones, implement hazard fuel reduction in areas with high fire hazard and/or crown fire potential. Priority is Old Forest Emphasis Area (OFEA), primarily using prescribed fire. (Refer to Desired Conditions 9, 10)	Fire
1-4	Improve and maintain the remainder of the landscape with naturally occurring fire where possible. Hazard fuel treatment may be necessary to facilitate the use of naturally occurring fire in the future. (Refer to Desired Conditions 9, 10)	Fire
1-5	Improve fire station facilities at Brightman Station. (Refer to Desired Conditions 9, 10)	Fire
1-6	Increase late succession habitat in Old Forest Emphasis Areas by reducing the number of small and medium trees in overstocked stands to accelerate growth rate of the residual trees toward late seral condition. (Refer to Desired Conditions 16, 20, 21, 23)	Wildlife
1-7	After checking the vegetation typing in spotted owl PAC TL134 and the Eagle Creek North goshawk PAC, use thinning and reintroduction of fire as needed to reach desired condition. This landscape has lower priority than other landscapes based on the fire/fuels recommendations. (Refer to Desired Conditions 16)	Wildlife
1-8	Increase the acres in the Soda Creek goshawk PAC and decrease the acres in the Eagle Creek North goshawk PAC. (Refer to Desired Conditions 16)	Wildlife
1-9	Reduce density of upland vegetation to restore evapotranspiration closer to its natural potential and to reduce the risk of large and severe wildfire delivering excessive sediment to streams. Utilize prescribed fire, fire use for resource benefits or mechanical thinning as determined at the project scale. Key treatment locations are stands throughout the landscape below about 7,000 where SDI currently exceeds or will exceed threshold values within the next ten years. (Refer to Desired Conditions 4, 8)	Watershed
1-10	Restore and maintain the natural fire frequency in RCA's and uplands where vegetative conditions are at or near desired condition. Key restoration locations are wilderness and other roadless areas. (Refer to Desired Condition 21)	Watershed
1-11	In ecological Unit 331 prescribe burn to maintain Jeffrey pine, cycle nutrients, reestablish nature fire regime, and improve wildlife habitat and diversity. (Refer to Desired Conditions 9, 10, 14, 15, 16)	Watershed/ Fire/ Wildlife
1-12	Reduce stand density by thinning where Stand Density Index threshold values are currently exceeded or projected to be exceeded within ten years. (Refer to Desired Condition 20)	Silviculture
1-13	In areas containing CWHR size class 3 and 4 trees, reduce stand density to accelerate tree growth toward size class 4 and 5 to increase late seral conditions. Identify areas to establish early seral vegetation to increase biodiversity. (Refer to Desired Conditions 19, 20, 21, 22)	Silviculture

#	Potential Projects	Program Lead
1-14	Decrease white fir in mixed conifer vegetation types to meet PNV. (Refer to Desired Conditions 18, 22)	Silviculture
1-15	Revise the Old Forest Emphasis Areas as located in the Sierra Nevada Forest Plan Amendment. (Refer to Desired Condition 16)	Wildlife/ Silviculture
Patch/Site Scale Vegetation Management		
2-1	Improve ecological status of meadow vegetation where it is not at desired condition, using appropriate active or passive restoration methods. (Refer to Desired Condition 21)	Range/ Watershed
2-2	Remove impacts to meadows from disturbances such as roads, trails, OHV's and other recreation use, and keep livestock grazing and trampling to allowed limits. (Refer to Desired Condition 21)	Range/ Watershed
2-3	In meadows in the Upper Montane Meadow PNV Series where conifer encroachment has occurred, increase meadow size to natural potential by thinning or prescribed burning. (Refer to Desired Condition 21)	Range/ Watershed
2-4	In non-wilderness locations where fire or other disturbances remove upland vegetation and regeneration is mostly riparian species, determine whether permanent meadow/riparian conditions are desired. If so, manage toward the potential natural community. (Refer to Desired Condition 21)	Range/ Watershed/ Wildlife/ Aquatic Biology
2-5	Restore aspen stand condition to protect or enhance aspen populations. Key restoration locations are aspen stands with conifer encroachment or livestock grazing of aspen suckers. (Refer to Desired Condition 21)	Wildlife/ Watershed
2-6	Remove or reduce existing noxious weed populations using methods appropriate to the species, location and population size. (Refer to Desired Condition 11) *(FERC Related)*	Resource Management
2-7	Treat new noxious weed occurrences aggressively, using methods appropriate to the species and size/age of the discovered population. (Refer to Desired Condition 11) *(FERC Related)*	Resource Management
2-8	Implement Region 5 noxious weed risk reduction methods to protect against introduction of new weed populations. (Refer to Desired Condition 11) *(FERC Related)*	Resource Management
2-9	Work with local Native American community to identify traditional National American plants of interest and actions that can be taken to maintain and enhance plant populations. (Refer to Desired Condition 13)	Botany/ Tribal Relations
Soil Productivity		
3-1	Restore soil and vegetation conditions at the Juniper Mine site. (Refer to Desired Condition 14, 15)	Watershed
3-2	Fertilize plantations in red fir timber types where available nitrogen is low. (Refer to Desired Condition 14)	Watershed
Aquatic/Riparian		
4-1	Adjust streamflow regime in streams with dams and diversions to restore and sustain proper stream channel morphology, optimize structural and species diversity of riparian vegetation, and maintain viable populations of native and desired non-native aquatic fauna. To restore proper functioning stream condition in the gravel bed segment of the MFK Stanislaus River impaired flows should be reduced to within 10% of unimpaired flows from June through October and managed to within 20% of unimpaired flows from November through May. (Refer to Desired Condition 7) *(FERC Related)*	Watershed

