



September 1, 2013

Inyo National Forest  
351 Pacu Lane  
Bishop, CA 93514

Re: Inyo National Forest Assessment Topic Paper Comments

Please accept these comments on the draft Inyo Assessment Topic Papers on behalf of Friends of the Inyo. These topic papers represent a tremendous wealth of information on the Inyo National Forest and its resources. They are well written and comprehensive, especially given the amount of time the Inyo has had and the timeframe in which they were produced. Thank you also for extending the commenting deadline for these, and doing a good job of reaching out to the public and interested parties, ensuring their voices are heard, and comments are incorporated. Listed below are comments, questions, and input by chapter.

## **Chapter 1: Terrestrial, Aquatic, and Riparian Ecosystems**

- Please clearly define the relationship between the various types of terrestrial ecosystem models that are referenced. The National Hierarchical Framework, Forest Terrestrial Ecological Unit Inventory (TEUI) system of assessment types, and Ecological Subregions of California are all referenced.

### **Sagebrush Shrub Assessment Type**

- Table 6: Of the attributes being measured, pinyon is not the only tree encroaching. Jeffrey Pine and Lodgepole pine are as well. The attribute should be modified to read “Conifer encroachment” rather than just pinyon.

### **Subalpine Conifer Assessment Type**

#### **Current Conditions**

- As across much of the conifer forest on the North Zone of the Inyo, an aggressive “hazard tree removal” program away from developed areas, coupled with illegal felling of dead and dying large snags for fuelwood, has resulted in a decrease of dead and dying large lodgepole pine in some areas of this assessment type.
- The Indiana Summit RNA, like McAfee Meadow, also includes subalpine conifers, namely large lodgepole pine groves in the bottomlands of this RNA.

### **Jeffrey Pine Assessment Type**

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## Current Condition

- For Table 8 (as well as all the tables in this section), an additional indicator for all terrestrial ecosystems should be created to measure fire as an ecological process to supplement FRCC percentage and average fire size. This additional attribute could be termed “Ecosystem Function – Fire History”. The indicators for this could be total percent cover of association burned in the last 50 years (measure: percent covered burned in last 50 years, percent cover of association burned by fire severity (measure: percentage high, moderate, low) and percent of association by fire age (measure: acreage percentage in age classes 1-3 years, 4-10 years, 10-20 years, 20+ years). Using actual acres burned, the age of these burns (an indicator of seral stage and potential diversity), and fire severity presents a living picture of the actual ecological condition and ongoing processes across a given association. FRCC may not present the same information, as it seems to be solely a measure of assumed departure from a pre-determined ideal condition. While helpful in determining deviation from an ideal standard, FRCC percentages alone may not paint an accurate picture of a given association’s ongoing ecological processes and current condition across the landscape.
- The discussion for Jeffrey Pine notes that “past management has contributed to creating high road densities in the core area.” Activities creating high-density route systems beyond what was designated in the 2009 ROD for Travel Management are not “past”, but still current and active in the core area. Current management activities such as fire line creation, commercial and non-commercial thinning and public fuelwood gathering are leading to soil compaction, fragmentation, and recreational confusion, as routes created by these activities are not being restored in a timely manner. This is clear from fire crew activities north of Indiana Summit RNA and west of Dry Creek in the Glass Mountains, where fire lines cut directly to designated roads were repeatedly driven by fire crews, not restored and immediately became OHV routes. This was also true in the public fuelwood area south of June Lake Junction along 395 and south of Smokey Bear Flat where intensive thinning activity followed by public fuelwood gathering created an extensive network of new roads. Timely restoration of these impacts must be included in any project level planning, approval, funding and post-project monitoring. Currently, these impacts are being restored by recreation staff and NGO partners with recreation dollars, rather than fire and vegetation management staff and funds.
- Snag retention and management has been an ongoing issue within the Jeffrey pine forest and is not mentioned in this association’s discussion. Past Forest documents, such as the Jeffrey Pine Forest Health Restoration project, noted the paucity of standing snags in the Forest. An overly aggressive “hazard tree” removal program is currently exacerbating this dearth of wildlife-critical standing snags. “Hazard trees” – mostly dead or dying (often just scarred) Jeffrey Pine and Lodgepole – are currently being felled and limbed at an alarming rate along native surface Forest roads outside of developed areas. Three hundred year old living Jeffrey Pines along the Bald Mountain road, for example, have been cut in the last year by Forest fire crews. To ensure a healthy density of standing wildlife trees – both dead and living (often fire- or lightning-scarred trees) –

the Forest should both evaluate the identification and approval for removal of “hazard trees” outside of concentrated developed areas, as well as create a scientifically-sound definition and protective measures for the designation of “wildlife trees.”

- In the list of recent fires, please add the June Fire of 2006.

### **Trends**

- There is a positive trend in the Forest’s use of prescribed fire to restore ecological health to the Jeffrey Pine forest and core timber area. Prescribed fires, such as those east of Wilson Butte, south of the Bald Mountain Road, southeast of Airport Sandflat, and especially, south of the Owens River Road north of Bald Mountain have yielded excellent results. From nesting black-backed woodpeckers to an amazing abundance and diversity of native grasses, these moderate intensity broadcast burns have created some of the best heterogeneous forest habitat on the Inyo.
- Fires that actually kill trees, as well as remove understory vegetation, yielding a heterogeneous forest structure of dead, dying and living trees with a greatly renewed forb and grass understory should be the model for prescribed fire on the Inyo (see Seigel et. al 2011 at [http://www.birdpop.org/Sierra/bbwo\\_results.htm](http://www.birdpop.org/Sierra/bbwo_results.htm)). Friends of the Inyo thanks and acknowledges the hard work of line officers, fire management officers, burn bosses and crews who make these fires happen. They are yielding real results, and this progressive use of broadcast-based, moderate intensity prescribed fire should be a trend that is encouraged through this plan revision.

### **Xeric scrub and Blackbrush Assessment Type**

#### **Current Conditions**

- Due to its open nature and proximity to population centers (Bishop, Tri-Valley area) this assessment type is perhaps the most heavily impacted by unmanaged recreation, namely unauthorized route proliferation along the White-Inyo Mountains front. This expanding network of unauthorized routes spreads from BLM and LADWP lands onto Forest lands and is impacting habitat quality and visual quality of these scenic desert slopes.

### **Alpine Assessment type**

#### **Current Condition**

- Please increase and diversify the type of indicators for the alpine assessment type. Given that much of this assessment type is the target of wilderness-based recreation, an attribute assessing the impacts and management status of wilderness-based recreation should be included. Possible indicators could be miles of trail meeting standard (indicator of erosion), number of wilderness rangers (indicator of recreation management), number of trail maintenance personnel, measure of down wood (indicator of camp fires within closed areas), or condition of mapped campsites for dispersed and commercial use (indicator of recreation management and impact).

- Cheatgrass has also been observed and removed (20 square feet removed, bagged and carried out in June 2013) at 9800' on the shore of lower Sardine Lake along the Mono Pass-Bloody Canyon Trail.

### Trends

- The loss of an active, professional wilderness rangers and trail crews on the Inyo National Forest performing trail maintenance, campsite clean up, visitor contact, and education have resulted in increasing negative impacts to alpine environments. Without wilderness rangers and trail crews, these negative impacts will continue due to increased improper human waste disposal, improper meadow and riparian camping, declining trail conditions, increased campfires in closed areas, and lack of education and enforcement presence.

### Special Types

#### Aspen

- While mentioned in a reference to Estes (2013), the discussion of this assessment type should be augmented to note that aspen stands in the Eastern Sierra are unique in that they are divided into two distinct associations – upland or ‘snowbank’ aspen and riparian aspen. Snowbank aspen stands occur generally on the north to northeastern facing sides of slopes where snow accumulates and lingers. These stands are removed from visible seeps and springs, and seemingly persist simply on water from lingering snow and shade. Such stands are common in the volcanic soils of the Glass Mountains, most notably around Sagehen Peak and below the north-trending ridge west of Sentinel Meadow. Anecdotal observation indicates that these stands seem to be in declining health with very light regeneration and few young trees. This may be due in varying degrees to grazing, wildlife browse, drought, sheep bedding, recreational impacts (people and animals love shade), drought, and/or climatic change.
- In contrast, riparian aspen stands occur along perennial or seasonal creeks and streams, as well as along meadows and around seeps. Riparian aspen stands tend to appear more vigorous, with more extensive recruitment and various age classes of trees.
- These two distinct aspen types should be identified separately as Special Types, as they occupy different habitat, may serve different ecological functions and may be influenced by different stressors. Conservative management of aspen stands on the Inyo will be a critical piece of Forest Plan revision. As noted by Point Reyes Bird Observatory scientists following many years of ongoing monitoring on the Inyo, “Aspen habitat, especially when associated with riparian vegetation, is the single most species-rich avian habitat in the Sierra Nevada.” ([www.prbo.org/cms/docs/edu/NSierraAspen.pdf](http://www.prbo.org/cms/docs/edu/NSierraAspen.pdf) and other reports to the Inyo National Forest).
- Given the diversity of aspen on the Inyo, the establishment of an RNA specifically targeting eastside aspen, particularly snowbank aspen, should be identified in Forest Plan revision. The areas east of Sagehen Peak or west of Sentinel present perfect candidates.

## **Dry Forbs**

- Limited Mono Pumice Flats do occur in association with lodgepole stands in bottomlands of the Indiana Summit RNA. The most effective technique to protect pumice flats is to create barriers along roads adjacent to pumice flats with native pine logs (a technique called “Lincoln logging”).

