

Inyo National Forest Update/Revision

Focus Paper – Multiple Uses

Prepared by Inyo County Planning Department

January 2014

Table of Contents

	Page
Executive Summary	2
Introduction	2
Background	3
Setting	5
Issues and Trends	10
Opportunities	13
Constraints	16
Forest Service Approach to Date	17
Conclusion	17

Executive Summary

The Inyo National Forest Plan Update/Revision provides opportunities to enhance the social, economic, and cultural environments of the County. Multiple uses in the Forest have been and continue to be integral to the County's identity and a core component of its culture and economy. Providing for multiple uses of the nation's public lands are one of the core responsibilities of the Forest Service, as specified by the Multiple-Use Sustained-Yield Act of 1960 and other rules, regulations, and policies. However, multiple uses have been displaced from much of the Forest, and external social change continues to discourage multiple uses.

Recommendations

Pressure to diminish multiple uses in the Forest can be expected to continue or even increase. The County must remain vigilant to detect trend development and work with the Forest Service to revise and update the Plan to accommodate existing, evolving, and new multiple uses, as necessary. The County should emphasize the following in the Plan's development:

- Continue to encourage multiple uses in the Forest.
- The Healthy Forest Restoration Act.
- Work with the Forest Service towards an appropriate list of species of conservation concern.
- Advocate for the private sector's role in the Forest, particularly the potential to address declining public resources, attracting private investment, and benefiting nearby economic development.
- Work with the Forest Service to streamline permitting.
- Positive activities taking place on the Forest should be emphasized.
- Provide information about the benefits of agricultural activities and advocate for enhancement of this important sector of the County's society, culture, and economy.
- Educate the Forest Service about State-wide, regional, and local planning efforts.
- Continue to advocate for resources and policies to promote access, search and rescue, public services, and infrastructure.

Introduction

The Inyo National Forest (INF) is updating its Land Resource Management Plan. This Focus Paper provides an overview of issues germane to the County of Inyo in the Update as of January 2014. This Focus Paper will be updated periodically throughout the process to reflect current trends.

Purpose

The purpose of this Paper is to distill relevant information regarding Multiple Uses in the INF Plan and concentrate the County's input on important issues, focus the County's participation, and to provide better feedback to the Forest Service.

Roadmap

Following this Introduction, background information is presented, and then a description of the setting. Then, issues and trends and opportunities and constraints are presented, followed by a description of the Forest Service's approach to the relevant issues.

Background

The INF Plan was last comprehensively updated in 1988. Numerous addenda, errata, and other modifications have occurred since.

1988 Plan Update

The 1988 Plan addresses multiple uses by dividing such uses into a topic list, which are addressed in this manner throughout the document. These include discrete social, economic, and resource environments. The multiple use management goals include the following:

- economically efficient and cost-effective management that is responsive to economic and social needs;
- identification, evaluation, protection, and interpretation of historic resources as an integral management component;
- diverse plant and animal communities;
- fish habitat that is managed to provide species diversity to ensure viable populations of native vertebrates, and that the habitats of management emphasis species are maintained or improved;
- efficient transportation, administrative sites, and other facilities for planned uses and resource protection;
- provisions for geologic hazards;
- compatible relationships with adjacent non-federal lands;
- pest management;
- fire management that minimizes long-lasting adverse fire impacts;
- maximizing public benefits from mineral resources, including geothermal;
- sustained yield of forage, improved range condition, and increased grazing capacity;
- a broad range of developed and dispersed recreation, establishing research areas, including aquatic and geologic candidates;
- managing special interest areas; managing, protecting, and improving riparian areas;
- providing for a sustained yield of timber;
- maintaining and enhancing scenic resources;
- providing for sustained benefit of consumptive and nonconsumptive uses of water;
- managing and protecting wild and scenic rivers and wilderness, and;
- wildlife habitat managed to provide for species diversity for existing native vertebrates and invertebrates, and that habits of management emphasis species are maintained or improved.

Quantitative objectives are identified for a variety of infrastructure and planning projects. Management prescriptions, similar to zoning are identified for numerous specific areas, such as the Bristlecone Pine Forest, Developed Recreation Site, Dispersed Recreation, Multiple Resource Area, etc.

Planning Since 1988

Plan Amendments since 1988 include the South Sierra Wilderness Management Plan (1991), Motor Vehicle Direction (1993), Wild and Scenic River Management Plan: North and South Forks of the Kern (1994), Forest-wide Range Utilization Standards (1995), Management Direction for the Ansel Adams, John Muir, and Dinky Lakes Wildernesses (2001), Sierra Nevada Forest Plan Amendment (2004), and Management Indicator Species Amendment (2007). These Amendments provide for specific management direction for selected topics, and generally work to prescribe greater restrictions for multiple uses.

