

August 25, 2011

Karen Taylor-Goodrich, Superintendent  
ATTN: Wilderness Stewardship Plan  
Sequoia and Kings Canyon National Parks  
47050 Generals Highway  
Three Rivers, CA 93271

Dear SEKI Team-

I am writing to comment on SEKI's Wilderness Stewardship plan. I write as someone who has been backpacking in SEKI for more than 30 years, including both on trails and cross-country into the more remote regions of the parks. As such, I have seen much that is good about the management of these parks, and a few things that are in need of significant change.

Your website provides a series of guiding questions, and I will offer comments on most of these. However, there is one question on this list that seems to me to be inappropriate, and in many respects typifies those aspects of wilderness management that are in most need of reform. Specifically, question 6 asks **“What are your thoughts on commercial services in wilderness, such as guided hiking, guided stock trips, and guided climbing/mountaineering?”**

I find this question troubling in that it appears to be asking the public what they think is an appropriate level of commercial activity. The Wilderness Act is very clear that commercial services are to be allowed in wilderness *only to the extent necessary to meet the intended purposes of the Act*. Recent court rulings have clearly stated that “need” and “desire” are distinct. It does not matter if a certain segment of the population may “desire” to visit the wilderness on horseback or under the guidance of a professional guide. What matters whether *if* commercial services are necessary to meet the intended purposes of the Act. In an era when trailhead quotas are making it increasingly difficult for the non-paying public to visit specific portions of the wilderness that they would like to see, the Park Service should be seriously considering elimination of these commercial services since they effectively limit the number of non-commercial visitors from entering the wilderness. My point is that how much commercial service should be allowed should not be a popularity contest. Rather, it should be determined through a formal and rigorous assessment of true “need” (i.e., access for persons who are unable to carry a backpack), not a popularity contest among those who take the time to respond to the scoping letter.

This issue is critically important to me and many other hikers, as clearly the most pervasive source of impacts to the wilderness environment--trails, soils, meadows, water quality, and the aesthetic experience---throughout SEKI is the excessive use of commercial and administrative livestock. These impacts significantly affect my enjoyment of the SEKI backcountry, and stock management in SEKI seems to be lagging well behind many other national parks in the West.

With that in mind, here are my thoughts on a number of other wilderness management issues.

## Group Size Limits

### *Human Limits*

Large groups, both backpackers and stock users, seriously detract from the wilderness experience and do serious damage to the wilderness environment. There is nothing more disheartening than spending a long day on the trail and arriving at your destination only to find that there is a group of 15 people camped there. Even more frustrating is when this occurs in off-trail portions of the wilderness.

A recent trip over Kearsarge Pass is illustrative of the negative impacts of large groups have had on my wilderness experience. As me and my two hiking partners arrived at the Onion Valley trailhead, we were rather shocked to see a group of 30 backpackers who were just setting out toward Kearsarge Pass. A few individuals in the party set off up the trail as we packed up, while other in the group continued to get ready. The last people in the party, a man, his son, and a third person who appeared to be one of the trip leaders brought up the rear. As e caught up with the group, we asked one of the last in line if they were all part of the same group, knowing that the group size limit was 15. He replied "Yes, there are 30 of us." The trip leader quickly jumped in and said "No, we're actually two separate parties," giving the unwitting hiker a stern look. Clearly, this group (a Sierra Club outing, we learned later) was breaking the rules, going in as one massive group under the pretense of being two "separate" groups.

So here we were, stuck in the midst of this mass of humanity. We spent the entire morning, trying to catch up and pass the lead hikers in this group, but they had a good mile head start, and were in moving fast enough that we could not overtake them. So we spent the next 4-5 hours stuck in this throng of people, catching up to people...having to wait until they noticed us so that we could pass them...having some of them pass us up if we stopped for a rest...and then having to repeat the process all over again. At one point, we considered just stopping for an hour or so just to let the entire seething horde get ahead of us. But as it turns out, the young kid who was near the back of the group started complaining of headaches and dizziness from the altitude, so we were stuck in the middle. Needless to say, we felt more like we were in a line at Disneyland than in a wilderness setting.