#	Potential Projects	Program Lead
4-2	Where reservoirs have inundated historic amphibian habitat, mitigate for habitat loss as a condition of hydropower relicensing. (Refer to Desired Condition 2) *(FERC Related)*	Aquatic Biology
4-3	Maintain and restore habitat/populations of Yosemite toads and mountain yellow legged frogs to insure species viability. (Refer to Desired Condition 1) *(FERC Related)*	Aquatic Biology
4-4	Restore stream channel morphology and riparian vegetation in candidate locations described in Appendix I, using appropriate active or passive restoration techniques. (Refer to Desired Condition 5)	Watershed
4-5	Relocate, redesign or decommission dispersed and developed recreation sites adjacent to water that are obvious sources of erosion and stream sedimentation. (Refer to Desired Conditions 4, 15)	Watershed
4-6	Retain or increase Large Woody Debris in stream channels. Reduce or relocate LWD only when it is adversely affecting property, stream condition or public safety. The key location is the Relief Reach of the MFK Stanislaus River where recruitment and passage of LWD should be promoted, including allowing LWD passage through Relief Dam. (Refer to Desired Condition 3) *(FERC Related)*	Watershed
Recreation Sites/Activities		
5-1	Upgrade developed recreation facilities to current standard, starting with the poorest condition/oldest buildings, emphasizing heavily visited areas and incorporating soil/vegetation restoration, where needed. (Refer to Desired Conditions 27, 28, 30) *(FERC Related)*	Recreation
5-2	Implement fee Collection at developed campgrounds meeting minimum criteria for collection (FSM 2300). (Refer to Desired Conditions 24, 27)	Recreation
5-3	Increase Forest Service Presence (i.e. FS Employees and volunteers). (Refer to Desired Conditions 24)	Recreation
5-4	Manage day-use campsites and trails adjacent to Relief Reservoir to reduce sense of crowding, increase trail maintenance frequency and reduce resource impacts. (Refer to Desired Conditions 27, 28, 30) *(FERC Related)*	Recreation
5-5	Develop a network of approved and improved dispersed campsite locations. Revise Recreation Opportunity Guide. (Refer to Desired Conditions 23, 24)	Recreation
Trails and Roads		
6-1	Build the Old Mono Road Trail. (Refer to Desired Condition 30)	Recreation
6-2	Route all trails entering Wilderness through established trailheads to ensure dissemination of wilderness information prior to entry. (Refer to Desired Conditions 23, 30)	Recreation
6-3	Provide trails connecting this landscape with adjacent landscapes to achieve a network of non-motorized trails between landscapes. (Refer to Desired Condition 30)	Recreation
6-4	Establish an OHV road and trail system that exists within currently roaded areas, has minimal impacts on other resources and emphasizes loop road opportunities. (Refer to Desired Conditions 29, 30)	Recreation/ Engineering
6-5	Secure Scenic Byway status for Highway 108. (Refer to Desired Conditions 23, 27)	Recreation
6-6	Following completion of Roads Analysis, needed roads should be improved as necessary to minimize effects on water quality and aquatic habitat. Road reconstruction and maintenance funds should be focused on level 2 roads since 80% of roads are in that class. (Refer to Desired Condition 29)	Engineering/ Watershed

