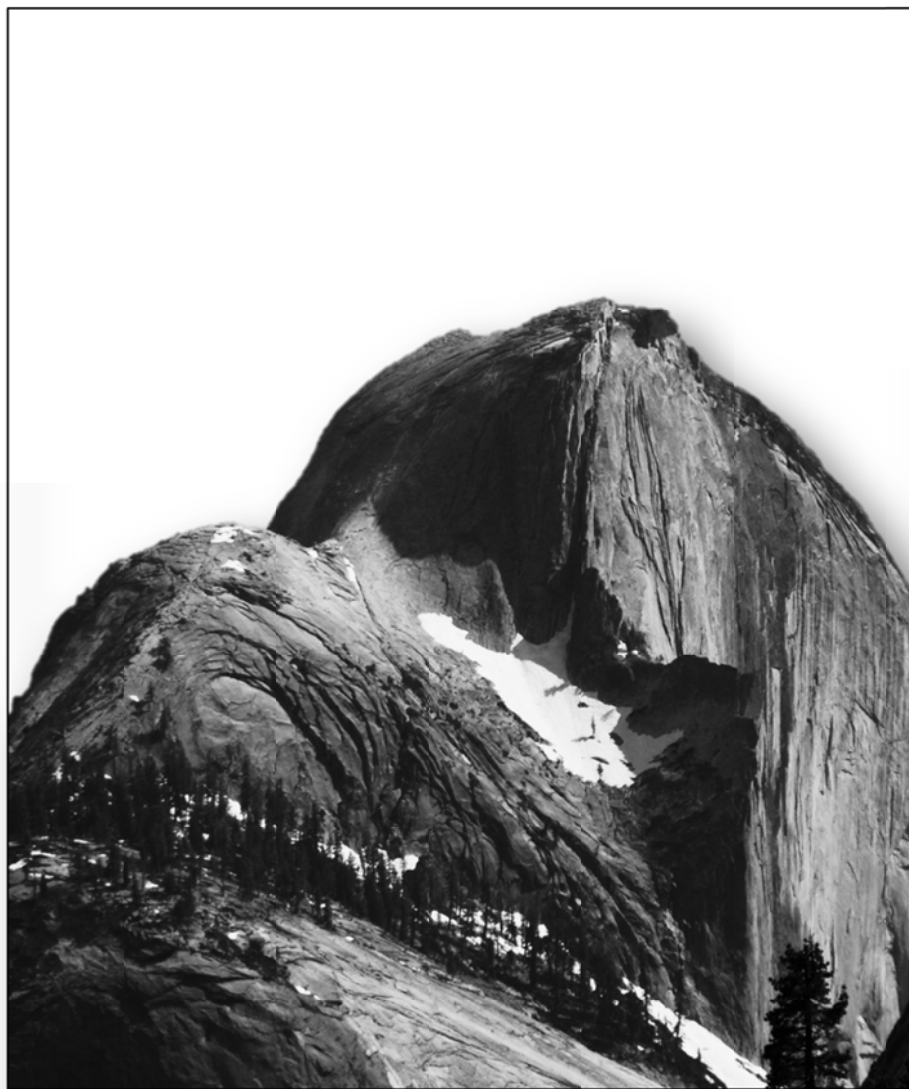




Half Dome Trail Stewardship Plan

Finding of No Significant Impact
December 2012



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United States Department of the Interior
NATIONAL PARK SERVICE

Yosemite National Park
P. O. Box 577
Yosemite, California 95389

IN REPLY REFER TO:
H3015 (YOSE-PM)

DEC 12 2012

Dear Friends of Yosemite National Park:

The National Park Service at Yosemite National Park announces the availability of the finding of no significant impact for the Half Dome Trail Stewardship Plan. This document records the decision of the National Park Service to protect and enhance wilderness character and visitor experience along the 2-mile length of the Half Dome Trail, which includes the cables and summit. The selected action was described as Alternative C in the *Half Dome Trail Stewardship Plan Environmental Assessment*.

The finding of no significant impact, errata sheets, public comment and response report, and other documentation completing the decision-making process are available at <http://parkplanning.nps.gov/halfdome>.

The National Park Service has determined that implementation of the Half Dome Trail Stewardship Plan will not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared.