2012 Planning Rule

The Forest Service updated its Planning Rule in 2012. According to the Rule, consistent with the Multiple-Use Sustained-Yield Act of 1960, the Forest Service manages its lands to sustain the multiple use of its renewable resources in perpetuity while maintaining the long-term health and productivity. Resources are managed through a combination of approaches and concepts for the benefit of human communities and natural resources. The plan must provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area as follows:

- (1) integrated resource management for multiple use (aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses; renewable and nonrenewable energy and mineral resources; appropriate placement and sustainable management of infrastructure, such as recreational facilities and transportation and utility corridors; opportunities to coordinate with neighboring landowners to link open spaces and take into account joint management objectives where feasible and appropriate; habitat conditions; wildlife, fish, and plants commonly enjoyed and used by the public for hunting, fishing, trapping, gathering, observing, subsistence, and other activities; land status and ownership, use, and access patterns; reasonably foreseeable risks to ecological, social, and economic sustainability; system drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of the terrestrial and aquatic ecosystems on the plan area to adapt to change; public water supplies and associated water quality; and opportunities to connect people with nature), and
- (2) standards or guidelines to provide for sustainable recreation (including recreation settings, opportunities, and access), scenic character, recreation opportunities (including nonmotorized, motorized, developed, and dispersed recreation on land, water, and in the air), protection of cultural and historic resources, management of areas of tribal importance, protection of congressionally designated wilderness areas as well as management of areas recommended for wilderness designation to protect and maintain the ecological and social characteristics that provide the basis for their suitability for wilderness designation, protection of designated wild and scenic rivers as well as management of rivers found eligible or determined suitable for the National Wild and Scenic River system to protect the values that provide the basis for their suitability for inclusion in the system, appropriate

management of other designated areas or recommended designated areas in the plan area, including research natural areas, and other plan components for integrated resource management to provide for multiple use as necessary.

The Forest Service's draft Directives to implement the Planning Rule include specific approaches to multiple uses, including outdoor recreation, range, timber, watershed, and fish and wildlife.

Current Update/Revision Effort

To date, the current Update effort includes a Science Synthesis, a Bioregional Assessment, and Topic Papers. Multiple uses are addressed in these documents throughout, although generally speaking not discretely. The Science Synthesis addresses specific topics selected for analysis throughout the Sierra Nevada based on a review of scholarly articles to identify common themes and disagreements; multiple uses topics include ecosystem services, fire, soils, water resources and aquatic ecosystems, wildlife, and socioeconomics, as well as related strategies. The Bioregional Assessment addresses fire resilience, sustainable recreation, ecological integrity, and community resilience at a Sierran scale. The Topic Papers are tailored to the INF and address the following topics (listed by the 15 chapters): (1) terrestrial, aquatic, and riparian ecosystems; water resources; (2) soil resources; (3) system drivers and stressors; (4) carbon stocks; (5) at-risk wildlife and plant Species; (6) social and economic conditions; (7) ecosystem services (8) multiple uses – timber, water, range, wildlife/fish/plants; (9) recreation settings, opportunities, and access; (10) mineral resources and renewable energy; (11) infrastructure; (12) areas of tribal importance; (13) cultural resources; (14) land ownership, land status, and land use policies and zoning, and; (15) designated areas.

County Priorities for Update/Revision

According to the Board of Supervisors' June 19, 2013 correspondence, the following priorities for the Update effort relevant to multiple uses are identified: access should be enhanced to accommodate vehicular use, packing, hunting, hiking, and other recreational opportunities, as well as mining and other uses of the Forest. Mitigation opportunities for potential environmental impacts resulting from increased access should be identified and implemented. Roads and trails should be protected and expanded to provide access for recreation and exploration for natural resources and other uses of the Forest, including grazing, mining, and the activities of native peoples (such as gathering). Conflicts between biological resources and human access should be identified and planned for. The Plan should contribute substantially to the local economy, and support and encourage consumptive and sustainable uses of the Forest to contribute to the County's economy and culture. The Plan should support and enhance the culture of local communities to the extent social and cultural issues revolve around the forest and provide access to the Forest for gathering activities, prospecting, sightseeing, exploration, and camping.

Setting

Multiple uses of public lands are integral to Inyo County, particularly lands in the INF. The County's economy developed based on resource extraction and agriculture, which has transitioned towards a service economy particularly tied to tourist-oriented recreation. These historical ties have shaped the society and culture of the County.

Historical

Native peoples relied and prospered on the natural bounty of Inyo County since time immemorial. Resource extraction has always been and continues to be an integral component of the County's economy and culture. In the 19th century, mining provided opportunities for development of its communities; mines in the Sierra Nevada produced great quantities of precious metals and strategic resources. This was exemplified by the Pine Creek Mine, the primary commodity of which was tungsten. Agriculture initially drove development in the Owens Valley, including important shepherding and other animal husbandry components. Recreational opportunities from the Sierra Nevada through Death Valley always provided sustenance to those who lived here and drew visitors. Timber production in the Sierra Nevada provided important sources for local and regional wood supplies, including for heating people's homes. Water extraction and export to Los Angeles shaped the County's future in the early 20th century, and development of hydroelectric energy facilities for construction of the Los Angeles Aqueduct and later development of geothermal, wind, and solar resources provide a base for potential future renewable energy development.