#	Potential Projects	Program Lead
6-7	Following completion of Roads Analysis, unneeded roads should be closed or decommissioned. Closed roads should have entrances blocked, water bars constructed and culverts unplugged or removed. Decommissioned roads should have these treatments and may have additional ones (i.e., subsoiling, recontouring). (Refer to Desired Condition 29).	Engineering/ Watershed
Land Acquisition		
8-1	Acquire Sanguinetti and Kennedy Meadows properties when available. (Refer to Desired Condition 26)	Recreation

#	Inventories and Monitoring	Program Lead
Landscape Scale Vegetation Management		
1-1	Conduct stand exams in California spotted owl and goshawk PACs to ground truth vegetation strata data, to establish a baseline on habitat conditions and to prioritize areas for treatment. (Refer to Desired Condition 16)	Wildlife
1-2	Develop improved vegetation data (i.e., stand structure and species composition characteristics) to better assess mule deer and other wildlife habitat. (Refer to Desired Condition 16)	Wildlife
1-3	Collect habitat data for bats at occupied sites. (Refer to Desired Condition 16)	Wildlife
1-4	Assess the habitat condition at the Eagle Meadows PAC. (Refer to Desired Condition 16)	Wildlife
Patch/Site Scale Vegetation Management		
2-1	Determine ecological status of all meadows designated as grazing allotment key areas, and other meadows as deemed necessary. Repeat on a three to five year basis. (Refer to Desired Condition 1)	Range
2-2	Inventory the frequency and distribution of conifer encroachment in meadows. (Refer to Desired Condition 21)	Wildlife/ Watershed
2-3	Inventory high and moderate risk areas for new noxious weed occurrences (train forest employees and volunteers in weed identification). (Refer to Desired Condition 11)	Resource Management
2-4	Inventory the frequency, distribution and condition of Quaking Aspen stands. (Refer to Desired Condition 21)	Watershed
Soil Productivity		
3-1	Test for Nitrogen availability in plantations in red fir timber types. (Refer to Desired Condition 14)	Watershed
3-2	Inventory LWM by Ecological Unit and in plantations. (Refer to Desired Condition 14)	Watershed
3-3	Survey status of soil organisms in plantations. (Refer to Desired Condition 14)	Watershed
3-4	Inventory soil porosity in plantations and in multiple entry tractor units. (Refer to Desired Conditions 8, 14)	Watershed
Aquatic/Riparian		
4-1	Conduct native aquatic species surveys. (Refer to Desired Condition 1)	Aquatic Biology
4-2	Conduct waterfowl nesting inventories. (Refer to Desired Condition 1)	Aquatic Biology