The plan will be first implemented for the 2013 hiking season.

We thank you for your interest and comments regarding the project. Public participation is a key element in the environmental review process at Yosemite National Park. Your participation helps to ensure that the National Park Service fully understands and considers your values and concerns.

Sincerely,

Don L. Neubacher
Superintendent

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The Half Dome Trail Stewardship Plan Finding of No Significant Impact

December 2012

Yosemite National Park

FINDING OF NO SIGNIFICANT IMPACT

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to adopt a plan for management of the Half Dome Trail in Yosemite Valley and the determination that no significant impacts on the human environment are associated with that decision.

PURPOSE AND NEED

Half Dome is an iconic, granite peak visible from many spots in Yosemite National Park, rising 5,000 feet above the Yosemite Valley floor in one dramatic sweep of sheer rock. Reaching its summit is a goal for a broad cross section of the public including beginning and experienced hikers, first-time and lifelong park visitors, an array of ethnicities and cultures, children to grandparents, and people from all around the world. For many, this may be their first hike in designated wilderness. The combination of the long hike, an exhilarating, exposed ascent of the cables, and a spectacular view from the summit can combine to be a highlight of a person's summer or even a life-changing event.

Popularity of the Half Dome Trail has resulted in crowding along the Trail and the summit; this affects wilderness character of the area by compromising visitors' opportunities for solitude. High use levels also affect natural conditions which are essential to wilderness character. Crowding has raised concerns about the safety of both the public and rescue personnel on the cables. Crowding subjects hikers to long travel times and delays in ascending and descending the Half Dome Cables and may prevent them from getting down from the exposed section of the Trail in a timely manner to avoid rain and lightning storms.

These conditions led the National Park Service (NPS) to implement an interim permit system in 2010 that limited visitor use of the Half Dome Trail. This system was modified in 2011 and remained in place through the 2012 hiking season. The 2010-2012 interim permit system was implemented as an emergency measure in tandem with the development of the *Half Dome Trail Stewardship Plan Environmental Assessment* (EA). This EA was undertaken with the express purpose to: protect the wilderness character of the project area while providing the public with appropriate opportunities to reach the summit of Half Dome; improve visitor experience on the Half Dome Trail by reducing crowding and limiting encounters among hikers; protect the area's natural and cultural resources; and improve public safety by reducing crowding on the Half Dome Trail.

SELECTED ACTION AND RANGE OF ALTERNATIVES CONSIDERED

The EA, dated January 2012, describes and analyzes the following five alternatives:

- Alternative A: No Action
- Alternative B: 400 People per Day (Minimum Management Action)
- Alternative C: 300 People per Day (Preferred)
- Alternative D: 140 People per Day
- Alternative E: Remove the Cables

These alternatives represent a reasonable range of options that meet the purpose and need for the project, relevant legal requirements, and park policies and guidelines. These alternatives were developed through an interdisciplinary process based on scientific visitor use studies, as well as public, NPS staff, tribal, and agency input. When developing reasonable alternatives for this EA, the NPS sought those alternatives that would:

- Provide a range of wilderness experiences for people seeking to reach the summit of Half Dome,
- Protect and enhance the wilderness character of the area, and
- Provide generally consistent free-flow travel conditions on the Half Dome cable section of the Trail to improve both visitor experience and public safety.

SELECTED ACTION – 300 PEOPLE PER DAY

The goal of the Selected Action is to best protect wilderness character while providing a range of wilderness experiences and enhancements to public safety. The Selected Action is generally the same as Alternative C in the EA (the Preferred Alternative). There are some clarifications and corrections to the EA based on public comment, mainly in the area of commercial use. All corrections and clarifications are described in the Errata. The substantive changes are also included in this FONSI and are reflected in the description of the Selected Action. There are no corrections or clarifications based on agency consultation.

Change: The plan will be modified to allow permit allocation for commercial use to respond to changes in use patterns, implementation of new technologies, and to meet the guidelines of the Determination of Extent Necessary (DEN) for commercial use in wilderness. This will ensure equitable and efficient distribution. Public notice will be given for any such modifications to the program.