The peoples of the County continue to rely on multiple uses of public lands in and adjacent to the County. The County's population is relatively skewed towards the elderly, including seniors with limited incomes who live here for affordability and lifestyle reasons, as well as more affluent retirees who choose to live here for the natural beauty and outdoor recreation possibilities. An increasing Hispanic population takes advantage of the low cost of living, employment opportunities (particularly in the service sector), and the setting. The government sector (which relies on recreation, natural resource management, and water export) provides important high-paying employment opportunities, partially offsetting losses of good jobs in the mining and agricultural sectors.

Current Uses and their Importance

The historic importance of multiple uses shapes today's Inyo County, and access to the Forest is vital to maintaining multiple uses. The following summarizes some of the more important multiple uses.

1. **Mining** – mining of various resources in the Forest provided the base of the County's development. One of the County's most important mines in the Forest in the last century was the Pine Creek Mine, from which tungsten and myriad of other precious metals vital to national industrial prowess and wealth were produced. Gold, silver, and many other important minerals have been extracted from various mines in the Forest during human habitation of the region.
2. **Water** – the Forest provides water for multiple downstream uses, including agriculture, power production, domestic, industrial, recreational (fishing, water sports, boating, etc.), and export.
3. **Agriculture** – the Forest is utilized by agricultural interests for animal husbandry, particularly cattle and sheep. Animals such as these are kept at lower elevations during the colder months and are driven into the Sierra during the late spring, summer, and early fall. By this cycle, the ecological integrity of the lands can be maintained, while providing for thinning to minimize wildfire impacts and promote ecological heterogeneity. While crop production is now largely absent from the forest (with the exception of illegal marijuana cultivation), some people enjoy collecting forest products for holiday wreaths and other decorative displays. Beekeeping also occurs in the Forest.
4. **Packing** – many County residents make their livelihood leading tourists into the Sierra Nevada, and some operate the numerous pack stations and related businesses in the Forest and nearby areas. Of particular historic/cultural importance to the community are the guides leading pack

trains into the backcountry, providing access for a multitude of activities. Due to the decline in motorized access, these “packers” provide one of the few means of access for equipment-laden pursuits and those with limited mobility. Pack stations in Horseshoe Meadow, Onion Valley, Big Pine Canyon, Bishop Creek Canyon, Pine Creek Canyon, and Rock Creek Lake are important starting-points to locations and treks in the Forest; additional support facilities can be found in nearby communities.

5. **Sightseeing** – many tourists visit Inyo County for its breathtaking scenery, dramatic locales, and intriguing history. Popular destinations in the Forest include Mt. Whitney, Horseshoe Meadows, Bishop Creek, Big Pine Creek, Onion Valley, Pine Creek Canyon, the Bristlecone Pine Forest, and routes to Death Valley National Park (including Saline and Eureka valleys). Nine-mile Canyon Road provides access from the County into popular Forest destinations via Tulare County, and Rock Creek Road provides access from the County into the Forest via Mono County.
6. **Hiking** – the County provides hiking trails and exploration unsurpassed. Popular trails accessed in the Forest include the Pacific Crest Trail, John Muir Trail, Whitney Portal Trail, and High Sierra Trail. Hikers stay in local accommodations and buy supplies in the County,
7. **Fishing** – fishing has always been and continues to be integral to most people living in Inyo County, particularly in the Owens Valley. Life in the Valley in the past in many ways revolved around fishing season, and Opening Day is still an important event.
8. **Climbing** – the Forest provides varied opportunities for technical climbing pursuits, from routes well-suited to novices to rock climbing requiring extensive experience and technical skills. The Buttermilk and Pine Creek Canyon are particularly well known locations for these adventures.
9. **Off-highway Vehicle Recreation** – OHV use has been and continues to be important to the psyche of many County residents, who often spend free time exploring nearby roads and trails on OHVs. OHV recreation draws tourists to the Sierra Nevada, the White/Inyo mountains, the Owens Valley, Death Valley, and other locations. Popular OHV destinations in the Forest include Bishop Creek, Coyote Flat, and the White/Inyo Mountains.
10. **Wooding** – peoples of the County have and continue to collect wood for heating and energy generation for their homes. The Sierra Nevada provides this resource primarily, although the White/Inyo Mountains also provide timber that is utilized for these purposes. Many families enjoy searching for a perfect Christmas tree for the holidays, and local school harvest Christmas trees for fundraising purposes.
11. **Others** – myriad of other multiple uses take place in the Forest, including rock collecting, filming, photography, bouldering, pine nut and cone gathering, hang-gliding, spelunking, mountain biking/fatbiking/unicycling, enjoying historic and cultural resources, religious activities, limited commercial timber production, renewable energy production (solar, wind, biomass, geothermal) and transmission, etc.