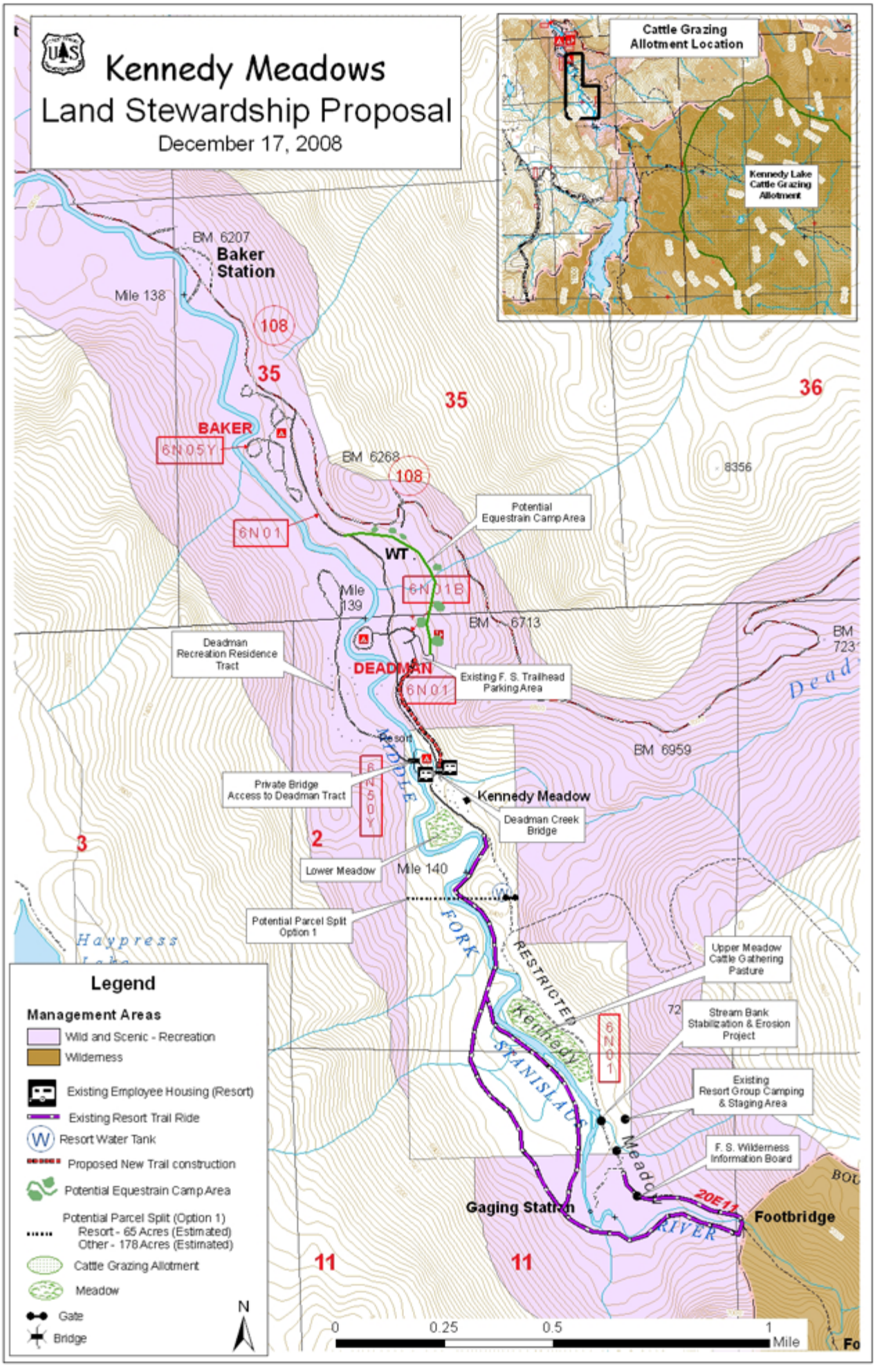
#	Inventories and Monitoring	Program Lead
4-3	Conduct macroinvertebrate surveys. (Refer to Desired Condition 1)	Aquatic Biology
4-4	Inventory reference reaches for PSD and pool sediment. (Refer to Desired Condition 4)	Watershed
4-5	Monitor applicable water quality parameters where degradation may exist (see Appendix I). (Refer to Desired Condition 6)	Watershed
4-6	Inventory special aquatic features across the landscape (meadows, aspen stands, springs, ponds, fens and bogs). Of special interest is Kennedy Canyon. (Refer to Desired Condition 21)	Watershed
4-7	Inventory LWD in reference areas (i.e., unmanaged wilderness streams) and managed sub-watersheds. (Refer to Desired Condition 3)	Watershed
4-8	Inventory the frequency, distribution and condition of true riparian trees and shrubs in Riparian Conservation Areas. (Refer to Desired Condition 21)	Watershed
4-9	Inventory stream sediment attributes (i.e., particle size distribution, residual pool depth) in streams with dams and diversions and in sub-watersheds where roads are not at desired condition. (Refer to Desired Condition 4)	Watershed
4-10	Inventory channel morphology in sensitive stream reaches (i.e., low gradient streams with fine grained streambanks) at reference locations. (Refer to Desired Condition 5)	Watershed
4-11	Inventory channel morphology in sensitive stream reaches (i.e., low gradient streams with fine grained streambanks) in managed sub-watersheds (see Appendix I). (Refer to Desired Condition 5)	Watershed
Recreation Sites/Activities		
5-1	Conduct visitor use level inventories. (Refer to Desired Condition 27)	Recreation
5-2	Conduct facility condition survey. (Refer to Desired Condition 23)	Recreation
5-3	Conduct visitor preference inventories. (Refer to Desired Conditions 22, 23, 27)	Recreation
Trails and Roads		
6-1	Conduct trails condition inventories on system and non-system trails. (Refer to Desired Conditions 27, 28, 29, 30)	Recreation
Animal/Plant Species		
7-1	Conduct forest carnivore and bat inventories. Conduct additional goshawk surveys. (Refer to Desired Condition 16)	Wildlife
7-2	Conduct peregrine falcon surveys within suitable habitat. (Refer to Desired Condition 16)	Wildlife
7-3	Conduct sensitive plant surveys in un-surveyed potential habitat. (Refer to Desired Condition 12)	Botany