Large groups also do considerable damage to the wilderness landscape. First, many logical camping destinations in SEKI have only a handful of suitable and "hardened" campsites where pitching a tent is possible. When a small group arrives at a lake, they typically gravitate toward these previously used sites as they have usually been cleared of rocks, pine cones, and other debris that is likely to cause discomfort while sleeping. A large group arriving at the same site, however, has no other choice than to clear new sleeping areas. Subsequent campers will then continue to use these "new" sites; thus, large groups cause a proliferation of hardened sites. It is well established in the scientific literature that most of the soil compaction and vegetation damage occur in the first few uses of a site, and that it often takes years or even decades for natural processes to reverse these effects.

Large groups also lead to much more rapid "trails of use" between campsites and water sources, around the perimeters of lakes, and on cross-country routes. For example, two or three people traveling cross country often tend to spread themselves out over the landscape, where as groups of 10 or 15 people tend to travel single file, resulting in the establishment of trails of use.

Large stock parties are the most problematic of all large groups because of the combined impacts of both people and stock animals. A pack train hauling 15 persons and 20 head of stock is simply unconscionable in this era. These groups cause an order of magnitude more impact to trails,

meadows, and camping areas than groups traveling on foot. It is time for the Park Service to establish group size limits that reflect the disproportionate impact that stock have on both the wilderness environment and the experience of visitors.

#### *Stock Limits*

The only thing worse than encountering 15 people on the trail or at a camping destination is encountering 15 people along with 20 meadow-mowing, defecating, water polluting, frog trampling, bell-wearing horses and mules. The current limit of 20 head of stock results in unacceptably high impacts to the vast majority of wilderness users (including most stock users), as evidenced by work conducted in and around SEKI (see Cole 1989, Cole 1990, and Watson et al. 1993). Furthermore, these limits exceed maximum group size limits in place in most other parks in the West. Several parks have maximum group-size limits that range from 6 to 16 head of stock (Mt. Rainier, Olympic, North Cascades, Crater Lake, Lassen Volcanic, Rocky Mountain), and those that allow large numbers (20-25 head) do so only on a limited number of trails constructed to high standards. Although the scientifically defensible approach would be to establish area-specific group-size limits that reflect differences in environmental sensitivities and capacities, the Park Service has in the past argued (as part of the effort to establish uniform group-size limits throughout the central and southern Sierra) that uniform group-size limits are desirable from a management standpoint. If that remains the case, then for groups size limits to be effective, they must be low enough to protect the most sensitive areas.

The current group size limit for stock simply cannot be justified. Essentially, the current regulations state that 16 people hiking in a group cause unacceptable impact to the environment, but 15 people and 20 head of grazing, dust-creating, meadow thrashing, manure producing livestock is perfectly fine! This makes no sense.

#### Recommendation

For these reasons, I strongly support the following steps to protect the SEKI wilderness regarding group size limits:

- Hikers and stock-users alike should be limited to no more than 10 heartbeats (i.e., people and stock combined). Although this does not completely remedy the disproportionate impact caused by stock, it does at least improve the equity among users. It also places on the onus on stock users to reduce the number of unnecessary luxury items (and hence the need for more mules) that they bring into the backcountry so that they can maximize the number of people in a party.
- Groups traveling cross-country should be limited to no more than 6 persons. One of the primary motivations for traveling cross-country is to find solitude. Large parties ruin those opportunities for solitude.

Your EIS should include alternatives that contains these provisions.

#### Foot-travel only trails

Should the Park Service decide to continue to allow stock use in the wilderness of SEKI, the Park Service should give serious consideration to establishing a network of foot-travel only trails. A network of foot travel only trails would allow hikers the opportunity to experience wilderness free from the many impacts of recreational stock. This is not a radical concept. Many other national parks in the West, including Mt. Rainier, Olympic, North Cascades, Crater Lake, Glacier, and

Yellowstone, have modest networks of foot-travel only trails to allow hikers to enjoy a stock-free experience and to protect sensitive areas.

There is a trail I frequent in the John Muir wilderness just north of SEKI that receives considerable traffic from hikers but very little stock use due to a rough access road that precludes horse trailers. The difference in the hiking experience between this trail compared to one of the many high stock-use trails in SEKI and elsewhere is like night and day. On this trail, the tread measures at most about 20-24 inches wide. Forested sections of the trail are covered with pine duff, which has the effect of eliminating virtually all dust. There is no horse manure/urine or accompanying smell or flies. Indeed, one truly feels like they are visiting a wilderness where the impacts of man are truly "scarcely noticeable."