Multiple Uses Sustained Yield Act

According to the Multiple Uses Sustained Yield Act of 1960, it is the policy of the Congress that the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes. The Act authorizes and directs that the national forests be managed under principles of multiple use and to produce a sustained yield of products and services, and for other purposes. Multiple use means the management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources;

and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output. Sustained yield of the several products and services means the achievement and maintenance in perpetuity of a high level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land. The Act authorizes the Secretary of Agriculture to cooperate with interested State and local governmental agencies and others in the development and management of the national forests.

County Policies

The County's General Plan supports the concept of multiple uses throughout. The following summarizes the most relevant references.

Land Use Element

The Land Use Element encourages evaluation of the Forest Service's land holdings for potential land sales and/or exchange to create new private holdings suitable for commercial, industrial, and residential uses; provision of adequate utilities, infrastructure, and services, and; coordinating fire protection.

Government Element

The Government Element provides a positive guide for the County to coordinate efforts with federal land management agencies in development and implementation of land use plans and management actions which are compatible with the best interests of the County and its citizens to facilitate continued, revitalized, and varied use of federally managed lands. With more than 98 percent of the land area of Inyo County managed by federal, state and city governments, it is clear that the economic viability of the County is inextricably tied to operational decisions made on public lands. Goals, policies, and implementation measures are included towards the following:

- ensure no net loss from federal land acquisitions;
- encourage public agencies to develop new tourist serving facilities or otherwise enhance their capacity to serve visitors on the public lands they manage;
- encourage public land management and service agencies, including the Forest Service, to increase their capacity to serve visitors on properties they manage;
- ensure opportunities for agriculture on federal land be continued, or expanded at levels consistent with historical custom and culture and the protection of equitable property rights, and sound management practices;
- ensure that federal and state governments shall not unreasonably obstruct agricultural opportunities on lands managed by them;
- support of varied use of public and private recreational opportunities: support for OHV use, use areas, and new OHV opportunities;
- continue maintenance of roads and expansion of motorized access to public lands;
- preserve the four-wheel and OHV network;
- enhance and protect the existing network of hiking, backpacking, and stock trails in the Sierra Nevada – no existing trail should be closed, and where trails and natural habitat coincide, human use of the trails should be preserved;

- support wildlife management that enhances populations of game and non-game species, recognizes that enhancing non-native game and non-game species may negatively impact native species and rangeland ecosystems, increases wildlife numbers where practicable that is not in conflict with existing economic uses or ecosystem health, recognizes that large game animals compete for forage and water with other economic uses, and supports the need for a private property compensation program for certain wildlife damages;
- encourage the exploration, development and reclamation of these resources, expansion of lands available for exploration for mineral development, and that access to public lands be maintained, expanded or altered to allow mineral exploration and prospecting activities;
- act to preclude additions to Wilderness and remove wilderness study areas and identified roadless areas in the County in order to preserve economic opportunity of federal lands and maintenance of mining opportunities;
- discourage incompatible developments on lands identified as containing significant mineral resources, and support uses that will not preclude future mining activities;
- encourage development of energy resources on both public and private lands, including, but not limited to geothermal, wind, biomass, and solar, and development of adequate utility corridors necessary for the transmission of newly generated energy, and maintaining energy opportunities on state and federal lands maintaining and expanding access, and;
- develop and maintain a transportation system that optimizes accessibility and that minimizes the cost of movement connecting corridors consistent with County, State, and federal roadways and travel ways – all routes causing no actual resource damage should remain open, and off-road closure policies must contain adequate exemptions for administrative, management, public functions, livestock, and scientific research.

Economic Development Element

The Economic Development Element works to enhance the County's economy and prosperity of its people. The County's wealth is highly dependent on economic activities occurring on public lands, including grazing, mining, and water transportation/management. Goals, policies, an implementation measures are identified to promote increased capacity to serve tourists, enhance tourist serving facilities and increase tourism on public lands, bring more destination spending into the County, encourage retirees to move to the County, and support expansion of industry, including mining.

Housing Element

The Housing Element works to provide adequate housing for the range of needs in the County, including working with the Forest Service to identify lands for release and discourage public acquisition, and encouraging employer assisted housing, such as for Forest Service employees.

Circulation Element

The Circulation Element works to provide for a comprehensive transportation system. Goals, policies, and implementation measures are identified to improve capacity; provide for transit (particularly for the transportation disadvantaged), including for access to tourist attractions; encourage and promote greater use of non-motorized means of personal transportation, and; work with federal land management agencies to coordinate trail efforts and ensure connections.