Clarification: Some minor technical corrections and these clarifications were made to the EA based on public comment:

- Effects of park wide trail use displacement will be monitored and addressed in the upcoming *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement*
- Annual Half Dome Trail use data will be posted on the park's website
- Permits will be transferrable except for the trip leaders¹

¹ Trip leader (and alternate) is specified in the application process

Under the Selected Action, the NPS will retain the cable system and implement day-use limits through a permit system managing to a target of 300 hikers per day on the Half Dome Trail. Use levels under the Selected Action provide appropriate conditions for wilderness character on the Trail by improving the opportunity for solitude. In the context of this popular, easily accessible wilderness area, solitude was considered to be an outdoor, recreational experience that was free from crowding. Reducing crowding will improve visitor experiences on the Trail and increase the public's ability to more safely use the Trail by maintaining free-flowing travel conditions on the cable section of the Trail.

Permits and Fees

Half Dome permits will be allocated through a combination of distribution methods. A percentage of Half Dome use will be allocated to Yosemite Wilderness Permit holders² who start their overnight trips from specified trailheads in the Half Dome travel area. Pacific Crest Trail permit holders and those with Yosemite Wilderness Permits for trailheads outside of the Half Dome travel area will not be eligible for this privilege but could compete through the normal day-use permit allocation system. The remaining use will be considered day use and Half Dome permits for this use will be distributed through a combination of an advanced and day-before permit allocation system. Specifics and timing of this advanced allocation system will be refined annually, as needed, to best provide:

- an equitable distribution system,
- the ability to cancel unused reservations for a partial refund,
- technological and/or operational safeguards to protect against illegal resale of permits, and
- actual use that meets the designated management target.

Half Dome permits will be transferrable, except for the trip leaders' permit. Trip leaders (and alternate) are designated at the time of permit application. To help ensure compliance, personal identification may be required of trip leaders. Advanced permits will be allocated through a first-come first-served reservation system, a lottery, or a combination of these options. Additionally, the NPS will reserve and distribute a portion of the day-use permits the day of or days before the hiking permit date to allow for more spontaneous use of the Trail. Finally, if through the ongoing monitoring of visitor use on the Half Dome Trail the NPS determines that this allocation system is not achieving the management target of 300 people per day, the NPS will take action to adapt the permit allocation system to achieve this daily management target. One of these actions could be to sell additional permits, above the use limit number, to make up for an expected number of unused permits. An annual report on Half Dome visitor use statistics will be compiled each year by the NPS and made available to the public.

Under the Selected Action, the NPS may periodically adjust the permit allocation system to take advantage of new technologies as they become available. These adjustments would be incorporated to improve equitability and efficiency of the permit allocation system to achieve the prescribed management target. Public notice will be given for any such program adjustments.

² Yosemite Wilderness Permits allow wilderness users to camp overnight in the wilderness with a set quota available for each trailhead. Wilderness Permits are obtained through a competitive process with advance reservations as well as day-before and day-of allocations.

The NPS will charge a fee for Half Dome permits. Permit fees will be designed to recover costs required to maintain the cable system and Trail, monitor use, educate hikers, ensure compliance with use limits, and protect the wilderness resource. This permit program will make the program self-sustaining by recovering those costs needed to directly manage the Half Dome Trail. Total permit fee to a visitor will consist of two costs: 1) the cost of allocating the permit by a contractor (which is approximately \$4.50 per group via online application and approximately \$6.50 for call in), and 2) the cost per person for the NPS to manage the Trail. This fee will initially range from approximately \$6 to \$8 per person. If operational costs increase, permit fees would also increase proportionately.

Compliance Enforcement and Monitoring

Two staff per night will be required for compliance enforcement and monitoring. These staff will stay at the NPS' administrative camp at Little Yosemite Valley. These two additional staff will not increase the administrative use footprint.

Commercial Use

Commercial services providing educational or scenic trips on the Half Dome Trail will be allowed to provide up to a daily limit of 30 persons per day on guided educational trips and 15 people per day on scenic trips. Commercial use numbers were set by a DEN as part of the EA. While commercial use limits are set by the DEN, permit allocation methods will be administered annually by the NPS to ensure equitable and efficient distribution. In response to public comment on the EA, there will not be a prescribed system for allocating commercial use permits in the Selected Action. This stipulation allows the NPS to respond to changes in use patterns, implement new technologies, and meet the DEN guidelines. Public notice will be given for any such program modifications.