#	Plans and Analysis	Program Lead
1	In the Stanislaus National Forest Fire Management Plan, identify the potential impacts of fire on people, property, and natural resources. Define and prioritize mitigation measures necessary to expand the use of naturally occurring fire for resource benefit inside and outside of the wilderness. Coordinate with the Toiyabe National Forest on wildland fire management along the east edge of the landscape. (Refer to Desired Conditions 9, 10)	Fire

#	Plans and Analysis	Program Lead
2	Conduct Roads Analysis in the roaded portion of the landscape. (Refer to Desired Conditions 1, 4, 5, 6, 14, 15, 27, 29)	Watershed/ Engineering
3	Develop a Road Closure Planning and Design Guide to reduce recurrence of problems with closed roads. (Refer to Desired Condition 29)	Engineering
4	Develop a Road Decommissioning Design Guide to help insure effective decommissioning. (Refer to Desired Condition 29)	Engineering
5	Develop a Road Maintenance and Reconstruction Design Guide to be able to implement effective methods of minimizing impacts on water quality and aquatic habitat. (Refer to Desired Condition 29)	Engineering
6	Update/revise range allotment plans based on meadow ecological status and other variables. (Refer to Desired Condition 21)	Range
7	Prepare and annually update an Interpretive/Public Information Plan, using Visitor Preference Surveys (Refer to Desired Condition 23)	Interpretive Services
8	Prepare Sensitive Plant Species Management Guides. (Refer to Desired Condition 13)	Botany

#	Land and Resource Management Plan Amendments	Program Lead
1	Establish Streambank Stability standards and guidelines. (Refer to Desired Condition 5)	Watershed
2	Establish Large Woody Debris (LWD) standards and guidelines for streams. (Refer to Desired Condition 3)	Watershed

Attachment F—Map


Kennedy Meadows
Land Stewardship Proposal
December 17, 2008
Cattle Grazing Allotment Location
Kennedy Lake Cattle Grazing Allotment
BM 6207
Baker Station
Mile 138
108
35
36
BAKER
6N05Y
BM 6268
108
8356
6N01
Potential Equestrain Camp Area
WT
6N01B
Mile 139
BM 6713
Deadman Recreation Residence Tract
DEADMAN
6N01
Existing F. S. Trailhead Parking Area
BM 6959
Resort
6N50Y
Private Bridge Access to Deadman Tract
Kennedy Meadow
Deadman Creek Bridge
3
2
Lower Meadow
Mile 140
Potential Parcel Split Option 1
Haypress
FORK
RESTRICTED
Upper Meadow Cattle Gathering Pasture
72
Stream Bank Stabilization & Erosion Project
6N01
Kennedy
STANISLAUS
Existing Resort Group Camping & Staging Area
F. S. Wilderness Information Board
Meadow
20E11
Gaging Station
RIVER
Footbridge
11
11
Legend
Management Areas
Wild and Scenic - Recreation
Wilderness
Existing Employee Housing (Resort)
Existing Resort Trail Ride
Resort Water Tank
Proposed New Trail construction
Potential Equestrain Camp Area
Potential Parcel Split (Option 1)
Resort - 65 Acres (Estimated)
Other - 178 Acres (Estimated)
Cattle Grazing Allotment
Meadow
Gate
Bridge
N
0
0.25
0.5
1
Mile

Attachment G—Kennedy Meadows Bridge Condition Assessment

United States Department of Agriculture **Forest Service** **Pacific Southwest Region**

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File Code: 7730 **Date:** December 15, 2008
Route To:

Subject: Evaluation of Deadman Creek Bridge and Deadman Flat Bridge

To: Forest Supervisor, Stanislaus National Forest

At the request of Forest Engineer Mike Bradshaw, Structural Engineers Nancy Tipton and Chris Shields, of the Regional Office Engineering Staff, Transportation Structures Group traveled to the Kennedy Meadows area of the Summit District on October 15, 2008. The purpose of the visit was to evaluate the condition of two road bridges, which are both located on land owned by Pacific Gas and Electric Company (PG&E). PG&E is divesting the land, and the Forest and or Tuolumne County is considering possible a proposal to acquire the land. The team was accompanied to the site by Mike Bradshaw where they met with representatives from the County of Tuolumne Department of Public Works, Bill McKenzie, Barry Bynom, and Scott Meyer. Following is a brief summary of observations and recommendations, followed by detailed information for each bridge.