Conservation Element

The Conservation Element works towards the following:

- provide and maintain a diverse agricultural industry, including to support continued use and expansion of public lands for agriculture;
- protect the current and future extraction of mineral resources;
- provide an adequate and high quality water supply, and protect and preserve water resources for the maintenance, enhancement, and restoration of environmental resources;
- encourage appropriate access for recreation;
- promote hunting and fishing activities within the County;
- provide and support passive recreational opportunities and interpretive education in the natural environment;
- identify degraded biological resource areas that may be suitable for restoration or enhancement activities;
- provide access points, trails, and roads into and through resource-managed lands;
- development of interpretive facilities that educate the public about natural environmental resources;
- support and promote interpretive facilities to highlight the County's cultural resources;
- develop a public parks, recreation, and open space system that provides adequate space and facilities to meet the varied needs of County residents and visitors;
- encourage the use of the natural environment for passive recreation opportunities;
- encourage the continued management of existing recreational areas and open space, and appropriate expansion of new recreational opportunities on federal lands;
- work with federal agencies that manage land to ensure that appropriate access to open space and recreational areas are provided, and;
- to minimize hazards from floods, fire, avalanches, and other natural hazards that might originate in the Forest.

Issues and Trends

Multiple uses of public lands are vital to the County's economy and culture, and played integral roles in its history. Recreational use of the dramatic lands in the County has always been and continues to be part of the psyche of the peoples who inhabited and visited the area. Geopolitical and national social movements have combined to reduce the output of local natural resources and create pressure to diminish multiple uses of the land. The decline in multiple uses has led to stagnation of the economy over the last several decades.

Community Vibrancy Tied to Multiple Uses

The County's communities have typically relied upon activities on public lands, and the Forest in particular, for their well-being. Growth and development of Owens Valley towns revolved around resource-based industries, such as mineral resources (including precious metals), water extraction and export, agriculture, and tourism (which has become a more important sector in recent history). Primary and induced spending effects from these pursuits drove development of the towns and the County's

culture and character. As the trend to restrict multiple uses became more strenuous in the 1970s, the towns' vibrancy stagnated, reflected by the lack of population growth that has occurred since.

Separating Uses

Forest zoning has existed for some time, and includes zones for Wilderness, Concentrated Recreation, specific management areas, and many others. Through the current update effort, zoning could be utilized to further segregate multiple uses spatially. Depending on how this may develop, the outcomes could be supportive of multiple uses. For example, if intensive recreation is focused into certain areas, other areas can be reserved for less-intensive and dispersed recreation. Multiple use zoning can also provide a balance to areas where multiple uses have been eliminated (e.g., Wilderness). On the other hand, expansion of Wilderness into areas accommodating multiple uses and/or insensitive zoning could further degrade the Forest's multiple use mission with potentially devastating effects to local peoples.

Evolving Economy

The economy continues to transition towards more service-oriented industries. This phenomenon is expected to further accentuate the tourist-serving sectors, prioritizing the need to accommodate recreational uses in the Forest. The County's attraction for retirees and others drawn to the local lifestyle provides opportunities to capitalize on the Forest's phenomenal natural beauty and attractive local environment. However, changes in commodity prices and increasing world demand for natural resources could increase the need for locally available mineral resources. Interest in renewable energy (e.g., solar, wind, geothermal, biomass) could lead to development of such resources, although the potential is somewhat limited in the Forest in Inyo County due to a number of factors (e.g., inappropriate slopes for solar, military incompatibility for solar thermal and wind, lack of geothermal or biomass resources, aesthetic impacts from wind, etc.). The ever increasing demand for water is not expected to abate either.

Emerging Uses

New recreational uses are constantly evolving at an ever faster pace in our modern world, including such uses as bouldering, trail running, fatbiking, unicycling, zip lines, etc. Undoubtedly, new uses will evolve over the lifetime of the Plan. There is a need to accommodate such uses, while being sensitive to resource protection and minimizing displacement of existing uses.

Demand for Water

As California's population increases, demand for water is anticipated to continue to increase. Persistent long-term drought in the southwest potentially threatens supplies via the Colorado Aqueduct. Demand for conservation water, both locally as well as State-wide, is expected to continue to grow. Limits to water through the Bay-Delta for environmental purposes have and will continue to limit supplies via the California Water Project. Catastrophe, such as severing water conveyance by earthquake or terrorism, or saltwater intrusion into the Delta, could interrupt water supplies for extended periods. Demand for conservation water for dust abatement and habitat enhancement at Owens Lake and elsewhere constricts local supply. All of these factors are expected together to work to increase demand for water from the Forest.

Regulatory Impediments

The ever-increasing regulatory demands threaten a variety of multiple uses. Well-intentioned laws to protect the environment can instead damage resources and work to limit multiple uses. Some regulations are intended to displace multiple uses, such as Wilderness legislation. Local, regional, and State regulations can also work to diminish multiple uses.