Trail Maintenance

The NPS will maintain the trail bed and stone step sections of the Half Dome Trail. Wilderness trail maintenance will continue to be accomplished primarily with hand tools; however, mechanized or motorized equipment may occasionally be the minimum tool for their work, as described in the 1989 *Yosemite Wilderness Management Plan*.

The cable system will be put up each May and taken down each October as weather permits. This will require use of the NPS' administrative camp at Little Yosemite Valley by 6-12 park staff for approximately four days at both the start and end of the season to put up and take down the cable section of the Trail. The steel cables will be left attached to the rock face all year. During the hiking season metal stanchions will be placed to lift the cables off the rock, and wooden steps (attached to the stanchions) will be placed to aid footing. Sections of cables, connecting hardware, and anchor bolts will be inspected twice annually and replaced as necessary. If anchor bolts require replacement, a Minimum Tool Analysis will be completed. When the cables are taken down in the fall, the stanchions and steps will be removed and stored in the immediate area.

Visitor Education

The NPS will provide and update wilderness stewardship and safety information to help visitors enjoy a safe, successful, low impact wilderness experience. The Yosemite National Park website will provide video and text information about safety and resource stewardship:

<http://www.nps.gov/yose/planyourvisit/halfdome.htm>. Information provided to permit

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applicants will include safety and stewardship recommendations and will also guide visitors to access the park's website for additional education.

Ranger Patrols

NPS Rangers will patrol the Half Dome Trail regularly to ensure protection of the wilderness resource and check for compliance with regulations.

Visitor Use Monitoring

The Half Dome Trail will be monitored by NPS visitor use and social science experts to determine actual visitor use levels and associated resource impacts.

Wilderness Camping

Wilderness camping will be subject to the Yosemite Wilderness Permit System and regulations contained within Title 36 Code of Federal Regulations and the Superintendent's Compendium. The NPS will continue to regulate numbers of wilderness campers in the Half Dome Trail area through trailhead quotas. Camping will continue to be prohibited on the Half Dome summit.

OTHER ALTERNATIVES CONSIDERED AND ANALYZED

Alternative A (No Action)

The No Action Alternative is required by the National Environmental Policy Act and the NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making, to provide the baseline against which to compare the other alternatives. Under this alternative, the park would retain the cable system and continue managing the Half Dome Trail as it was up through 2009. There would be no day-use limits. Wilderness camping in the area would continue to be regulated through the Wilderness Permit System. The cables would continue to be put up in May and taken down in October, weather permitting. Maintenance and structural improvements to the Trail and cables would occur as needed. The No Action Alternative would result in unacceptable impacts to both visitor safety and wilderness character per NPS policy.

Alternative B: 400 People per Day (Minimum Management Action)

The goal of Alternative B was to provide the greatest access while improving visitor safety. Under this alternative the park would retain the cable system and implement day-use limits through a permit system with a management target of 400 hikers per day. This use limit is considered the minimum management action and is the same as the 2010-2012 interim permit system that was implemented as a temporary measure to address visitor safety. Under this alternative travel times on the cables, crowding, and wilderness encounters are greatly reduced from the busiest days recorded when no day-use limits were in place (No Action Alternative). Use is not expected to exceed the visitor-informed threshold for crowding. The 400 people per day would be a combination of overnight users with wilderness permits, hikers with permits, and commercial clients and their guides. Day-use permits would be allocated through a combination of advanced reservation and day-before allocation. Five permits per day would be set aside for commercial use for up to two commercial trips per day.

Alternative D: 140 People per Day

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The goal of Alternative D was to protect wilderness character by eliminating crowding. Under Alternative D the park would retain the cable system and implement day-use limits through a permit system allowing 140 hikers per day. At 140 people per day, maximum day-use levels are expected to always remain below the statistical model threshold for crowding, and there would be no delays while traveling on the cables even during maximum use periods. The 140 people per day would be a combination of overnight users with wilderness permits and hikers with day-use permits. Day-use permits would be allocated through a combination of advanced reservation and day before allocation. No commercial use would be allowed.

Alternative E: Remove the Cables

The goal of Alternative E was to protect wilderness character by removing the cables. Alternative E would result in the park physically removing the cable system from Half Dome. Access to the summit would only be possible via technical climbing routes. One permitted commercial trip per day would be allowed.