Summary

The Deadman Creek Bridge was designed by the Forest Service and constructed in 1955 using Forest Service drawing R-486. Current ownership of the bridge and right-of-way status has not been determined. The bridge is 52 feet long, composed of a concrete deck supported by steel girders and concrete abutments. The bridge is in good condition, and can support California state legal load vehicles. To meet current standards the bridge rail should be replaced, and bridge approach rail should be installed. The bridge girders should be painted within the next 10 years to protect the steel and prevent loss of carrying capacity. The girder splices should be further evaluated, and as a minimum the existing bolts should be replaced with high strength bolts. The concrete bridge deck shows only minor wear after 50 years of use. The deck can be expected to continue to be serviceable unless traffic volume or type changes. The bridge can be expected to remain in service for the next 20 to 40 years, with minor continuing maintenance.

The Deadman Flat Tract Bridge over the Middle Fork of the Stanislaus River is a private bridge, constructed and maintained by the owners. The bridge is 42 feet long, with a timber deck and rail system, supported by steel stringers and concrete abutments. The bridge is in good condition, but structurally it cannot support California state legal load vehicles, and is required to be weight limit posted. To meet current Forest Service standards the bridge rail should be replaced, and bridge approach rail should be installed. The bridge would be required to be posted with a standard weight limit sign. The bridge can be expected to remain in service for the next 20 to 40 years, with minor continuing maintenance.

Bridge Detail

Deadman Creek Road Bridge
Infra Structure Number 051653000001029
This bridge is located where Forest Road 6N01 crosses Deadman Creek (Lat. 38.31276, Longitude 119.74566; T5N, R20E, Sec 2). Investigation of the Regional Office bridge files indicates this bridge was constructed in 1955, using Region Five Forest Service bridge drawing number R-486, titled "Deadman Creek Bridge No. 114." The drawing indicates that the current bridge replaced a shorter bridge previously located just downstream. A bridge inventory report and a photo dated 1950 were found of a 30 foot long Forest Service log stringer bridge, titled "Deadman Creek Bridge 1950." The existing bridge appears to have replaced the log stringer bridge.

A condition inspection was completed at the site. Measurements were taken of significant components. These measurements were later compared with and found to match dimensions shown on Drawing R-486. A date stamp "1955" located on the traffic side of the downstream curb further supports the identity of the bridge as "Deadman Creek Bridge No. 114", Drawing R-486.

This one lane bridge is 52 feet 5 inches long, with a clear width of 14'-0" between the curbs. The bridge is composed of a cast in place concrete deck and curb supported by three rolled steel girders. The girders are supported by cast in place concrete wall abutments and spread footings. Concrete wing walls support the road fill. The bridge rail system is composed of concrete posts, spaced 9 feet-9 inches on center, with a single layer of metal beam guard rail.

The deck is in good condition with minor deterioration from wear on the deck surface. Some minor spalling of the concrete deck and rail post bases was observed. No bridge approach rail is in place. The bridge rail system does not meet current standards. Type 3 object markers are installed at all four corners, but they are not installed in accordance with Manual on Uniform Traffic Control Devices (MUTCD).

The steel girders are in good condition. Each girder is spliced at approximately 14 feet from the end of the girder. The bolted splices appear to contain several different types of bolts and nuts. The girders are painted and it is likely for a bridge of this era that the paint is lead based. The paint is in good to fair condition. Some rusting is occurring at the bearings.

The concrete abutments are in good condition. No significant defects, scour, or settlement was observed. No rust, staining or efflorescence was observed on the concrete surface.

There is a ½ inch diameter active water pipe attached to the downstream side of the bridge deck.

The calculated flow at the bridge for a 100 year return design storm is 3000 cubic feet per second. This flow can pass under the bridge with a freeboard of approximately 3 feet.

Since no design calculations have been located, a bridge load rating was calculated which determined that the bridge can support state legal loads.

The following retrofit and maintenance items are recommended. Cost estimates are for planning purposes, and are based on FY 2008 public works costs. The cost estimates are for construction only, and do not include administrative costs.