Regulatory burdens by the federal government include the National Environmental Policy Act (NEPA) and permitting procedures for mining, agricultural uses, recreation, concessions, access, research, wildlife stocking, and other Forest-dependent activities important to the County. Despite efforts to the contrary, the trends seem to point to greater and greater regulatory burdens. Expensive time-consuming NEPA review adds costs to doing business, particularly for small businesses that rely on the Forest for their practitioners' livelihoods. NEPA review can effectively make infeasible permits for those need them for their livelihoods, such as businesses that provide guide services (i.e., packers, fishing/hiking/hunting guides, etc.), agricultural operations, student researchers, and others with limited financial means.

The Endangered Species Act works to eliminate threats to selected classes of plants and animals; if the perceived threats are beneficial to the local community, conflicts arise between the dependent multiple uses. Examples include restrictions on sheep, trout, mining, guzzlers, and access. The current amphibian proposals are especially problematic in their potential to decimate the fishing industry, which is integral to the local economy and culture.

The intentions of some regulations include eliminating multiple uses. For example, the Wilderness Act purposely precludes a wide spectrum of multiple uses that existed prior to Wilderness designation. Post-Wilderness, these multiple uses are displaced and focused into the diminished share of the Forest available, thereby concentrating impacts into smaller geographic areas and reinforcing perceptions that such uses can result in resource damage.

Other regulations are instituted in such a manner to make it impossible to continue certain activities. Often these regulations are instituted on such a scale that even though they are not necessary locally, they are applied through broad brush strokes. An example includes the Sierra Nevada Forest Plan amendments that applied regulations tailored for west-side forests to the INF.

Local, regional, and State regulations can also work to diminish multiple uses. For example, air quality regulations can make mining and road maintenance infeasible. State environmental and endangered species laws can complicate permitting in the Forest, thereby impacting the viability of existing and potential multiple uses. Local regulations required by the State can slow permit processing, such as building permits and surface mining and reclamation requirements.

Diminishing Access

Social pressures exist to reduce and eliminate access to the Forest, primarily due to perceptions that human activities are unnatural and damage natural resources. Vehicular access is seen by many as particularly detrimental. The 2009 Travel Management Decision eliminated over 600 miles of roads in the Forest. Wilderness designations have eliminated mechanical access to over half the Forest in Inyo County in less than 40 years. Inventoried Roadless Areas, which are treated like Wilderness, cover another approximately one-third of the Forest in Inyo County. Non-vehicular access may also be

considered by some a threat, leading to access closures, road and trail rerouting, and other means to encourage human avoidance of areas deemed sensitive. Examples of this include closing trails through Big Horn Sheep habitat and restricting pack stock use in the vicinity.

Fire Management

Fire has the potential to disrupt multiple uses through direct destruction and division, and also indirectly through smoke and economic impacts. Fire can also result in ecological and social benefits that encourage multiple uses, such as by providing new and enhance recreational opportunities. The Plan's approach to fire management will be important in shaping future trends.

Opportunities

Excellent opportunities for enhancing multiple use aspects of the Forest are afforded by the present Plan Update effort. A variety of existing uses can be enhanced and diversified to take advantage of the bountiful natural resources the Forest offers, while maintaining and improving the environment. New multiple uses can be accommodated through thoughtful planning about future trends. Accommodation of multiple uses can be pursued by encouraging such uses and reducing regulatory impediments.

Existing Uses

A variety of existing uses in the Forest provide livelihoods for the County's peoples, as well as draw visitors to the natural splendor. These include the many recreational amenities related to fishing, hiking, backpacking, nature viewing, rockclimbing, packing, boating, etc. A number of resorts and campgrounds exist in the Forest that could be upgraded to attract tourists to the area, including at Whitney Portal, Big Pine Canyon, Bishop Creek, and Rock Creek. Improved roads, parking facilities, and trailheads could be provided for the Shepherds, Taboose, Baxter, Sawmill, and Olancha pass trails, as well as the Sacatar Trail. Modernized equestrian facilities could entice better utilization of high country trails by trekkers and local packing businesses. These facilities could be expanded upon to enhance the local economy, through leases, concessions, or other mechanisms, thus improving access for locals and visitors to further the intent of the various applicable multiple use policies. Existing access could also be improved and expanded to provide greater opportunities to utilize recreational resources, including new and improved transit service. Water management of reservoirs could be improved to more efficiently provide for multiple uses, including recreation and fisheries. Streamlined permitting can reduce administrative burdens for existing permittees, thereby energizing their businesses and organizations.

Mining and sensitive water projects could provide additional opportunities for local economic development while lessening the County's reliance on tourism. Strategic minerals and precious metals available in the Forest can be accessed, if the economics support their extraction. Streamlining regulatory burdens can reduce costs and thereby facilitate development of these resources. Water conservation projects and development of water resources in the Forest can provide hydrological benefits for other users. Streamlined permitting can facilitate water infrastructure projects.