ACTIONS CONSIDERED BUT DISMISSED

The NPS considered a range of actions when developing possible alternatives for the *Half Dome Trail Stewardship Plan*. The following actions were analyzed, considered, and dismissed because they did not fully satisfy the objectives of this planning effort. Actions were dismissed for one of the following reasons:

- The action would not satisfy the project's purpose and need.
- Less environmentally-damaging options were available.
- The action would cause unacceptable environmental, cultural, or social impacts.
- The action would present unacceptable risks or constraints with an associated increase in costs.
- The action would conflict with the guidance and direction provided in the park's 1980 *Yosemite General Management Plan*.

Install a Third Cable to the Cable System

With this alternative, the NPS would install a third cable, additional stanchions, steps, anchor bolts, and hardware next to the existing cable system, resulting in a total of three cables and two lanes of travel, one up and one down the cable system. In the absence of use limits, this additional cable could increase the cable system's capacity to handle the same level of use with less congestion.

The NPS dismissed this alternative because reducing opportunities for solitude and adding development in wilderness contradict the objectives of this plan to protect wilderness character and improve the visitor experience in the project area. A third cable would allow continued, extremely high use of the Trail resulting in crowding on the Trail and summit, with encounter rates that far exceed any other wilderness area in Yosemite or in the U.S.. Furthermore, the 1989 *Yosemite Wilderness Management Plan* specifically limits facilities in Yosemite wilderness to those present in 1989 when the plan was written, or those that were specifically proposed in the plan. The plan contends that "Further facilities would compromise the National Park Service's responsibilities in wilderness management." This supports why the existing two-cable system could be allowable in wilderness but additional permanent installation of a third cable would not be allowable.

Moreover, a three cable system would likely not resolve safety issues associated with unregulated use levels. At 1,200 people per day, people at one time (PAOT) on the cables can reach 130 which could overwhelm even the additional lane of travel, causing delays and congestion.

Remove Half Dome Trail from Designated Wilderness

Under this alternative, the NPS would recommend to Congress that the Yosemite Wilderness boundaries, as designated in the 1984 California Wilderness Act, be redrawn to remove the Half Dome Trail from designated wilderness. Section 3 (e) of the 1964 Wilderness Act describes the option for boundary adjustment. Doing this would allow the NPS to manage the Half Dome Trail as non-wilderness and would not require the NPS to consider the concept of solitude or the minimum requirement for installation of structures. This alternative is not consistent with the purpose and need of this plan to protect wilderness character.

Under this alternative, rather than being a guiding purpose, wilderness character would become irrelevant because Half Dome and the trail leading to Half Dome would be removed from wilderness. This alternative would also not meet the goal of improving safety because existing use levels, which have been shown to impede free-flow on the cable route, would continue. The safety considerations that form part of the purpose and need for this plan exist regardless of the area's status as wilderness.

Station Rangers at the Half Dome Cables in Lieu of Use Limits

Under this alternative, a ranger would be stationed at the base of the cables to regulate traffic during periods of congestion and/or to close the route during inclement weather. This could eliminate the need for use limits.

This alternative was considered and dismissed because it would not decrease crowding and provide for solitude opportunities on the Trail. Encounter rates would continue to be high, and crowding would be transferred to the summit and Sub Dome. Similarly, positioning a ranger to "close" the cable system when a storm is approaching contradicts established policy for risk management in wilderness. *NPS Management Policies 2006* 6.4.1 states, "Park visitors need to accept wilderness on its own unique terms," and the NPS should only provide visitors with "general information" concerning possible risks. This would establish an unmanageable precedent for other wilderness areas.

Control Timing of Use

Under this alternative the NPS would spread use out over the day by assigning hikers to specific time slots. Controlling the timing of use would eliminate midday crowding and maintain free-flowing conditions while accommodating a larger number of hikers per day. A ranger would be stationed at the base of the cables and would serve as a gatekeeper allowing hikers to use the cable system only during their assigned time slot.

This alternative was dismissed because it does not meet the purpose of increasing safety along the Trail corridor. A late ascent time could pose safety risks for many hikers. Numerous search and rescue incidents are caused by visitors completing the return portion of their trip after dark. In addition, delaying people until later in the day means they are at the summit in the afternoon when thunderstorms are more likely.