This experience runs in sharp contrast to the experience of hiking any of trails frequented by stock, and commercial pack stock operators in particular. These trails are typically 2-3 times as wide as those used only by hikers. The duff layer that holds down dust is quickly pulverized by the pounding hooves of horse and mules and ground into the mineral soil. Copious quantities of manure, both fresh and dried, are ground into this dust, and on the fresher manure piles, dozens of flies buzz around, landing on your legs as you pass. When hiking down these trails, a plume of this smelly mixture rises up from the feet of the hikers passing in front of you. Often, it is so bad that you have to space yourselves out on the trail so that the dust has time to settle or blow away between hikers. Worse yet is the fact that this dust sticks to your sweat, so that within a mile or two, your legs and even arms are coated with this stinking residue. Indeed, it becomes a necessity at the end of each day (and sometimes more than once per day) to jump into the nearest creek or lake to try and get rid of this slime, as failure to do so means your sleeping bag will soon become filthy. And if it happens to rain that day, re-wetting the trail? Well, instead of experiencing the clean, pure smell of pines after a rain, you instead you have to endure the smell of a barnyard as the manure and urine are re-wetted.

Now, I know there are some people who, for reasons of nostalgia, find the smell of horse manure to be tolerable or even pleasant. But for the vast majority of wilderness users---those who are on foot and have to walk in the filthy dust clouds created by excessive stock use---this is a non-trivial impact that often lasts for miles and miles on the more heavily used trails. I have been on many trails in SEKI and elsewhere where you literally could not walk 50 paces without encountering remnants of a manure pile.

A network of foot travel only trails would also substantially reduce trail maintenance costs. On a recent trip to the Evolution Lakes area, I was astonished at the extent of highly engineered trail sections. In many areas, tread measuring 4-5 feet wide had been constructed of rock that was filled in with sand. Much of this construction was done to move the trail out of meadow areas in which multiple treads had formed in response to wet conditions and heavy use by both hikers and stock. While I applaud the attempt to protect meadows from further damage, this could have been accomplished with much less damage to the landscape (i.e., removal and hauling of vast amounts of rock and soil from nearby locations). The resulting "freeways" are visible from long distances, looking more like roads than trails. All of this excess construction was simply to accommodate stock use. In fact, in one area, a rock "causeway" some 5-6 feet wide and perhaps 100-150 feet long was built directly on top of a large granite slab. This structure was built solely for the convenience of stock users, as a hiker would have had no problem crossing this very modest slope of granite.

My point is that if a trail requires such Herculean efforts to make them meet "stock standards" then the trail should be considered for designation as "foot-travel only." I recognize that some of

the more obvious candidates originate on Forest Service lands outside of SEKI (e.g., Shepherd, Baxter, Sawmill, Taboose). However, by designating those trails as foot-travel only, the Park Service could effectively halt any Forest Service plans to upgrade these trails (as was unsuccessfully done to Sheperd Pass trail and was proposed back for Taboose back in the 1990s). This is a waste of taxpayer monies that could be better spent on other aspects of wilderness management.

#### *Recommendation*

The ESI should include alternatives that establish a network of foot-travel only trails so that hikers that do not have experience to travel cross-country can have an experience wilderness free from the impacts of stock.

### **Livestock Grazing**

Grazing of recreational livestock in the backcountry is a damaging practice that ought to have ceased decades ago. Since the time I was a small child, I have had countless rangers discuss the importance of leaving no trace in the backcountry, including not picking wildflowers or otherwise destroying natural vegetation. Yet the Park Service seems to have no qualms about 20 head of stock parading through mountain meadows, eating the grasses and forbes, trampling streamside areas, and munching on willows, leaving them looking more like cow pastures than natural ecosystems. This is an affront to the wilderness. It is time to end grazing in the SEKI wilderness and to require all stock users to carry in certified weed-free feed. Numerous other parks have had the wisdom to end grazing in the wilderness and it is time for SEKI to follow suit.