## **Alkali Flats**

- These flats, many resulting from ephemeral wetlands, also occur in small pockets of the northern Inyo Mountains at Little Cowhorn Valley, and Upper and Lower Harkless flats. As with pumice flats, the only technique proving successful to keep vehicles on roads in alkali meadows, has been delineation by lining routes through open areas.

## **Aquatic Ecosystems**

### **Indicators**

- Indicators for aquatic health should also be developed to reflect recreational impacts and grazing. These could be as simple as presence or absence of recreational activity/grazing for each water body/way or a percent of area/shoreline affected by said activity. Inclusion of these indicators is not necessarily negative, but could act as a trigger for management action where improved management and/or facilities could enhance riparian health and/or water quality.

## **Lentic ecosystems**

### **Current Condition**

- Is Mono Lake included? Please clarify in the discussion.
- Potential impacts to lentic systems are not just roads, but also trails, such as the erosive trail around Convict Lake and trails to dozens of wilderness lakes.

### **Trends**

- If not reversed, the decline of a professional wilderness ranger and trail crew program on the Inyo and resulting decrease in backcountry presence, facilities quality, and education will negatively impact the quality of wilderness lentic ecosystems. The effects of the increasingly unmanaged wilderness recreation are brought into focus as implementation of the Trail and Pack Stock Management Plan is noted as a means of “improving conditions of these aquatic features” in the discussion. Plans alone to do not improve conditions; people on the ground, year after year, do.

## **Springs and Seeps**

### **Current Condition**

- The Forest should identify a subset of springs representative of flow volume, geographic diversity, and water temperature for ongoing monitoring to assess and track condition. Many critical springs, such as Big Springs, could potentially be impacted by Forest authorized activities, such as groundwater pumping, snowmaking, and geothermal development in the absence of any long-term or ongoing data to assess project impacts on ecologically-critical spring systems.

## **Trends**

- Increased demand for water, due to diffuse factors such as population growth, as well as specific factors such as increased demand for snow making to support industrial ski areas, will impact spring flows. To what extent springs will be affected is largely unknown due to lack of current spring flow data and ongoing monitoring plans for authorized projects. A decline in agency capacity, coupled with increasing demand and complex permitting procedures, will also affect the agency's ability to manage and sustain water resources.

## **Lotic Ecosystems**

### **Flat gradient, Meadow-associated streams**

#### **Trends**

- The discussion notes "improved...management of wilderness recreation use in meadow areas" as a positive trend, but in actuality, the reverse is more likely as the staff to create this management scenario are no longer present in the backcountry to educate visitors and enforce protection of meadow systems, or maintain the trails to a standard to limit degradation.

## **Special Management Areas for Aquatic Ecosystems**

- This section does not mention any CARs designated in the southern White Mountains for the protection of the endemic Black Toad ([\*Anaxyrus exsul\*](#)). Derham Guiliani and Paul McFarland discovered a population of males and females in Birch Creek on Inyo Forest land in 2004. This population was regularly monitored by Friends of the Inyo and Dawn Becker of the Department of Fish & Game until 2009. Birch Creek has been the site of past off-road vehicle damage to this unique desert riparian system and deserves focused management. A CAR is appropriate for Birch Creek. Is designation or new CARs possible with this round of Plan Revision?

## **Glass Creek/Deadman Creek CAR**

- In addition to the known population in Glass Creek Meadow, Yosemite toads have been observed in the upper reaches of Deadman Creek by Paul McFarland in July of 2012.

## **Wild & Scenic Rivers**

- Creation of management plans to protect and sustain the outstandingly remarkable values of the Cottonwood Creek and the Owens River Headwaters complex should be identified as a high priority action in Forest plan revision. Like the Forks of the Kern plan, these plans should detail opportunities for partnership engagement.

## **Riparian Ecosystems**

### **Meadow Riparian**

- White Sweet Clover (*Melilotus alba*) is also an increasing invasive component of meadow ecosystems and should be added.

### **Non-meadow riparian**

- Water Birch is also a common non-meadow riparian ecosystem in the White Mountains (Marble Creek, Birch Creek and Cottonwood Canyon downstream from Cottonwood Basin, as main examples).

## **Chapter 2: Air, Soil, Riparian Areas and Water Resources**

### **Soils**

#### **Stressors**

- Hardened campsites and parking areas that are delineated and defined could result in less overall compaction, erosion, and tree mortality.
- Under Roads and urban/suburban development for developed sites the discussion notes that soil compaction is expected and not a problem unless it leads to erosion. The increase in soil compaction in dispersed camping areas, designated campgrounds, and recreational facilities in forested areas appears to be leading to increased tree mortality. This is especially visible in the Deadman-Glass Creek area. Efforts by the Forest and partner groups to delineate parking areas, campsites, and other areas where foot and vehicle traffic are causing hardening, are producing positive results. This process should be identified as a need and purposefully expanded forest-wide to improve and sustain ecological conditions and the quality of frontcountry recreation. Field observations confirm that unarmored and unmanaged hardened areas expand over time unless they are directly treated.

### **Nutrient cycling, organic matter, and soil carbon**

#### **Stressors**

#### **Fuels and Fire Management**

- The discussion of soil nutrients and the benefits of broadcast burning versus pile burning notes that “fuels treatments do not directly affect soil nutrients,” but does not elaborate on the different results of the two main types of post-treatment burning methods. Is there information on the difference between pile burning and broadcast burning on nutrient cycling and soil health? Broadcast burning appears to encourage abundant new growth and habitat renewal while pile burning has little observable effect on broader forest health. If broadcast burning can be shown to be ecologically beneficial, it should be encouraged as the best practice for prescribed fire on the Forest.

### **Trends affecting soil resources**

#### **Soil Strength and Compaction**

- Areas of extensive and extraneous soil compaction should be mitigated through appropriate decompaction measures.
- The discussion notes the extensive compaction in the Deadman-Glass Creek area and could include discussion of the extensive work that has been completed, regularly monitored, and repaired when necessary that has taken place here over the past three

years by the Forest and partners. This work has been focused on decreasing the overall area of disturbance created by recreational use. Through the delineation of parking areas and campsites with boulders and logs and the placement of native mulch (duffing) on areas blocked off for non-intensive wheeled use, dozens of hardened locations have been 'restored.' These simple recreation management actions should be replicated across the Forest in conjunction with a baseline inventory in other areas of increased compaction from dispersed recreation. Both techniques restore soil function, reduce erosion, and enhance recreational quality in popular dispersed locations.

## **Water Resources**

### **Indicators**

- Please include an indicator to measure groundwater levels. An attribute to measure groundwater levels and spring flow should be developed, especially for groundwater basins (such as Dry Creek and June Lake Loop) that will potentially face increased down draw to support snow making for permitted ski areas, and spring systems, such as Big Springs, that are being potentially impacted by geothermal development.

### **General Overview of Hydrologic Systems**

- There seems to be a lack of information and data describing springs and streams on the Forest.
- The discussion states the western side of the White Mountains has very few streams, with only two streams (Silver and Coldwater) reaching the valley floor. In contrast, nearly every major drainage north of Silver Canyon supports a perennial stream (Montgomery Creek, Marble Creek, Falls Canyon Creek, Pellisier Creek, Middle Creek, Birch Creek, Willow Creek, Lone Tree Creek, Cottonwood Canyon Creek, and Milner Falls Creek). The main reason these streams do not reach the valley floor is that they are diverted at or near each canyon mouth for small hydropower production or down valley irrigation systems. For nearly all of these creeks, the Forest contains both the intake and the upstream, free flowing portion of these creeks.
- Figure 3 showing known springs on the Forest appears to leave out numerous known springs shown on publicly available maps, such as those in the Glass Mountains (lower Dexter Canyon, Crooked Creek Springs, Baxter Springs and Wet Meadow Springs, for example), Lee Vining Canyon, Tollhouse Spring, Marble and Black Canyons in the Whites, etc. Friends of the Inyo is interested in working with Forest staff to map and substantiate seep and spring locations around the Forest. We look to the Forest for guidance on how to best engage in this activity.

## **Chapter 3: System Drivers and Stressors**

### **Indicators**

- An additional indicator may be created to capture the importance of habitat connectivity in facilitating species adoption to drivers and stressors. This indicator could be within the Landscape Resilience group and populated as a map of identified corridors



and ecotones. Identification of these corridors would place many of the other indicators in a geographic context.

- An indicator should also be developed to capture Forest capacity. As discussed elsewhere in these comments, the true outcome of regulations, plans, and decisions is determined by the capacity of the Forest and its partners to implement these actions on the ground. An indicator group called “Forest Capacity” should be created with two potential indicators being “percentage of year-round Forest positions filled” and “overall appropriated annual budget trends” calculated by reviewing annual appropriations by functional group and account within the Forest over the last 10 years. The Forest’s own management capacity is perhaps the most important driver and stressor of all Forest activities.

## **Trends in Drivers and Stressors**

### **Socioeconomic Factors and Human Uses**

- As the demand and need for use and enjoyment of forest resources continues to grow proportional to the population, the Forest’s management capacity to ensure the sustainability of this use is decreasing to dramatically low levels. This trend of decreasing management capacity coupled with an increasing percentage of decaying, unmaintained facilities may yield higher negative impacts from human activities, commercial and non-commercial, permitted and non-permitted. Additionally, a loss of Forest staff and the decline in Forest infrastructure dedicated to interpretation and day-use recreation may compound the disconnect between an increasingly urban American population and the natural resources of their public lands. This could not only lead to increased irresponsible behavior but also to direct declines in public support for natural resource conservation and further erosion of direct budget appropriations to manage, enhance, and sustain public resources.
- Discussion of this lack of current and foreseeable professional Forest capacity should be included in all driver and stressor trend discussions where forest personnel directly manage, permit, and monitor multiple uses of public resources (fuelwood, grazing, water, and transportation). Additionally all trend discussion should address the increasing reliance of the Forest on partnerships to achieve sustainable management and needed stewardship of public Forest resources.