Agriculture is an important component of the history of Inyo County, and continues to be vital to local custom and culture. The County's Fair, rodeos, festivals, and educational programs highlight this connection to the land. The Forest's role historically in agriculture production lay in animal husbandry and water provision to the valleys. Today, these resources still provide the base of the local agricultural

industry, which potentially could expand to provide locally grown/raised fresh food for the region. Pastoral landscapes also can enhance the visitor experience, thus leading to greater tourism revenues. Expanded beekeeping and associated research is an opportunity for further local economic development with potential beneficial impacts to the Forest. Streamlined permitting can facilitate agricultural production for the benefit of all.

Due to the dramatic scenery, the County offers excellent filming opportunities, which are exploited for numerous venues, such as movies, television, advertising, internet, and social media. Some locations in the Forest, such as Mt. Whitney, are well-known and familiar throughout the world due to their extensive portrayals. This resource is important in the modern economy and could be enhanced due to the proximity to major media production facilities in southern and northern California.

Potential New Uses/Diversification

Repurposing existing recreational uses on the Forest works to improve the vitality of local culture and the economy. The Pine Creek Mine is an excellent example of a facility that could be converted to recreational or other uses to capitalize on the dramatic scenery in already disturbed areas, and new campgrounds in the vicinity could further entice other visitors. The Ashram Temple near Whitney Portal is a prime candidate for enhanced trail access and signage that potentially could provide a new destination for more locals and visitors alike. Zip lines have become popular, and can provide recreational opportunities for thrill seekers in areas with diverse scenery and wildlife viewing. New campgrounds could be provided at the Shepherds, Taboose, Baxter, Sawmill, and Olanca pass trailheads, as well as improved access, equestrian, and other visitor amenities. Enhanced snowmobiling opportunities could be provided in Bishop Creek and the White Mountains. Lower reaches of the entire Forest provide excellent winter hiking opportunities. Better marketing and facilities could be provided for cross country skiing, snowshoeing, and other winter sports in the Sierra Nevada, such as Mount Tom via the Elderberry Trail, thereby working to balance the now predominantly summer tourist season. A wayfinding program and consistent signage throughout the County (and potentially adjacent counties) could be developed with local interests in concert with other transportation networks to provide a variety of seamless hiking and other travel opportunities for the ever more diverse population. Synergies with the proposed Adventure Trails network could be capitalized to encourage seamless OHV recreation with resources outside of the Forest. Tourism is an important component of the economy, and can be accentuated, including providing more luxury accommodations for those with more discretionary spending capabilities. Use of high country trails appears to be increasing, which along with the ever-increasing California populations is resulting in greater demands for related services; expansion of such services can be encouraged. These and other actions to enhance recreational uses, particularly reduced regulatory burdens, can also work to offset past impacts to such resources.

The Forest provides excellent research opportunities for scientific advancement; for example, high-altitude studies are conducted at the White Mountain Research Station. Flora and fauna from the Forest potentially could be utilized further for biomedical purposes. Educational opportunities are vast, exemplified by the curricula offered by Deep Springs College that takes advantage of its remoteness in the vicinity of the Forest. Improved coordination with educational and research institutions in California and Nevada should be pursued to expand the body of knowledge of local conditions.

Grazing opportunities have been curtailed and/or eliminated throughout wide swaths of the Forest. Research indicates that grazing has minimal adverse impacts and potentially beneficial effects if properly managed. New grazing allotments could be provided, and existing areas closed to grazing could be

reopened, particularly in the Kern Plateau – Ramshaw, Templeton, Brown, Big Whitney, and Little Whitney meadows. Animal husbandry elsewhere could provide pastoral settings for sightseeing opportunities and scientific research, such as studies into livestock behavior and improvement of best management practices to better protect resources, including for fire management. Overall reduction in permitting requirements could energize the industry.

Although timber production is minimal in Inyo County, locally collected foliage could be utilized to a greater degree for artistic design and food production (e.g., pine nuts). Limited timber production could work to reduce fire hazards and remove blowdown.

The Forest Service employs relatively large numbers in the County, and can assist with housing for employees. Also, the Forest Service can release lands for private development and other locally-enhancing activities.

The concept of ecosystem services perpetuated by the 2012 Planning Rule affords opportunities to embrace multiple uses. All of the multiple uses provide for social benefits and costs, and by equating these factors, the net social benefits of the multiple uses can be evaluated to derive ecosystem services. Since benefits and costs valuations can be objective, care must be taken in assigning value.

Mixed Use Policies/Zoning

New zoning designations for the Forest could embrace the multiple use concept. Rather than zone out uses in the few remaining areas that still allow for multiple uses, zoning could be utilized to sensitively provide for multiple uses. Multiple use categories could be constructed to allow for greater intensity of uses while providing for less intensive uses elsewhere.

Forest Service lands may also be officially designated and the Forest Plan and/or specific management plans may be developed to encourage and sustain multiple uses. Botanical, Geological, Historical, Paleontological, Recreational, Scenic, and/or Zoological areas may be designated at the local, regional, or national level (depending on size) administratively. Congress can designate National Trails, National Scenic Trails, National Historic Trails, National Scenic Areas, National Recreation Areas, and National Heritage Areas. Presidential Executive order or Congressional action can designate a National Monument. Other designations may also be available or could be crafted to encourage multiple uses.