Permit System with Use Limit of 500 People (or More) per Day

Under this alternative the NPS would retain the cable system and implement day-use limits through a permit system managing for a target of 500 or more hikers per day. At 500 people per day, visitor experience on the Half Dome Trail would be similar to conditions previously observed for weekday use without a permit system. The 500 hikers would be a combination of overnight hikers with wilderness permits and hikers with day-use permits. Day-use permits would be allocated through a system that allocates permits months in advance and days in advance.

This action was considered and dismissed because it would not sufficiently decrease crowding, provide opportunities for solitude, or provide free-flowing conditions where hikers could manage their own risks. Scientific models concluded that five hundred people per day would result in wilderness encounter which would exceed any other documented wilderness use in the western U.S.

Implement a Permit System for Weekends and Holidays

Under this alternative a permit system similar to the 2010 interim permit system would be implemented, and use would only be regulated on Friday through Sunday and on federal holidays. Prior to 2010 the busiest days on the Half Dome Trail were Saturdays and holidays with generally much lower use on weekdays. Based on this data, a permit system would only be required to limit use on the identified busiest days, as well as Fridays and Sundays, to account for planned use displacement to adjacent days.

This alternative was tested during the 2010 season and found to result in use being significantly displaced to non-permit days, Mondays through Thursdays, with highest use on Thursdays. Monitoring showed daily use was high enough on the busiest days to consistently cause crowding and queuing which adversely impacted both wilderness character and public safety and, therefore, did not meet the purpose and need for this plan.

Issue Permits Good for Multiple Days

Under this alternative the NPS would retain the cable system and implement a permit system with permits that are good for multiple days. Permit holders would be able to take advantage of favorable weather conditions, weigh other risk management factors, and choose the day of their ascent within a given time period.

This action was considered and dismissed because it would not guarantee elimination of crowding, opportunities for solitude, or free-flowing conditions. Under this alternative, there is no way of predicting the number of people who would be using the Half Dome Trail on any given day, and it is likely that encounter rates would exceed acceptable levels on weekends and on the first day of favorable weather after a period of inclement weather.

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ENVIRONMENTALLY PREFERRED ALTERNATIVE

Council on Environmental Quality (CEQ) Regulations, implementing the National Environmental Policy Act (NEPA), and the NPS NEPA guidelines require that “the alternative or alternatives which were considered to be environmentally preferable” be identified (Section 1505.2).

Environmentally preferable is defined by CEQ as “the alternative that will promote the national environmental policy as expressed in the NEPA Section 101. This means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources”.

Section 101 of NEPA states that it is the continuing responsibility of the Federal Government to:

- 1) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2) Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- 3) Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- 4) Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;
- 5) Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life’s amenities; and
- 6) Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources. (This goal was not considered applicable in this EA.)

The Selected Action (Alternative C presented in the EA) would best fulfill responsibilities of the NPS to identify the alternative that will promote national environmental policy as expressed in NEPA Section 101.

All action alternatives (B, C, D, and E) address the purpose and need of this plan by improving safety conditions where visitors are able to manage their own risks consistent with criterion 2. The No Action Alternative and Alternatives B, C, and D would retain the cables and allow those hikers without technical rock climbing skills to access the Half Dome summit. Alternative E would remove the cables, thereby improving the undeveloped character of wilderness on the Trail.

Alternative D would best meet criterion 4 by managing use levels on the Half Dome Trail to 140 people per day which would likely result in the least impact to the environment while preserving national heritage in the form of historic use of the cables. The difference in physical impacts under the Selected Action and Alternative D is minimal. However, reducing use to the low levels prescribed by Alternative D would not attain the widest range of beneficial uses of the environment (criterion 3).

The Selected Action best meets NEPA Section 101 criteria 1, 2, and 3 by maximizing use while maintaining free-flowing conditions. This meets risk management objectives and protects and enhances wilderness character. Compared with other project alternatives, the Selected Action would achieve the best balance between visitor use and resource protection (criterion 3). Thus, the NPS identified this action as the environmentally preferred alternative.

DECISION RATIONALE

The Selected Action best protects wilderness character while providing a range of wilderness experiences and improving public safety. Decision rationale demonstrating how the Selected Action best meets the purpose and need of this plan is provided below.