## **Chapter 4 – Carbon Stocks**

- On page 2, the chapter states that, “A sufficient dataset of direct measurements of carbon within the Inyo NF was a data gap in the development of this assessment.” A future study of carbon stocks ought to be done, seeing that the Inyo had to largely infer the data incorporated within this chapter, particularly concerning AB32 mandates

### **Current Condition of Carbon Stocks**

- Tg of Carbon are assessed, but what about trends? No trends for Tg of Carbon are even estimated, although speculation of decreased carbon stocks is alluded to in the narrative paragraphs in pp. 8-11.

- There is a clear need to incorporate carbon stocks into adaptive management practices through all activities on the Inyo NF, monitoring Carbon storage before, during, and after any management activity or major project that may affect carbon stocks, storage and sequestration

#### **Trends Related to Carbon Storage and Sequestration**

- Table 5, which lists various Drivers and Stressors, should include climate change and its effects on potential for forest to be a carbon sequestration sink. The table should also include public fuel wood gathering, potentially as a Disturbance, or Human Use.
- Thank you for including Roads and Motorized use as a stressor in Table 5. It should be noted later under population growth and forest uses that increased roads and motorized use lead to degraded soil quality, and subsequently degraded capacity for carbon storage

#### **Grazing**

- Follett and Reed 2010 are quoted, “ more productive systems can sequester more carbon in soils where hoof action breaks up surface litter”. There are very few places where this would occur on the Inyo NF, as cows don’t graze in places where significant litter has developed, such as the Jeffrey Pine forest.

#### **Invasions**

- p.10 illustrates the problems associated with the invasions of *Bromus* sp. Increased perennial grass cover, as well as cover of native shrubs and forbs, could potentially mitigate this issue.

### **Chapter 5 – At-Risk Species**

- While it is understood that the Inyo National Forest is following the Draft Directive policy regarding occurrence records within the Planning Area, and within the last 10-15 years, these directive policies are still in draft phase, and may likely change. Please consider species for the Potential At-Risk Species that have occurrence records outside of the 10-15 year window. These species should be considered unless it is known that they are currently extirpated from the Planning Area. The current lack of recent records and information clearly demonstrates the need for a more in-depth look at current biological conditions and trends. It would be tragic if the Inyo NF neglected potential species based on this draft policy.

#### **Aquatic Wildlife**

##### **Indicators**

- In Table 2, for the Inyo Mountains and Kern Plateau Slender Salamanders and the Owens Valley Web-toed salamander the use of the presence or absence of springs/seeps as a “current condition indicator” is insufficient, as it does not capture the health of these species’ limited habitat range. The indicator should be modified to assess the current proper functioning condition of spring/seep systems in which this highly restricted species is known to occur.
- For Table 3, the measures discussed for habitat conditions – a count of acres of habitat – does not inform habitat condition. These measures should be modified to reflect a

quality rating (high, sufficient, poor) and trend (improving, stable, declining) by percentage of suitable habitat.

### **Terrestrial Wildlife**

- The final list of Inyo National Forest Potential At-Risk Species, found in Appendix A, does not include any terrestrial invertebrates, while the Step 1. Starting List includes a robust list of them. Please reconsider this in light of the above comment regarding occurrence records.

### **Indicators**

The following comments refer to Table 7:

- For sage grouse, the measure “acres of pinyon expansion within priority habitat” should be modified to read “acres of *conifer* expansion...” Pinyon is not the only conifer encroaching into sagebrush habitat, and in fact, current Forest projects to improve sage-grouse habitat have focused on removal of Jeffrey Pine from sagebrush. An additional measure for terrestrial ecosystem structure should be created to reflect percentage of priority habitat by range condition assessment and trend.
- For Northern Goshawk, an additional measure could be created to quantify disturbance within mapped Protected Activity Centers by providing a percentage of total known PAC’s with a qualitative condition assessment reflecting habitat quality (good, fair, poor) developed by an assessment of development, recreational activity and other Forest permitted activities within the PACs.
- For American Marten, the indicator measurement “acres of wildfire” could be modified to be “acres of burned area” which would capture both true “wildfire” as well as prescribed fire acres within known Marten habitat.
- For Townsend’s big-eared bats the measurement should be modified to capture the percentage of known abandoned mines suitable for bats with human-excluding bat gates installed and in working order. A count of suitable mines alone does not capture habitat quality or sustainability.
- For Black Toad, an additional indicator for ecosystem structure should be developed to qualitatively describe known habitat locations. As reported below, the Forest has isolated Black Toad populations outside of areas directly impacted by Deep Springs College cows. For the Forest population in Birch Creek, an indicator should be developed for habitat disturbance with the measure being “observed illegal OHV activity.” Birch Creek, the site of a disjunct population of Black Toads, has been repeatedly damaged by OHVs driving in the stream, as well as extensively cutting riparian vegetation.
- Our comments above on the need to expand measures beyond simple accounting of acres apply to Table 8 as well. The quality of suitable habitat, not just the number of acres, should be measured.

### **Current Condition and Trends of Terrestrial Wildlife**

#### **Bald Eagle**

#### **Current Condition**

- While the discussion states that “larger trees are not targeted for removal” by vegetation management projects, the dramatic recent increase in removal of ancient standing snags and living conifers outside of concentrated and developed recreation areas under the guise of “hazard tree” removal presents a real driver and stressor to large conifer dependent wildlife.

### **Sage-grouse**

- This well-written discussion of Sage-grouse management should include “recreation, namely off-road vehicle use and dispersed camping” as additional stressor specific to sage grouse. Additional off-Forest activities influencing sage-grouse include unmanaged trash – namely from popular fishing areas, as well as the Long Valley Dump on Benton Crossing Road - which attracts and supports predators.

### **Goshawk**

#### **Trends**

- The refreshing discussion for this species notes the continuing trend of the “reduction in survey efforts” and the note that a more “rigorous survey effort is needed.” This honest assessment of the impact capacity reductions have on the actual management of species should be included throughout the document. This, as with some other Forest capacity shortfalls, may present another area where Forest investment in partnerships could help. Surveys for a charismatic species such as Goshawk are perfectly suited to attract and retain trained volunteers. Friends of the Inyo is interested in helping fill these data gaps through expanded partnerships.

### **Yosemite Toads**

#### **Trends**

- While the document states that “current management direction is providing for the maintenance of suitable Yosemite toad habitat,” a plan alone does not protect or sustain habitat. This discussion should be modified to reflect the fact that the “capacity to maintain Yosemite toad habitat is provided in management plans, but a lack of staff capacity, namely wildlife staff, wilderness rangers, and trail crew staff, who would directly implement and monitor these planned actions, may hamper actual on the ground implementation.”

### **Black Toad**

#### **Current Conditions**

- In 2003, a population of Black Toads was discovered by Derham Guiliani and Paul McFarland between 6,400 and 7,200 feet along Birch Creek in the southern White Mountains entirely on the Forest. This population was regularly monitored for a number of years by Derham and Paul in the company of Dawn Becker of the then California Department of Fish and Game. Birch Creek has seen extensive damage from off-road vehicle use that peaked in 2003 until the road was closed by to vehicle use by the Inyo National Forest. No designated vehicle route exists in Birch Creek downstream from the historic cabin at approximately 8,400 feet. During monitoring visits, both male and

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female toads were observed, as well as egg strings, along this shallow, perennial desert creek. Photos and mapped locations can be provided upon request. This population should be revisited to review habitat and population health.

## **Chapter 6: Social, Cultural, and Economic Conditions**

### **Indicators and Context**

- The overview of this chapter refers to a “separate chapter that assesses social, cultural, and economic conditions at a bioregional scale.” How will this chapter be incorporated into the Assessment for the Inyo National Forest?
- When reviewing the indicators used to assess the conditions, it would be useful to add a review of recreational uses in measuring visitor connections with the land. Friends of the Inyo and MLTPA have both quantitative and qualitative data on recreational use patterns, including surveys done through LABSS and stewardship work on the Inyo National Forest.
- In addition, data from Mono County’s MCRAT (Mono County Recreational Access Tool) for activities, access points, etc. may prove useful in assessing community values.

### **Recreation**

- In the bullet of Californian’s projected outdoor recreation demand for 2020, OHV use and fishing are excluded. Given the prevalence and cultural importance of these activities on the Inyo, it is important to include them as trends locally.
- The context assessment refers to vague evidence that community-based stewardship and volunteerism is increasing as a form of recreation. Friends of the Inyo has data on our public volunteer stewardship programs for the past eight years both in volunteer numbers and hours as well as projects accomplished. Volunteerism and public stewardship on the Inyo is an increasingly important part of forest management as volunteer projects develop individuals’ and groups’ connections to the land and provide support for strained forest resources.
- Also, the discussion of demand and crowding is confusing as it highlights both an increase and a decrease in demand and crowding. Please clarify this information or point to specific areas of increase and decrease.

### **Human Well-being**

- Under Human Well-Being, there is a discussion of county health rankings, which offers ranks for Inyo, Mono, and Mineral Counties. Please explain further how to interpret this ranking and how it affects planning on the forest overall.

### **Political Environment**

- The “open government” strategies of using the internet to facilitate collaboration and participation needs to be tailored to the breadth of communities and individuals to be truly inclusive. Tools like Facebook, which are currently not used by the USDA, may prove useful to building engagement, but it is important to maintain traditional, non-

electronic forms of outreach especially in rural and older communities that may lack good network access.

- The discussion of the political environment emphasizes the role of Los Angeles and the LADWP in the current climate. However, it fails to acknowledge recent public lands actions including the wilderness designations of the 2009 Omnibus Public Lands Act or the 2011 Travel Management decision both of which had significant political impacts in the local area that continue to influence the atmosphere around public lands management and planning today.