#### *Recommendation*

The EIS should consider alternatives that:

- Cease all grazing within the park wilderness areas
- Cease grazing above 9600 feet.

### **Cross country travel by stock**

Cross country travel by stock in SEKI is inappropriate. Such use results in a proliferation of trails-of-use and other ecological damage.

#### *Recommendation*

The EIS should consider alternatives in which the current ban on cross-country travel by stock in most areas of the SEKI wilderness is expanded to include all areas of the park, including those areas where such use is currently allowed.

### **Food Storage Practices**

I would like to express my strong objection to the proliferation of food storage lockers in the SEKI wilderness. According to the SEKI website, there are now 80 food storage lockers in the backcountry of SEKI.

I fully understand and appreciate that these food storage lockers have contributed to a decline in the number of "bear incidents" in these parks. That is most certainly a positive thing. However, the fact is that most backpackers carry their own food canisters, which has greatly reduced the

need for these intrusive structures in the backcountry. Further, these food storage lockers have resulted in concentration of use in the areas surrounding them. On one recent trip to Bubbs Creek (near Junction Meadow), I was appalled to find between 20 and 25 people camped near the storage lockers. The experience was more akin to a campground than a wilderness.

Even worse, the result of this concentration of use was that human waste was a substantial problem. When it came time to “do my business,” virtually every available place to dig a cat hole had already been used, and as a result, people had taken to climbing the hillside and turning over rocks to move their bowels in the resulting hole. I literally saw evidence of 8-10 “deposits” in the single night I spent there.

The result is not more composting toilets in the woods. The solution is to rely on bear canisters so that use once again becomes more dispersed.

#### *Recommendation*

The Parke Service EIS should consider alternatives that remove all food storage lockers from the backcountry and require carrying of bear canisters.

#### Sanitation

In preparing these comments, I visited SEKI’s website to learn what was new in wilderness regulations for 2011. I was surprised and more than a little annoyed to see that SEKI is now requiring wilderness visitors to pack out their used toilet paper.

To be frank, this regulation is rather absurd. In the first place, it is a completely unenforceable regulation. Does SEKI intend to have rangers spy on hikers while they move their bowels? (Creepy!) Will there be “spot inspections” to make sure you hikers are carrying a ziplock with their soiled toilet paper in it? (Creepy!). Now, I imagine that the park service really has no intention of actively enforcing this regulation. And maybe the regulation was promulgated under the assumption that the most conscientious wilderness users among us will adopt the practice, and that any reduction in toilet paper waste is a good thing.

If that is indeed the case, then the park service is neglecting the fact that regulations such as these highlight the tremendous double standard that SEKI applies to hikers versus livestock. Hikers are required to carry out their soiled toilet paper, but a horse or mule will deposit 25 lbs of fecal matter per day pretty much wherever it decides to relieve itself, which is often either near water or on trails where the runoff eventually ends up in the nearest stream.

The ridiculousness of this double standard is illustrated in the photographs below. Figure 1a shows typical fecal deposit of a horse. On average, a horse will deposit between 6 and 8 comparable piles per day (range about 4-12). Figure 1b shows is the ash residue left after burning 20 sheets of standard 2-ply toilet paper...the amount I would typically use in the course of doing my business.



Figure 1. (A) The typical manure pile left by a horse compared to (B) the ash remaining from the burning of toilet paper.

So which of these constitutes the bigger impact on the wilderness? What SEKI's current regulations tell us is that the thimble-sized ash pile in Figure 1b is an unacceptable impact to the wilderness, while the manure pile in Figure 1a, multiplied by 6-8 each day, is perfectly fine! This ludicrous conclusion demonstrates the inequity of SEKI policies, which continue to place more and more constraints on backpackers while at the same time casting a blind eye toward the impacts of recreational livestock, which are far more detrimental to the wilderness ecosystem.

SEKI's credibility suffers from hypocritical policies such as these. In fact, let me share a true story. When Yosemite National Park first adopted this regulation, my son, who was 6 years old at the time, and I did a short backpacking trip up the Vogelsang trail out of Tuolumne Meadows. About 3 miles into the trip and after having stepped over, around, and through dozens of manure piles (the trail leads to the High Sierra camp that is regularly supplied by pack stock), my son turned to me and said "Dad, why is it that we have to pack out our dirty toilet paper but horses are allowed to poop all over the place?" If my 6-year old was astute enough to recognize this inconsistency, you can reckon that most other hikers see it as well. If you want backpackers to take the pack-out-your-toilet-paper regulation seriously, then please demonstrate that you're equally serious about reducing the impacts from stock waste (see discussion of manure catchers below).