WHY THE SELECTED ACTION WILL NOT HAVE A SIGNIFICANT IMPACT ON THE HUMAN ENVIRONMENT

In considering the 10 criteria for significant impact, as defined by CEQ regulation 40 CFR 1508.27, it was determined that the Selected Action will not have a significant effect on the human environment. The "human environment", defined in Sec. 1508.14, shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. Specifically, no highly uncertain or controversial impacts, unique or unknown risks, elements of precedence, or cumulatively significant effects have been identified. Implementation of the Selected Action will not result in the loss or destruction of significant scientific, cultural, or historic resources and implementation of the Selected Action will not violate any federal, state, or local laws. All criteria were considered, and it was determined that none of the significance criteria are triggered under the Selected Action, specifically:

- The Selected Action will benefit both the quality of visitors' experience and the public's safety and ability to manage their own risk. Impacts to the natural or physical environment and impacts to the relationship of people with that environment will not be significant.
- No highly uncertain or controversial impacts or elements of precedence have been identified. The Selected Action prescribes a permit system to regulate use in a wilderness area, a commonly accepted wilderness management practice in the Sierra and in U.S. wilderness areas in general. The 2010-2012 interim permit system and its allocation system, though separate from the EA, caused some public concern with management of the Half Dome Trail. However, refinements to the interim permit system have been addressed to satisfy those concerns.
- Implementation of the Selected Action will not violate any federal, state, or local laws.
- Special-status species will not likely be adversely affected.
- There will be no adverse effects to cultural or historic resources.
- The cable section of the Half Dome Trail does present an uncommon, though not unique, challenge and risk to the public. However, that risk is identified to the public through educational information as part of the permit program on the park's website, through NPS brochures, and on signs along the Trail. By following NPS' safety guidance, especially avoiding exposed portions of the Trail during and after inclement weather, the Trail does not present an unacceptable risk.
- The Selected Action was evaluated in context with other ongoing and proposed management actions, and no adverse cumulative impacts are expected. Some of these other management actions include the *Merced Wild and Scenic River Comprehensive Management Plan*, the *Tuolumne Wild and Scenic River Comprehensive Management Plan*,

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and the *Yosemite Wilderness Stewardship Plan*.

- Effects on public health and safety will be improved through regulated use and increased opportunities for safety education. The Selected Action will improve the public's ability to manage its own risk within the park.

Based on the following summary of effects, and as discussed in the EA, the Selected Action (Alternative C, as analyzed in the EA) is determined not to have a significant effect on the human environment.

Wilderness

The Selected Action will result in long-term beneficial impacts to wilderness character by eliminating crowding. The Half Dome Trail, including the cable section, provides the non-climbing public a rare opportunity to reach an iconic, internationally-known wilderness summit by a uniquely challenging hike. The NPS determined that the Half Dome Trail hiking experience was appropriate for this wilderness area and that the Trail and its structures were not prohibited in wilderness and did not need to be removed. The NPS sought a way to continue Trail usage while addressing adverse impacts resulting from high use and crowding.

The Selected Action employs a permit system to regulate and manage use to an acceptable level and eliminate crowding. While permit systems and associated program compliance may adversely impact the unconfined quality of a wilderness experience by intruding into the public's opportunity for unconfined recreation in wilderness, these systems are commonly used as the minimum required management in high-use wilderness areas around the country. Use levels specified in the Selected Action (300 people per day) were deemed to represent the best balance of public access and protection of wilderness character.

While the Selected Action (as well as Alternatives B, D, and E) is expected to decrease day use on the trail between the top of Nevada Fall and the start of the Half Dome Trail, it also has the potential to disperse and increase day use and associated impacts to other areas of the park. However, NPS social science staff expects that any dispersed use will result in a nominal redistribution to a number of trails around the park rather than to any one specific trail. Scientific assessment of use on wilderness trails throughout the park and the appropriate management response will be addressed in the upcoming *Yosemite Wilderness Stewardship Plan*. Overnight use (wilderness camping) should not shift to other wilderness areas in the park because overnight use is regulated by existing trailhead quotas which remain unchanged.