### **Economic Diversity**

- The discussion of economic diversity seems based heavily on the bioregional assessment and thus ignores some key realities within the local area. This section should be updated to reflect the context of the local economies.
- The Herfindahl-Hirschman Index used to calculate economic diversity in the local communities seems to ignore the importance of recreation as a forest related industry. As a result, data generated fails to examine the extent to which entertainment, recreation, accommodation, and food are dependent on forest visitation and tourism.
- The table presenting forest gateway socio-economic data seems to be missing some key points, including a review of the greater Bishop area and unincorporated areas of Mono County.

### **Key Conditions**

#### **Social**

- National forests “play a key role in fostering peoples connections to nature.” Within the Inyo, recreation, education, interpretation, and stewardship help to build these connections and are accomplished in part through partnerships with non-profit and community groups including Friends of the Inyo, Mono Lake Committee, MLTPA and others.
- Please include hiking, climbing, camping, and other activities as examples of social interactions on the forest. The emphasis on fishing seems to ignore other important recreational activities.
- In addition to playing a key role in bringing people together to participate in forest planning and management, the forest also plays a key role in establishing a sense of place and community stewardship, which will improve participation in future management and planning. Partnerships are an essential component of this work and opportunities for partnership should be included in the upcoming management plan.
- The chapter cites the YCC and the California Conservation Corps as examples of programs to address rural poverty through education and training. The new management plan presents an opportunity for the forest to adopt policies that promote and facilitate hiring employees from local communities and working with local organizations to train and hire a skilled, local workforce beyond the youth communities.

#### **Cultural**

- Please include a discussion, if possible, of ways to encourage the adoption of sustainable ranching practices to ensure the cultural connections to ranching on forest lands.
- In addition to skiing and OHV use on the forest, please acknowledge the cultural significance of hiking & backpacking, stock packing, fishing, and climbing. Also, there is a growing interest in mountain biking that is not addressed in this assessment chapter.
- Is there a citation for the statement about the social acceptability of grazing and pack stock use?
- The discussion of cultural and historic resources on the forest highlights the need for staff and other resource capacity to document and manage these resources, and to provide interpretation where appropriate to enhance the visitor experience and education. This could be achieved through a mix of dedicated agency resources and partners.
- If the Mono Basin Bird Chautauqua is mentioned, please include other important festivals and activities in which people explore and experience the INF public lands and waters
- In addition to “Interpretive trails, displays, and sites that help tell the story of this area and its cultural history”, please include interpretive tours, conducted by USFS, Mono Lake Committee, Friends of the Inyo, CA Native Plant Society, Audubon, Eastern Sierra 4WD Club, etc.

### **Economic**

- Discussion of economic conditions begins with an example of timber production and processing. Since timber is such a small part of the Inyo, please translate this for the local, recreation-based economy.
- Please include NGO contributions to USFS lands. Friends of the Inyo has volunteer hours data to provide, and related values of contributions for this time. In addition, NGOs also provide employment in the area.
- Mono County Tourism has conducted recent research for marketing purposes that might be useful for assessing visitors and activities to inform this section and augment the information related to fishing.
- Is there an opportunity to increase the competitiveness of local contractors through the forest management planning process?

### **Social, Economic, and Ecological Sustainability**

- Please include a discussion of added capacity for ecological restoration provided through partner groups like Friends of the Inyo. As staff resources for the forest continue to decline, particularly in the form of trail crews and wilderness rangers, partner groups can help to fill the gaps and mitigate negative impacts to forest lands and infrastructure.
- In order to better “find ways to coordinate, partner, and be more inclusive”, it is important to review ways to establish policies within forest management that facilitate and celebrate partnerships.

- In discussing local stewardship groups, please talk more about what the groups do and the capacity they bring to the land and the agency beyond their passion. Also, the Eastern Sierra Land Trust, which focuses their work on private lands, is misnamed as the Sierra Nevada Land Trust.
- Resource capacity for recreation is highlighted as a challenge for the forest. Given the importance of recreation within the forest and local economies, it is crucial to invest in recreation to maintain the quality and opportunity of the visitor experience. This may be achieved through internal resources and creative partnerships.
- For Lee Vining: Please refer to the Mono Basin Community Plan for specific information on Forest Service connections with the community

## **Chapter 8: Multiple Uses**

### **Timber**

- The Introduction states that the forested belt of the core area of timber management activity is, “managed by the Forest to improve overall forest health and resilience.” This seems to be primarily accomplished through thinning efforts of small to medium diameter timber. Please include other management activities the Forest is working toward to achieve this goal, such as prescribed fire (including broadcast burning).
- There are no indicators for forest health listed in this section, only timber volume sold and acres treated annually. There should be indicators for forest health that correlate to thinning and other management activities, that show how effective management activities are in achieving the above-listed goal of forest health and resilience.
- Please also include an indicator that measures fire susceptibility or risk. Many timber thinning projects over the last 10-15 years have had the goal of reducing the risk of catastrophic wildfire. It does not seem that the Inyo NF has a good grasp on whether or not this program has been effective. Measuring such indicators as fire susceptibility after treatments, and fires could help with this issue.
- Another goal listed in this section, suggests that the goal of management is “to achieve conditions where appearance and ecological function are proximate to pre-1860 conditions.” What constitutes the desired appearance is not precisely defined, but this sounds like using NRV to define desired conditions. Again, there are no indicators listed to monitor if this goal is achieved through management activities.
- Hazard Trees
  - Discussion in Chapter 2 states that “larger trees are not targeted for removal” by vegetation management projects. The dramatic recent increase in removal of ancient standing snags and living conifers outside of concentrated and developed recreation areas under the Forest’s “hazard tree” program presents a real driver and stressor to large conifer-dependent wildlife.
- Adaptive management practices should be favored on the Inyo National Forest in regards to its Timber management program. As mentioned above, indicators for forest health should be measured regularly before, during, and after all projects in order to ensure that goals of forest health are being met. If in fact, they are not, the Inyo NF should respond in management practices accordingly.



- **Trends:** For commercial and pre-commercial thinning treatments, as well as the public fuelwood program, there seems to be a recent trend of post-treatment illegal vehicle trespasses. Areas that are open to public fuelwood collection, as well as recently thinned areas of the forest seem to invite illegal off-road traffic. The Inyo NF should address this problem in future management practices and policies. Monitoring and patrolling of off-road traffic is certainly limited by available resources and capacity, but should be prioritized in and around Inventoried Roadless Areas.

## Range

- Current Conditions of Rangelands
  - Tables 6 through 10 have plenty of types of ratings, but there is no explanation of exactly what the rating means. For example, what differentiates a vegetation type between being “Excellent” and “Good”, or what are the indicators that decide whether a watershed condition is “Fully Functional” versus “Functional at Risk”, and what does that mean? An explanation accompanying all the different ratings listed within all of these tables would be helpful.
  - Table 10 has a gap of information for 2010, what happened here?
- Trends Affecting Rangeland Condition
  - Thank you for recognizing that adaptive management helps facilitate the upward trend of meadow and upland grazing sites. Adaptive management practices, coupled with good monitoring data, and an open process, is important for all management activities that occur on the Inyo NF.
- Friends of the Inyo would like to echo Steven P. McLaughlin’s comments here: “This subchapter ends with the following one-sentence paragraph: “Ecologically, grazing can mimic natural disturbance regimes, such as grazing by native species and fire, thereby providing a dynamic equilibrium to ecosystems that can increase species diversity within certain vegetation communities.” This statement requires justification and documentation *that are relevant to local ecosystems*. Cattle and sheep graze western rangelands very differently than native ungulates, concentrating their impacts in small areas over long periods of time without predators (or hunters) to keep them moving across the landscapes. Grazing removes only fine fuels—not woody fuels. I don’t see how cattle and sheep mimic either native ungulates or fire.”

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## Wildlife, Aquatics, & Plants

### Wildlife Viewing

- Bird Watching
  - Why does the “remainder of this section focus on bird watching opportunities at Mono Lake”? Although it is acknowledged that there are many popular bird watching areas on LADWP and Bishop BLM lands, there are clearly popular birding areas and opportunities on the Inyo National Forest, as well as access points through the forest to adjacent lands. Burned areas, creeks, aspen groves, cottonwoods, seeps, springs and other riparian areas are important bird habitat and offer great bird watching, and other wildlife viewing opportunities (mammals, butterflies, amphibians). As it is stated here and in Chapter 9, “

wildlife viewing ranks as the 5<sup>th</sup> most popular activity visitors participated in while on the Inyo National Forest”. With this in mind, it would be good if the forest spent more time identifying the locations where visitors go to view wildlife, and prioritize those areas for protection and management.

### **Wildflower Viewing**

- Friends of the Inyo has coordinated with the Inyo National Forest to provide wildflower tours in the Mammoth Lakes Basin since 2008. Data from these tours has been provided to forest staff via email communication (August 30, 2013).

### **Current Condition of Wildflower Populations and Habitats**

- The document states that, “aspen communities can be affected by conifer encroachment, grazing, and changes in fire regimes...” Please note in the Draft Assessment that grazing is a major stressor and threat to wildflower populations and habitats as well.

### **Trends Related to Wildflower Viewing**

- Friends of the Inyo agrees that this use is likely to continue or increase in the coming years. There is currently a huge demand for both fee-based and free interpretive programs that include wildflower tours/hikes, as well as other naturalist topics such as birding, geology, and history. The lack of capacity over the past several years within Inyo National Forest to provide these guided tours is a significant limiting factor for this and other similar uses.