1. Install bridge rail that meets current standards. The bridge rail system used for estimating purposes is a side mounted steel post with horizontal tube steel rail. Cost estimate: $16,500
2. Install Bridge Approach Rail. This will require construction of fill at all four corners to support the approach rail posts. Cost estimate approach rail: $14,500; Cost estimate approach road fill: $15,000
3. Re-install the Type 3 object markers in accordance with the Manual on Uniform Traffic Control Devices. Cost estimate $450
4. If needed in the future to protect the concrete deck, an asphalt overlay wearing surface can be placed on the deck. Cost estimate: $4,000
5. Paint Steel Girders within the next 10 years to protect the steel from loss of section. The existing paint is assumed to have lead content which will require special treatment. Cost estimate: $31,000
6. In depth inspection and evaluation of the girder splices. As a minimum the existing bolts should be replaced with uniform high strength bolts. Cost estimate: $20,000

<u>Deadman Flat Tract Bridge over Middle Fork of the Stanislaus River</u>
This bridge is located where an access road to the Deadman Flat Tract crosses the Middle Fork of the Stanislaus River. (Lat. 38.31314, Longitude 119.74660; T5N, R20E, Sec. 2). Anecdotal information indicates the bridge was originally constructed at this location in approximately 1945. The timber members were reported to have been replaced in approximately 1999. This bridge is a private structure, constructed and maintained by the owners. It is located on PG & E owned land. A locked gate is in place at the east end of the structure, restricting access to only authorized users. A non-standard weight limit sign that reads “Load Limit 20 Tons” is posted on the gate. A condition inspection was completed, and measurements were taken of the bridge components.

The one lane bridge is 42 feet long, with a clear width of approximately 10 feet between the curbs. The bridge is composed of a treated timber plank deck supported by five steel stringers. Two sets of longitudinal timber run planks provide a wearing surface for the deck. The deck is edged with a timber curb supported on timber scuppers. The bridge rail system is composed of treated timber posts spaced at 7 feet 10 inches on center, with a single horizontal 4 x 8 treated timber rail. The steel girders are supported by cast in place concrete wall abutments and spread footings. Concrete wing walls support the road fill.

The bridge rail system does not meet current standards. No bridge approach rail or object markers are in place. The timber deck, running planks and curb are in good condition.

The rolled steel girders are in good condition. The girders are painted and the paint is in good condition. It is unknown when the girders were painted, so the paint may contain lead. The girders bear on the concrete seat of the abutment. Every other girder is connected to the abutment with a single anchor bolt through steel plates that are welded to the bottom flange of the girder.

The concrete abutments are in good condition. No significant defects, scour or settlement was observed. Minor spalling was observed on the abutments and bearing seats.

Because the flow in the Middle Fork of the Stanislaus River is controlled by the upstream dam at Relief Reservoir, the 100 year return design flow (Q_{100}) at the site was analyzed two different ways. First, it was assumed that the Relief Reservoir Dam is managed to provide capacity in the reservoir for flood control. In this scenario, only the drainage area downstream from the dam contributes to the design flow at the bridge. The calculated Q_{100} for is case is 4000 cubic feet per second, and the flow can pass under the existing bridge with approximately one foot of freeboard. In the second scenario, the Relief Reservoir Dam is not managed to provide flood control capacity. In this case, the drainage area upstream of the dam is included in the calculation for the Q_{100} design flow. The calculated Q_{100} for this case is 7000 cubic feet per second, which would overtop the existing bridge.

The bridge cannot support state legal loads, and is currently posted with a non-standard sign for a reduced weight limit.

Should the Forest Service acquire ownership and management of this bridge, the following retrofit and maintenance items would be required to bring the bridge up to current Forest Service standards.

1. Calculate weight limit.
2. Install weight limit sign in accordance with Forest Service policy.
3. Install bridge rail that meets current standards.
4. Install Bridge Approach Rail.
5. Install Type 3 object markers in accordance with the Manual of Uniform Traffic Control Devices.
6. Install bearing devices. Install steel bearing plates, with anchor bolts and elastomeric bearing pads at each end of each girder.

If you have any questions regarding the information reported for these two bridges, please contact Nancy Tipton, Regional Bridge Engineer, Regional Office Engineering Staff, at 707-562-8862.

/s/ George Kulick
GEORGE KULICK
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cc: Mike Bradshaw
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