Is there a problem with human sanitation at SEKI? In certain locations (see discussion of bear lockers), absolutely. And I am certainly no fan of witnessing the evidence of other people's poor burial practices. But please answer me this. Do you really think that the wilderness visitor who, under the park services old advice on waste disposal, didn't take the time to properly bury their waste and burn their paper is now suddenly going to have the inclination to stuff his soiled toilet paper into a ziplock bag and then carry it for the duration of their trip? The answer would seem obvious to me.

#### *Recommendation*

The Park Service consider alternatives that abandoned the requirement that people pack out soiled toilet paper and instead promote education of proper disposal practices. The Park Service should then address the far more pressing ecological and aesthetic issue of stock waste as described below.

#### **Manure Catchers**

The time has come for the park service to implement policies that will reduce the amount of stock waste that enters streams and lakes of the SEKI wilderness. There are now numerous peer-reviewed scientific publications that demonstrate that water bodies in areas with recreational stock use are being contaminated with wastes from these animals (citations). These studies show elevated levels of fecal cholofom. Further, horses and mules can carry various pathogens including giardia, chryptosporidium, and campylobacter.

The park service should require stock users to use "manure catchers" so that waste from horses and mules can be deposited away from streams and rivers. These manure catchers are readily available in a variety of sizes and cost less than \$100. (Consider that a bear canister costs about \$80 and the Park Service does not blink at asking hikers to pay this cost).

Now I know that stock users will complain loudly about having to stop and empty these manure catchers every few hours. But if the park service is going to continue to allow people to bring



large, nonnative, waste-producing animals into the SEKI wilderness, then this is one of the inconveniences that stock users will have to endure.

*Recommendation*

The Park Service consider alternatives that require stock users to use manure catchers and dispose of waste away from water sources.

**Campfires**

For the most part, I support the elevation- and area-specific closures on campfires that are currently in place. However, I would recommend the following change:

The current elevation limit of 10,400 feet in the Kern River basin should be lowered to 10,000 feet. This would substantially simplify the existing regulations, making it consistent with Kings Canyon, and eliminating the need for the area-specific 10,000 ft. closures in Nine Lakes Basin/Big Arroyo and Lower Crabtree Meadow. Further, such a closure would have minimal effect on the ability of people to have fires where they are accustomed to doing so, owing to the fact that almost all the major lake basins are already above the 10,400 ft closure, and due to the nature of the Kern Basin topography, much of the band between 10,000 feet and 10,400 feet lies on the steep sidewalls of the main Kern Canyon and so are not particularly suitable for camping anyway. The only lake basin that would be appreciably affected is the Big Five Lakes basin. A 10,000 ft closure would mean that fires would not be allowed at the upper four lakes in this basin. This would be a positive change, as the forests at these subalpine lakes are sparse. People who wanted to have a fire could do so at the lowermost lake, where there is considerably more wood available.

*Recommendation*

The EIS should consider alternatives that establish a uniform fire closure at elevations above 10,000 feet.

**Bearpaw High Sierra Camp**

The Bearpaw High Sierra Camp is an anachronism and should have been closed long ago. The wilderness is not the setting for pampered, luxury experiences. It is a place where the influence of man is scarcely noticeable. The Park Service has failed in its obligation to monitor the effects of the Bearpaw enclave, as required by law. It is time for this abomination to be removed.

*Recommendation*

The EIS should consider alternatives that permanently close the Bearpaw High Sierra Camp.

**Mineral King Pack Station**

The idle Mineral King Pack station is an eyesore that ought to have been removed when the pack station was closed.

*Recommendation*

The EIS should consider alternatives that remove all traces of the Mineral King Pack Station and restore the area to its natural condition.

Thank you for considering my views.

A handwritten signature in black ink, appearing to read "Brian C. Spence". The signature is written in a cursive style with a horizontal line above the first few letters.

Brian Spence