## **Chapter 9: Recreation Settings, Opportunities, and Access**

### **Indicators**

- Under the table of indicators, Visitor Uses only references the National Visitor Use Monitoring (NVUM) survey, this should be expanded to include other surveys that have been done, such as the Lakes Basin Special Study<sup>1</sup> or the report recently published by the Sierra Business Council: “Eastern Sierra Innovation and Prosperity: An Industry Cluster Approach to Economic Sustainability in California’s Inyo and Mono Counties”.<sup>2</sup>
- The Infrastructure Condition Indicator should also include Inyo NF Staff capacity (number of staff dedicated to recreational programs), as this correlates directly with conditions and trends of recreational facilities and access.

### **Recreation Opportunity Spectrum**

- This section, including Table 1, includes data from the 1988 LRMP, and states at the end of the section that it, “provides the foundation for evaluating the current and future mix of recreation settings, opportunities and access.” It does not, however, mention if these are to be re-evaluated in the upcoming forest plan revision process. It is a fair assumption that these numbers under the ROS classes have changed in the past 20 years, please clarify the goal and intention of the Inyo NF to update these classes.

### **Outdoor Recreation Activities – Conditions and Trends**

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<sup>1</sup> <http://info.mltpa.org/the-labss-project-and-downloads-page>

<sup>2</sup>

[http://mammothlakes.granicus.com/MetaViewer.php?view\\_id=2&clip\\_id=210&meta\\_id=24575](http://mammothlakes.granicus.com/MetaViewer.php?view_id=2&clip_id=210&meta_id=24575)

- Please refer to the Mono County Recreation Access Tool, which has a comprehensive list of activities and access points for summer and winter recreation in Mono County, and is a comprehensive and appropriate list for the Inyo NF as well.
- Please include data from the Lakes Basin Special Study for the Mammoth Lakes Basin, which included recreational use surveys and interviews.
- As with the above comment regarding the NVUM data, it would be useful to gather data from more sources to provide a more in-depth picture of current recreation conditions
- Friends of the Inyo has heard from many of its members, and other members of the public, that there is a general dissatisfaction with the condition of the Wilderness on the Inyo NF, particularly regarding the recent lack of Inyo NF employed Wilderness Rangers. There has been an increase in anecdotal reports, within the past two years, of popular areas in the wilderness with increasing trash, human waste, and illegal campfire rings.
- There is a lack of Forest Service staff presence on Inyo NF lands, and there is a high demand for presence to ensure better communication, information, safety, and a better overall recreational experience.

### **Conservation Education and Interpretive Services – Conditions and Trends**

- Thank you for referencing Friends of the Inyo in providing many volunteer work and citizen stewardship projects. In addition, Friends of the Inyo has provided regular interpretive programs on Inyo NF lands for the past several years, including seasonal stewards located in the Mammoth Lakes Basin since 2008. Many other local organizations also provide recreational opportunities and interpretive services including Eastern Sierra Audubon, California Native Plant Society – Bristlecone Chapter, Sierra Club – Range of Light Group, Valentine Eastern Sierra Preserve, Eastern Sierra 4-Wheel Drive Club, and more.

### **Access – Conditions and Trends**

- Is Table 5. List of access options on the Inyo NF by ROS class, currently up to date or is this information from the 1988 plan?
- It is noted that, “concessionaires are not generally responsible for the larger repair needs at [campground facilities], such as repaving access roads or replacing deteriorated water and sewer lines. Under existing conditions on the Forest, many of the recreation facilities at developed sites are in a deteriorated condition and in need of substantial capital investment for repair and maintenance.” This is an accurate statement for campgrounds, as well as trailheads, and developed interpretive facilities such as Hot Creek and the Inyo Craters. The Inyo NF should be looking at different models, other than concessionaires, to run and generate funds for facilities like campgrounds, and developed recreation sites. (See Comments below for Chapter 11, Trends Regarding Recreational Facilities)

### **Scenic Character**

- Please reference air quality as a stressor for Scenic Integrity. This could be from both point source (fires and burning, woodstoves, industry) and non-point source (pollutants

from the Central Valley, and Los Angeles County). Indicators for air quality should be listed here as well. The IMPROVE site on Conway Summit provides good data on visual air quality metrics, that can be incorporated somewhere within this section. Casey Shannon on the Inyo NF staff should have all of that data.

## **Chapter 10: Renewable and Nonrenewable Energy and Mineral Resources**

### **Mineral Resources**

- Somewhere in this section, please include a reference to existing Inventoried Roadless Areas, and the requirements and restrictions within these areas where locatable and leasable mineral resources overlap.

### **Geothermal Resources & Geologic Hazards**

- Geothermal Energy development has the potential to dramatically alter the localized groundwater supply, this is particularly problematic for areas such as Mammoth Lakes, where the water supply for the municipality could be substantially degraded and changed with many unknown effects.
- Geothermal energy development also allows for a potential increase in earthquakes, and the release of hazardous gases.
- Under Geologic Hazards: Naturally occurring hazardous minerals and gases, the document states that, “Review, inventory, or testing of naturally occurring hazardous minerals and gases, other than asbestos and radon, has not been conducted.” There is a reference earlier in the Chapter, just a few paragraphs up in the Abandoned Mine Lands section, stating, “Pockets of oxygen-depleted air or lethal gas (e.g. carbon monoxide) can be present in adits... and can cause asphyxiation.” Has the INF coordinated with the USGS to obtain data? It seems in such a geologically active area, that this should be a priority in the future.

### **Renewable Energy Resources**

#### **Scale of Assessment**

- Under the Scale of Assessment for Wind, Hydropower, and Solar, it is stated that, “This assessment considers the potential for wind energy on the Inyo NF, as well as neighboring Federal lands (BLM) and Los Angeles Department of Water Power Lands.” This is interesting that this scale of assessment is so broad beyond the INF’s administrative boundary, when in nearly every other chapter, the scale of assessment is limited to the forest administrative boundary. For things like terrestrial and aquatic ecosystems, at-risk species, soil, water, and air quality, and many others, it is illogical to use the administrative boundary. The Inyo National Forest should include other scales of assessment throughout other Chapters to include neighboring Federal Lands.

#### **Wind Energy**

- “Wind Power Classes” are referenced, but not defined

- “Visual Quality Objectives, Inventoried Roadless Areas, and other resource concerns” are not *possible* constraints; they are, in fact, very real constraints. Please recognize this in the Draft Assessment.

#### **Biomass**

- Figure 1 shows nearly all of the Jeffrey Pine forest as a suitable productive site. Have there been any studies to support this map? Awaiting feasibility study from Mono County, which may not be ready in time for the Draft Assessment

#### **Hydropower**

- Scale of Assessment; includes BLM and LADWP, but many other chapters looking at At-Risk Species, ecosystems, and Scales of Assessment in nearly every other chapter are limited to the Forest Plan Area. If this Scale of Assessment is to include adjacent jurisdictions, surely terrestrial and aquatic ecosystems should as well.
- Mono Lake Committee should be looking at the Hydropower section in comments

#### **Solar Power**

- Look toward projects and adverse effects in the nearby Mojave & Colorado deserts (reference Brightsource and other articles; tortoises and **birds**)

#### **Transmission Corridors discussion**

- Thank you for the historical narrative regarding the lawsuit and settlement of transmission corridors in the area. A map corresponding to the narrative here would be helpful
- Any potential new designated utility corridor should not be located within an Inventoried Roadless Area, nor should they adversely affect any Forest lands wilderness characteristics

## **Chapter 11: Assessing Infrastructure**

### **Forest Transportation System**

#### **Indicators**

- To make full use of the current data structure created to track and manage the motorized road system on the Forest following travel management, as well as paint a more complete picture of the condition of this designated system, indicators identifying number of trespasses, location of trespass ‘hot spots’, and percentage of successful restoration (number of blocks vandalized in a given year/total block points) could be included.

#### **Trends Affecting the Transportation System**

- The discussion states that “very few road maintenance tasks are completed to address user comfort or rideability.” While it may be true that the work performed does not adequately address the full need across the Forest road system, an increasing number of road maintenance and improvement actions are being taking by Forest staff and partners. For example, routes in the pumice areas north of Mammoth are being graded to reduce “whoop-dee-dos”, extensive signage for motorized loops as well as route

number signage is being installed across the Forest, and volunteers and paid Forest staff regularly remove down trees, limb, brush, and rock routes, install new and maintain existing drainage structures, repair washouts (Papoose Flat Road and the Hartley Springs connector come to mind as recent examples), and perform what maintenance they can to preserve drivability and protect resources. Continuing these efforts will require continued funding and increased effective use of partnerships where possible.

## **Forest Recreational Facilities**

### **Current Extent and General Location of Recreational Facilities**

- For the Mammoth, White Mtn, and Mt Whitney Ranger Districts' list of facilities, there are no Interpretive Kiosks listed, only the Mono Lake RD has these listed. Please include interpretive kiosks for the other Ranger Districts, along with their condition indicators. For example, the kiosks at Hot Creek, Inyo Craters, Earthquake Fault should qualify, as well as many of the new kiosks that have gone in as part of the jointly managed Mammoth Lakes Trails System.
- Developed Interpretive sites
- Traffic sign and trailhead sign inventory and conditions are not adequately addressed in this section. Many traffic signs are old, faded, in disrepair, or are missing across the forest, from developed campgrounds, to trailheads, to all maintenance levels of roads. At one time there was physical record of all traffic and trailhead signs, has this been kept up to date? Has any of it been updated into the INF GIS database?
  - MLTPA and Friends of the Inyo have done a comprehensive inventory of signs in the Mammoth Lakes Basin; MLTPA has this GIS data with waypoints and photos. This program of up to date inventory through GIS should be implemented across the forest.