Information Technology/Digital 395

The greatest social change of late is the information technology revolution. Connecting locations in the Forest to information technology services offers economic, cultural, and social benefits. For example, resorts that offer wifi and high-speed internet may be more attractive to visitors. Digital 395 provides opportunities for local economic development, including in the Forest, by making linked locations more attractive for conferences, retreats, and migration of those not connected to place by their livelihood. The natural setting and history of the County provides wonderful themes for education, which can be more easily accessed via the web. Young people in particular enjoy being connected, and providing internet access in campgrounds may be a means to bond the next generation to the land. On the other hand, some locations in the Forest offer respite from constant digital connection, and maintaining such a void in certain areas may be attractive to some.

Streamlining

Streamlining could work to enhance multiple uses consistent with environmental protection. Habitat conservation plans provide one tool to eliminate regulatory duplication for multi-species protection, even for species that may become listed after the Plan is finalized. Programmatic environmental documentation can reduce and eliminate subsequent environmental review. Clear, consistent permitting requirements can balance the need to provide adequate oversight of potential resource-damaging activities while providing clarity to applicants, advocates, and the public.

Constraints

Potential future constraints on mixed uses in the Forest are well known based on past trends, including direct actions to limit multiple uses in the Forest (e.g., Wilderness). Evolving trends could result in greater constraints or unexpected demands for multiple uses.

Constrained Use Policies/Zoning

Zoning and official designations could be structured to diminish and potentially eliminate multiple uses, which given the recent history of eliminating multiple uses throughout most of the Forest in Inyo County could be potentially devastating. Various mechanisms could be utilized for such task. The most simple approach would be to design the zoning and/or designations to explicitly prohibit multiple uses. Other zoning tools, like further Wilderness, IRAs, and other limiting designations, can also eliminate multiple uses.

Social Change

Social change continues to move towards broader external pressures to restrict uses in the Forest. This seems especially acute in cities, which due to vast numbers of residents with limited or no connection to the Forest, can influence policy in the Forest detrimental to local residents.

Regulation

Despite efforts to the contrary, it is likely that the existing regulatory environment will continue to become more and more complex and burdensome. Although programs may be established to assist permittees and others navigate the maze of regulations that continue to be developed, it is anticipated that entitlement and permit compliance will continue to work to further and further limit multiple uses and discourage new activities. The interaction between this phenomenon and economies of scale will work to make it more difficult for small entities and individuals and favor larger organizations with significant resource bases, such as corporations and interest groups.

The Unknown

Pressure to diminish multiple uses in the Forest since the mid-twentieth century is well documented, and can be expected to continue or even increase. However, what changes in trends will the future bring that could reverse the stagnation of the County's economy? Although it seems as if the trend to reduce multiple uses in the Forest will continue, new trends or sudden changes could occur. For example, social change or upheavals could result in significant increases to immigration, completely

altering the demand for multiple uses in the Forest. In the past, interest in outdoor recreation has ebbed and flowed, and it is unclear what the future will bring in this regards. Demand for minerals could rise significantly, resulting in greater mining activity and related issues. Interest in renewable energy resources is high lately. Of course it is difficult if not impossible to predict changes to future trends with any accuracy. Thus the County must remain vigilant to detect trend development and work with the Forest Service to revise and update the Plan if necessary.

Forest Service Approach to Date

To date, the current Update effort includes a Science Synthesis, a Bioregional Assessment, and Topic Papers. The Science Synthesis and Bioregional Assessment focused on west-side issues, and lack relevance in many instances. The approach to managed fire and smoke impacts is generally adequate. However, the documents approach to the following topics relative to multiple uses should be improved:

- The role of multiple uses has minimized.
- The Healthy Forest Restoration Act should be better addressed.
- The identification of species of conservation concern is too broad.
- The private sector's role in the Forest is lacking, particularly the potential to address declining public resources, attract private investment, and benefit nearby economic development.
- The discussion about sustainable recreation, mining, agriculture, and other multiple uses minimally addresses permitting issues.
- Access and search and rescue discussions should be expanded.
- Positive activities taking place on the Forest should be better addressed, emphasizing what's working.
- Elaboration of the benefits of agricultural activities should be undertaken.
- Transmission for renewable energy development should be better addressed.
- More focus should be provided for State-wide, regional, and local planning efforts.
- Public services and infrastructure should be addressed more specifically.

Conclusion

Numerous policies, regulations, and procedures encourage multiple uses of the Forest. The County's history and culture are integrally tied to the Forest; multiple uses occurring there include mining, renewable energy generation, tourism, recreation, agriculture, and many others. However, extensive social pressures are working to reduce multiple uses of the Forest and are impacting the society and economy of the County. Through the Forest Plan Update, the County can work to shape the Plan to accommodate existing, evolving, and future multiple uses.