### **Trends Affecting Recreational Facilities**

- This section, along with this entire chapter does a sound job of disclosing the sobering state of degrading Forest facilities resulting from continual funding cutback over the last two decades. To provide a more complete picture, the Trends section should contain a discussion of the difference between concessionaire and Forest operated facilities, especially campgrounds. In particular the Forest should identify the percentage of concession fees returned to the Forest, percentage of total campgrounds under concession vs. run by the Forest, number of free campgrounds maintained by the Forest, and finally, a discussion of fee retention as authorized by the Federal Lands Recreation Enhancement Act (namely, the percentage of collected fees that stay on the Forest when a facility is managed by the Forest. The campgrounds in Lee Vining Canyon could be used as an illustrative example.)

## **Range Infrastructure**

### **Information Sources**

- The document states that range facilities in INFRA match neither those in the permit area, nor those on the ground. This discrepancy needs to be fixed, as the lack of clear information about grazing facilities has caused much confusion and some resource damage with regard to travel management implementation. Crews have documented

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previously unmapped facilities, as well as had extensive work ripped out by permittees to access facilities or locations that were not documented anywhere. Sound grazing management requires a well-documented baseline of facilities noting current condition, access points, and season of use.

### **Indicators**

- The discussion states that vacant allotment infrastructure is not inspected. An indicator should be developed identifying number and type of unnecessary structures and the percentage of them that have been removed/modified to protect public health and safety. Unused fencing and broken water developments needlessly threaten wildlife and present a public safety risk. Friends of the Inyo would appreciate partnering with the Forest to map and remove/modify these unnecessary facilities, just as we have partnered to build and maintain grazing infrastructure.

### **Private Uses on National Forest System Lands**

- Please see comment below under Chapter 14: Land Use Policies and Zoning, regarding Recreational Residences. More clarification and elaboration on the INF or USFS policy on Recreational Residences would be useful here.

### **Trends Affecting Range Infrastructure**

- As above, allowing abandoned “structures on vacant allotments...to degrade” should not be a management strategy for old water systems or fencing. These structures should be identified and actively removed or modified to reduce risks to the public and wildlife. We stand ready to help.

## **Chapter 13: Assessing Cultural and Historic Resources and Uses**

- As a general note, many historic properties, especially old buildings associated with mining districts, are rapidly reaching a literal tipping point – the point at which these buildings will be falling over! This is especially true for the heavily visited structures associated with the Mammoth Consolidated Mining District located in the Mammoth Lakes Basin. These properties, and other historic properties such as the Log Cabin Mine, are the focus of established local organizations (Southern Mono Historical Society for Consolidated and Mono Basin Historical Society for Log Cabin) that have expressed an interest in working with the Forest to sustain these properties.
- Given the visibility and popularity of many of these sites, while recognizing concerns for long-term maintenance, opportunities to partner with organizations to preserve historic resources should be identified as a priority in the plan revision process. The recently constructed kiosk at Mono Mills – the result of a partnership between the Friends of the Bodie Railway and Lumber Company and the Inyo National Forest led by Jon Kazmierski – is a perfect example of the role partnerships can play if Forest staff and partners are willing and able to work together.

## **Trends that Affect the Condition of Cultural Resources or the Demand for Cultural Uses – *Looting/Vandalism***

- Thank you for your discussion here recognizing the growing problem of looting and vandalism. More dedicated Forest Protection Officers, rangers, and staff on patrol, coupled with a more robust education program can help with this ongoing problem.

## **Chapter 14: Land Status and Ownership, Use, and Access Patterns**

### **Existing Land Ownership Patterns**

- In the paragraph regarding the Inyo National Forest’s administrative boundary, referencing 1,953,326 acres, does this number include the acreage of the Sierra and Humboldt-Toiyabe National Forests that are administered by the Inyo? Or are those acres not included in the total number for the administrative boundary? Please clarify.

### **Land Use Policies and Zoning**

- Please include Recreational Residence info within the table on page 7 that discusses Management Prescriptions, or in Table 1 under Land Uses, or in another appropriate section, such as Chapter 11: Private Uses on National Forest System Lands. Useful data to include would those Rec. Residences were first acquired by the INF, as well as current condition, and information regarding current management policy for these buildings. If discussed in Chapter 11, please reference that in the document. Many of these houses have an historical importance, and in some cases represent some of the oldest remaining buildings in an area, such as the Mammoth Lakes Basin. It is important to recognize these places on the forest, and clarify the management direction the INF currently employs regarding these housing tracts and facilities.
- In Chapter 12 (p.7), under “Potential Co-Management Areas and Land Acquisition”, it is noted that the “Forest is exploring authorities for small parcel transfers”. Please include this reference in the appropriate place in Chapter 14 with other discussions of land trades and acquisitions.

## **Chapter 15 – Designated Areas**

### **Introduction**

In the introduction to the chapter, the Forest presents a list of questions to be answered by the public. Some brief answers to these questions following the lettering of the individual questions are provided below:

### **B. Unrepresented land types or ecosystems**

- As noted above in our comments to Chapter 1, the existence and extent of snowbank-type aspen is unique to the Eastern Sierra and somewhat abundant on the Inyo National Forest. We believe this ecosystem warrants a Research Natural Area given the abundant diversity found in these groves and the potential for these groves to be directly impacted by climate change. Strong potential candidates can be found east of Sagehen Summit and west of Sentinel Meadow.



- We also note the existence of what Chapter 1 terms “dry forb” or Mono flats. These unique dry meadows are abundant in the Glass Mountains, but no extensive example of this habitat is currently enjoys any administrative or legislated protection or representation within the RNA system. As with snowbank aspen, this ecosystem is likely to be dramatically effected by climate change. Designation of one of these flat, ideally the large flat southwest of route 02S09 in the Glass Mountains, would protect a uniquely Inyo National Forest ecosystem. This particular pumice meadow is large and unroaded.
- Mid and lower elevation sagebrush steppe is also an ecosystem currently unrepresented in the National Wilderness Preservation System.

### **C. Rare or outstanding resources**

- The steep-walled, volcanic-soiled meadow, canyon and ridge system extending north and east from Glass Mountain represents a unique combination of shrub and forest uplands cut by perennial watercourses. This area, along the steep escarpment down to Long Valley and the arcing Glass Mountain Ridge from Bald Mountain to Watterson Trough, represents the only transverse (east-west) range in the Eastern Sierra and forms a unique bridge from the high elevations of the Sierra to the ranges of the Great Basin. Some special designation could enhance multiple use management of these lands at the heart of the Inyo National Forest.
- Of note, none of the Inyo-Mono Craters volcanic chain (save for a small chunk of a minor cone in the Inyo Crater chain partly within the boundary of the Owens River Headwaters Wilderness) is currently protect by any administrative or legislative designation. These volcanoes may be perfect candidates for National Natural Landmark status.
- Portions of the “core timber area”, also known as the world’s largest monospecific Jeffrey Pine forest, present great opportunities for some designation to foster interpretation and sustainable exploration of this unique, vastly underappreciated forest.

### **D. Unique Recreational or Scenic Areas for Sustainable Recreation**

- The immensely popular Mammoth Lakes Basin seems to be begging for special designation. To achieve a level of sustainable management and provide the inspiring experience this place is capable of, some special designation and focused management is required. Given the already high, and growing, number of visitors each year to this place, that enjoy a wide variety of recreational activities in this small hub of access points, it could certainly warrant a National Recreation Area designation.
- As in answer to the above question, portions of the “core timber area”, also known as the world’s largest monospecific Jeffrey Pine forest, present great opportunities for some designation to foster interpretation and sustainable exploration of this unique, vastly underappreciated forest rich in natural and cultural history.
- The Buttermilk Country and Coyote Plateau, both located west of Bishop, present other possibilities to sustain prodigious recreational activity in a near-community setting. While these areas are very different – intensive front-country recreation in a

fragmented ownership, lower-elevation setting for Buttermilk and dispersed recreation in a subalpine setting for Coyote – both areas are very popular with locals and visitors alike and require enhanced Forest and partner management to maintain their current values.

- No discussion of unique recreational and scenic areas on the Forest would be complete without discussion of the Hot Creek Geologic Interpretive site. This heavily visited Yellowstone-esque cauldron of steaming fumaroles, boiling sapphire pools and in-stream hot springs deserves significant facilities enhancement and interpretation. The current state of this amazing location – ringed with buzz-killing hogwire fencing and tacky-tacky regulatory signage - approaches depressing. This site should be a showcase for the diverse scientific research, recreational uses, unique species and active volcanic and tectonic process at work here. Perhaps through some special designation and recognition, this area could receive the investment it deserves from the Forest and it's many partners. Does the Forest have any visitation data – traffic or pedestrian counts – for this area?

#### **E. Historical, Cultural, or Research Opportunities**

- Running over 35 miles on the eastern edge of Mono Lake, the old Bodie Railway that ran from Mono Mills and the Jeffrey Pine forest to the town of Bodie should be officially recognized as a national historic railway. Much of the old corridor falls within the Mono Basin Scenic Area, and is commemorated by two historic plaques, and an interpretive kiosk, largely due to the Friends of the Bodie Railway and Lumber Company. Please include this as a recommendation for designation in the Inyo Assessment.

#### **G. Ecological Roles supported by Designation**

- One of the main ecological roles supported by designation and focused management is the protection and enhancement of habitat connectivity. This would be especially true with some enhanced management of the Glass Mountains (east-west connectivity), as well as the Southern Whites-Soldier Canyon Roadless Area complex south to the northern Inyo Mountains Roadless Area complex. Protection of this current designation gap in the White-Inyo Mountains would protect a north-south corridor from the Mojave south of the Malpais/Inyo Mountains wilderness areas to the alpine Great Basin habitat at tip of the White Mountains/Boundary Peak wilderness areas, as well as preserve an east-west corridor from the Death Valley-Deep Springs Valley Mojave ecosystem to the Owens Valley and Sierra ecoregions.

#### **Indicators**

- For Wilderness, an indicator should be developed to reflect ecosystem diversity with the measure being a unit count and individual acreage by component of Terrestrial Ecosystem Units as described in chapter 1 with the addition of acreage by type of riparian systems. This indicator would capture the ecological role wilderness plays, in addition to the recreation-focused indicators already described. An additional indicator to capture management capacity should be created with the unit of measure being

seasonal and full-time staff dedicated to the wilderness program differentiated by field v. office staff. This indicator should also capture partner contributions.

- For Wild & Scenic Rivers, an indicator should be developed to capture which rivers have had management plans created with meaningful measures to protect and enhance individual stream segment's outstandingly remarkable values.
- For the Mono Basin Scenic Area, an indicator capturing management and interpretive capacity should be created with the unit of measure being full-time and seasonal staff dedicated to this Scenic Area. This indicator could also capture partner contributions.
- For the PCT, an indicator should be developed which captures not just the connecting and side trails to be designated, but the current trail maintenance condition of these feeder trails by percentage meeting standard. An additional indicator should also be developed to highlight current management capacity and visitor experience for this popular National Scenic Trail corridor with a unit of measure being number of permitted through hikers per professional wilderness ranger by each Ranger District.
- For Research Natural Areas, an indicator should be created to reflect current manageability with a unit of measure being percentage of RNA boundary properly signed.
- For Inventoried Roadless Areas (IRAs), an additional indicator should be created to capture the ecological role IRAs play irrespective of their potential for Wilderness designation. The indicator could be a number of TEU types and acreage of each per IRA, as well as acreage of riparian systems by type.

## **Wilderness**

- The discussion on Wilderness does not include any mention of the significant contribution from a diverse set of partners, nor a discussion of the Forest's dramatic decline in wilderness management capacity. Backcountry Horsemen, Pacific Crest Trail Association, Sierra Club Service Trips, American Hiking Society, High Sierra Trail Volunteers, and Friends of the Inyo, among many others, have contributed immensely to trail maintenance, visitor contact and education, water quality and campsite monitoring, and habitat restoration. Since 2007, Friends of the Inyo has managed over 27,400 hours of volunteerism (representing over \$459,000 in contributed time) for Inyo National Forest wilderness stewardship, as well as contributed over 6,500 hours of direct Stewardship staff time (including funding two seasonal wilderness stewards for a contribution of at least \$195,000 in direct staffing costs). These numbers do not include supplies, food, travel, grant writing and fundraising time, project coordination, publicity or direct materials costs covered by Friends of the Inyo, but do demonstrate the need for the Forest to disclose the increasingly significant contribution partners play in wilderness management.
- When the Inyo NF undergoes its Wilderness Assessment for currently non-Wilderness lands, it should assess all lands with wilderness characteristics and qualities as described in the national draft directives.

## **Trends**

- The wilderness discussion appears to lack a discussion of trends for designated Wilderness. This needs to be included. This trends discussion should reflect the earlier discussion in the document that permit data “for overnight use has remained steady or trended toward a slight increase over the past 13 years.” This public use trend is directly opposite to the current trend in professional Forest capacity in wilderness; both wilderness trail staff and rangers have declined at alarming rates. This lack of capacity must be discussed and disclosed in a trends section. Decreasing regular trail maintenance and patrol, coupled with decreasing or absent visitor contact and dispersed campsite management, will lead to decreasing recreational and ecological wilderness resource conditions.
- Additionally, anecdotal evidence suggests that the recent switch of overnight wilderness permitting to the recreation.gov system, with its attendant reservation fees, along with the widely-understood non-enforcement due to lack of rangers, has led an increasing number of wilderness visitors to forgo obtaining overnight permits. This could lead to an undermined confidence in the main tool the Forest currently uses to manage and track wilderness visitation.

## **Wild & Scenic Rivers**

### **Cottonwood Creek Current Conditions**

- Under Development of Lands and Facilities, the document notes the Station Peak, Indian Garden and Cottonwood Creek stock trails. These trails do not exist on the ground and should be removed from the trails database. The only development impacts to Cottonwood Creek include a use trail along the North Fork from what’s known as “tire camp” down to the junction with the South Fork and along the South Fork upstream to McCloud Camp. These are user created trails that are very faint in many places. Extensive damage caused by vegetation removal, terracing, and irrigation system placement for illegal marijuana farming does exist in the lower, Forest-managed portion of Cottonwood Creek. The vast majority of the grazing facilities along Upper Cottonwood Creek are in very poor repair and should be removed and/or modified to minimize safety risks to people and wildlife.
- Under Recreation Impacts, the main impacts along Cottonwood Creek include a few dispersed campsites along the upper reaches upstream from Granite Basin. These campsites have not been observed to create negative impacts. Historically, unauthorized motorcycle trails did enter the stream and cross over to climb a user-created trail to Tres Plumas Flat.
- Under Water Quality conditions, the note that water quality is currently protected by standards and guidelines for livestock grazing is somewhat misleading as there is no current grazing in this allotment. Water quality is currently protected by the absence of grazing on this allotment. Sedimentation was clear and abundant during the period of illegal marijuana cultivation in this corridor.

### **Outstandingly Remarkable Values**

- Fisheries: The Piute Cutthroat Trout population in the North Fork was intentionally planted by the California Department of Fish and Game as a refuge population. Fish dams to prevent genetic contamination by wild brown trout of the South and Main Fork have been installed and spawning gravel recently placed by the Forest in the North Fork to aid this population.

**Other values:**

- Cottonwood Creek is the only waterway in the Great Basin protected from its headwaters to its terminus as a Wild & Scenic River.

**Owens River Headwaters**

- Current Management: A portion of the Cottonwood Creek discussion is mistakenly pasted here in the document.

**Current Conditions**

**River channel current conditions**

- Thank you for noting the improving character of the Scenic and Recreational portions of Deadman and Glass Creek. Conditions are definitely improving with regular Forest and partner presence to delineate campsites and routes along the river corridor.

**Outstandingly Remarkable Values**

**Fish and Wildlife values**

- Yosemite toads have also been identified in the upper reaches of segment 2 of Deadman Creek by Paul McFarland in July of 2012.

**List of Potential Wild & Scenic Rivers on the Inyo National Forest**

\*This list was compiled by The Wild Rivers Project: a project of Friends of the River and the California Wilderness Coalition. This list was originally developed by Friends of the River and American Rivers, and subsequently modified by other groups (other than the Inyo National Forest) over the past 20 years. Please include this in the Inyo Assessment for recommendation and consideration.

Stream	Miles	Outstandingly Remarkable Values
Lee Vining Creek	10.2	S, G, HC
Golden Trout Creek	16.9	S, G, F, W
Walker Creek	3.5	S, G, HC, E
Upper Parker Creek	7.1	S

South Fork Bishop Creek	8.9	S, O
Cottonwood Creek (Sierra NV)	12.9	S, R, F, W, H
Big Pine Creek	8.6	S, R, F, W
Lone Pine Creek	9.5	S, R
Convict Creek	6.4	S, G
Hot Creek	2.6	S, G, F
Rock Creek	21.2	S, R, F
Mill Creek	5.8	S, G, HC, E
South Fork Mill Creek	2.8	S, G, HC
Laurel Creek	3.6	S, R, G, F, W
McGee Creek	6.8	S, G
S=Scenic R=Recreational HC=Historical/Cultural F=Fishery W=Wildlife G=Geologic H=Hydrologic O=Other		

**Mono Basin National Forest Scenic Area**

**Current Condition**

- In addition to the Lake Trail connecting the Visitor’s Center to Mono Lake at Old Marina, the discussion should be amended to include the two mile Lee Vining Creek Trail that starts at the Visitor’s Center and travels through both upland and riparian habitat along lower Lee Vining Creek Canyon to the south end of Lee Vining. While the trail crosses LADWP and SCE lands, it starts on Forest land, the Forest has installed interpretive signs along this popular trail, and it is maintained by Forest staff and volunteers.
- This current conditions section leaves out the many historic structures and properties under Forest management within the MBSA. Namely, the DeChambeau Ranch and the Log Cabin Mine. These historic facilities represent important cultural resources and are held in high regard by local residents and visitors. The Forest, and many partners, including the Mono Basin Historical Society and Friends of the Inyo, have invested considerably in the DeChambeau Ranch and, to a lesser extent, the Log Cabin Mine.
- This section should also include a discussion of the active cultural and partnership role of the Mono Basin Kutzedika. Tribal members have provided rich interpretive material to the Forest and partners, regularly participate with the Forest in management discussions and are a living part of Basin’s cultural and ecological landscape through continued traditional practices across the Basin.

- While only one partner is mentioned in the discussion, the MBSA enjoys a number of robust partnerships, largely due to the Forest’s past willingness to engage and ability to leverage partner resources. Partners include the Eastern Sierra Interpretive Association, Yosemite National Park, Mono Basin Historical Society, Mono County, permitted outfitters such as Caldera Kayaks, California State Parks and Friends of the Inyo.
- This conditions section should also be amended to include mention of the DeChambeau Ponds – a wetlands mitigation project historically, and to the extent possible, maintained by the Forest. This managed habitat possesses current and future high wildlife and recreational value and should not be allowed to decay. Both the Forest and Friends of the Inyo have worked to remove invasive weeds, sustain water management activities, and improve recreational facilities at these wetlands. This site presents unique opportunities for expanded partnerships in the Basin.
- While the Mono Fire did remove significant sagebrush, it is not the moonscape as painted in this discussion. A robust carpet of fire-following buckwheat, graminoids and other forbs are rapidly colonizing the area and providing forage and habitat for a number of wildlife species, and the area is largely devoid of cheatgrass (*Bromus tectorum*). The area may not return to its previous late-seral sagebrush shrubland for decades, but the current visual and habitat diversity created by this and other fires in the Basin augment visual and ecological resources of the area.
- We do not believe the June Fire is within the Scenic Area boundary, as noted in the discussion. As such it was subject to a controversial post-fire cut of some of the best burned Forest habitat in the Eastern Sierra that resulted in the felling of many active nests for neotropical migratory birds.

## **Trends**

- As is true across the Forest, declining Federal funding has resulted in dramatic staffing and program reductions in the MBSA. For example, within the last ten years, the Scenic Area has lost a dedicated management position, a dedicated Forest Protection Officer and numerous interpretive staff. This has resulted in a lack of field presence and decrease in interpretive programs. Also these federal losses have been compounded by state cutbacks that removed a full time State Law Enforcement Ranger from the Basin. This state position has traditionally played a very active role in law enforcement, public contact and resource protection across the Basin. While partners have been able to bridge some of these gaps, the lack of a dedicated MBSA manager limits the effectiveness of cooperative partner contribution and program delivery.

## **Pacific Crest Trail**

### **Trends**

- This section should acknowledge the current shortfall in wilderness ranger and trails staff. Lack of professional maintenance, education, and enforcement presence will lead to decreased trail conditions, increased resource damage, and negative impacts from unsustainable use practices.

## **John Muir Trail**

- This discussion should be augmented to include that human waste and other resource and user conflicts will most likely increase with increasing visitor use and lack of professional wilderness ranger presence. Conditions have been clearly documented by partners and reported to the Forest by the public as worsening over the last three years at high use areas such as Thousand Island Lake. Without regular presence, these problems will continue.

## **Research Natural Areas**

### **Trends**

- Friends of the Inyo has documented increasing non-conforming uses in RNAs, namely increased fuelwood cutting and ORV trespass in the Indiana Summit RNA. Nearly all RNAs on the Inyo are poorly signed at various points of access and other boundaries. Without improved signage, the public is unaware of these unique areas and unformed of regulations. Without regular patrols, especially to RNAs, such as Indiana Summit and Whippoorwill Flat, with a higher potential for motorized impacts, the ongoing protection of the baseline condition these areas are meant to maintain is in question.

## **Inventoried Roadless Areas**

### **Current Conditions**

- The discussion of the need for potential intensive manipulation of vegetation to create defensible space for WUI's that overlap with IRAs is overly broad. The majority of the calculated WUI overlaps with IRAs are more the result of computer-generated, standardized spheres of overlap centered on individual, often abandoned, sometime historic structures within IRA boundaries without regard to specific vegetation condition, slope, or the feasibility, effectiveness or need for actual defensible space creation. While IRAs such as Nehavabe - with a forested ecosystem bordering habituated dwellings- may in fact require defensible space creation, IRAs such as the Hall Natural Area, shown as containing 97% of it's acreage in a WUI highlights the misleading nature of some of these WUI area calculation. Hall is in a subalpine environment of meadow and widely spaced lodgepole and whitebark pine forests with the only structures being historic cabins, a minimally developed campground and a two permitted resorts surrounded by open ground and scattered trees. Shaded fuel breaks or other traditional defensible space techniques are largely meaningless and infeasible for this habitat type. The discussion is also misleading in that WUI creation is in one sentence painted as impossible in IRAs, but then shown to be allowable in the next sentence. Permanent road construction, which is restricted but not banned in IRAs under the RACR, is not required to create defensible space. "Vegetation management and fuel reduction actions for the purpose of creating wildfire defensible space in the WUI" is clearly allowed. This discussion should be modified to present a more accurate picture of the intersection between WUIs and IRAs, or should be eliminated all together.



- Please include a more robust discussion of lentic and lotic riparian systems for IRAs. An analysis of the TEU percentages, including lentic and lotic riparian systems, for each Roadless Area would greatly inform any future discussion of these wild landscapes.

#### **Four Distinct Ecological Complexes for existing Roadless Areas**

- It should also be noted that many of the existing IRAs on the Forest fall naturally in Four distinct, ecologically unique complexes. Each of these complexes contains ecological, recreational, and cultural values sufficient to justify some manner of special administrative or legislative designation to provide focused management. The existence and values of each of these complexes should be included in the assessment. Listed below are the four complexes with descriptions:

##### *Excelsior Complex:*

- Starting in the northeastern corner of the Inyo National Forest, the Excelsior and Deep Wells IRAs (total 61,000 acres on the Inyo), together with the Excelsior East and Huntoon IRAs on the adjacent Humboldt-Toiyabe National Forest, create a continuous wild Great Basin landscape of over 200,000 acres. The Nevada portion of this Roadless complex is the subject of a Wilderness proposal created by the Nevada Wilderness Project ([http://www.wildnevada.org/index2.php?option=com\\_content&do\\_pdf=1&id=357](http://www.wildnevada.org/index2.php?option=com_content&do_pdf=1&id=357)).
- Ecologically, these volcanic, pinyon-covered slopes interspersed with sagebrush steppe, dune fields, alkali flats, seasonal wetlands and a few perennial springs represent a northern extension of the White-Inyo Range, the western-most range in the Basin and Range. These highlands, consisting of the Anchorite Hills, Pizona Hills and Excelsior Mountains also facilitate habitat connectivity between the subalpine habitat of the Whites and that found farther north in the eastern Bodie Hills and Wassuck Range. This landscape could be considered as lonely as it gets on the Inyo National Forest. Current recreational uses are very dispersed and require a high-degree of self-sufficiency. Hunting, mountain biking, dirt bike and four-wheel drive exploration, as well as deer hunting, desert meandering and some pinyon-nut gathering occurs here. The complex is exceedingly rich in archeological resources. While an interstate power line corridor and a handful of system roads bisect the complex, the area is largely devoid of extensive systems of roads and maintains a true wild west character.

##### *White-Inyo Bridge:*

- Sandwiched between the linear southern boundary of the White Mountain Wilderness on the north and the Inyo Mountains Wilderness on the south, a set of five Roadless Areas (Blanco Mountain, Black Canyon, Birch Creek, Soldier Canyon, Andrews Mountain and Paiute) create a 76,000-acre Roadless complex. Located at the intersection of the Great Basin and Mojave Desert Biogeographic provinces, the White-Inyo Bridge complex creates a north-south link between the alpine highlands and desert lowlands from the southern Inyos to the northern Whites at Boundary Peak. This bridge also contains the low saddle of the Wacoba embayment in the Soldier Canyon area – this low saddle presents east-west corridor from the Mojave of the Deep Springs-Eureka-Death Valley

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complex west to the Owens Valley and Sierra Nevada. The complex contains unique riparian systems, including the north-south flowing creeks in Black Canyon and Birch Creek Canyon (Birch Creek contains a disjunct, higher elevation population of the endemic Black Toad). Isolated bristlecone pine stands occur on Black Mountain in the southern Whites and Andrews Mountain in the northern Inyos. The complex does contain bisecting system roads and two major paved corridors. Dispersed camping, hunting, pinyon gathering, exploring on foot, horse, mountain bike, dirt bike and four-wheel drive are very popular recreational activities across this complex, especially in the southern Whites and northern Inyos. A number of wildlife drinkers (guzzlers) also dot the area.

#### *Sierra Escarpment:*

- Beginning with the wild South Sierra IRA at the southern tip of the Inyo National Forest and continuing north up along the remainders of the Tinemaha and Independence IRAs to the extensive Coyote North and Southeast IRAs north to the Sherwin IRA on the southern edge of Mammoth Lakes all the way to the Forest's north boundary at the Mount Olsen IRA, the Sierra Escarpment complex captures both the steep escarpment of the Eastern Sierra front and the unique, disjunct island of subalpine habitat on the Coyote Plateau. With the exception of the Coyote Plateau and parts of the South Sierra IRA, there is very little use in these small tag-end IRAs. The Coyote Plateau, however, represents a well-loved and unique recreation destination on California's National Forest. This high elevation plateau is unique in its generous road accessibility, isolated lakes, accessible peaks and abundant opportunities for hunting, fishing, exploring and dispersed camping. To maintain these unique and outstanding opportunities for diverse dispersed recreation, Coyote may require the increased focused management afforded by a special designation, enhanced Forest presence, and dedicated partner engagement.

#### *Glass Mountains:*

- Taken together the Benton Range, Watterson, Glass Mountains and incomparable Dexter Canyon IRAs create an 86,457-acre Roadless complex lying smack in the heart of the Inyo National Forest. Containing the Forest's only transverse (east-west) range, a good chunk of the world's largest Jeffrey Pine forest, two RNAs, forests from pinyon to limber pine and all mixes in between, snowbank and riparian aspen groves, topped off with abundant meadows, spring-fed creeks, steep-walled canyon, and high volcanic ridges, the Glass Mountains represent a truly unique ecological, recreational, and cultural resource on the Forest. The high elevation and location between the Sierra and Whites, create a unique mix of Great Basin and Sierra flora, while large tracts of relatively pristine conifer forest, meadows, and riparian systems host a diverse and thriving mix of resident, nesting, and migratory birds. The Glass Mountains complex supports an abundance of largely dispersed, lightly managed summer and winter recreational uses, as well as sheep grazing, and permitted and unpermitted firewood gathering.

## Trends

- Owing in large part to the 2009 Record of Decision for Travel Management and subsequent implementation, IRAs on the Forest are today “less roaded” and more likely to contain greater wilderness characteristics, increased habitat health, and expanded opportunities for primitive and unconfined forms of recreation.