Visitor Experience

The Selected Action will result in long-term beneficial impacts to visitor experience. This action leaves the cable system in place and allows non-technical climbers to access the Half Dome summit. Use will be managed to a target of 300 people per day through a permit system. During periods of highest use, PAOT on the cables will not reach unacceptable levels and will be only slightly above visitor-informed desirable levels.

Public Safety

The Selected Action will result in benefits to public safety and visitors' ability to manage their own risk on the Half Dome Trail. With a limit of 300 people per day, use on the Half Dome Trail is expected to provide free-flowing conditions, with an average of 15 PAOT on the cables. Even during brief daily periods of highest use on the cables, 36 PAOT is expected, which is only slightly above the free-flowing level of 30 PAOT. This is expected to greatly reduce descent times from

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the summit as compared to unregulated use. Hikers should be able to descend exposed sections of the Trail without obstruction from crowding when attempting to avoid approaching storms. Additionally, targeted safety information during the permit process could increase hikers' knowledge of potential risks associated with hiking the Trail and strategies to manage those risks.

Natural Resources

The Selected Action will reduce the number of hikers on the Trail and result in long-term beneficial impacts on natural resources. Targeted education on minimizing impacts to natural resources would be done as part of the permit process. Fewer hikers will reduce current adverse effects on vegetation along the Trail from trampling and soil erosion. Adverse effects to wildlife from increased availability of human food and trash, noise, and visual disturbance from hikers on the Trail will also be reduced. Finally, though the Mount Lyell Salamander, a species of special interest, is generally not disturbed by hikers, any adverse effects on this species should also be reduced.

Cultural Resources and Historic Properties

The Selected Action will result in no adverse effects to historic properties. Hikers will continue to experience the historic feeling of the Half Dome Cables and Trail Historic District, a historic property that was listed on the National Register of Historic Properties in 2012.

Park Operations

Compliance enforcement, use monitoring, resource and safety education, and trail maintenance will be done by dedicated Half Dome staff and will not adversely affect staffing for other park operations. The permit system will be managed to recover costs thereby eliminating any potential fiscal impact to the park's other operations.

With fewer hikers on the Trail, increased targeted education available through the permit process, and a consistent ranger presence, the efficiency of park operations is expected to increase. Under the Selected Action the cable system, the Trail, and the composting toilets at Little Yosemite Valley Campground will all be used less frequently thereby reducing operations and maintenance requirements. The increased opportunity for safety and resource protection education should reduce the frequency of rescue operations and resource restoration efforts. Increased ranger presence on the Trail should improve compliance with regulations.

Compliance enforcement and monitoring would add approximately two staff per night at the NPS' administrative camp at Little Yosemite Valley. The additional staff would not increase the administrative footprint. The trail crew would continue to stay at Little Yosemite Valley during the cable set up operation at the start of the season and during the cable take down operation at the end of the season.

Socioeconomics

Permit fees represent a minor adverse economic impact to visitors. The proposed range of total fee (permit cost and application fee) to the visitor is commensurate with other day-use fees at federal areas around the region. To recover operational costs of the permit program, individual hikers will be charged approximately \$6 to \$8 per permit, in addition to an application fee for permit distribution. This fee is not expected to deter potential Half Dome hikers. Permit demand remained high with comparable fees during the 2010-2012 interim permit system.

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Commercial use limitations under the Selected Action may result in minor, regional adverse impacts to commercial users. During unregulated use on the Half Dome Trail in 2008, commercial trips accounted for approximately 300 guided hikers per year. Under the Selected Action, a maximum of 45 people (clients and guides) per day are allowed over the 136 day season when permits are required. This could amount a maximum of 6,120 visitors per year. It is unlikely these limits will be reached on most days. The allocation system for commercial use will remain flexible to create the least adverse impact to commercial operations as necessary.

CUMULATIVE IMPACTS

CEQ regulations (section 1508.7) describe a cumulative impact as follows:

... a "Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

The analysis of cumulative impacts in *The Half Dome Trail Stewardship Plan EA* did not identify any significant cumulative impacts.

MITIGATION

No mitigation measures or best management practices to avoid or reduce adverse impacts on park resources have been identified in association with the Selected Action.

PUBLIC INVOLVEMENT AND COORDINATION

Public Scoping

Public scoping for the EA was initiated on May 26, 2010. The 30-day public comment period was to end on June 25, 2010. This period was extended until July 9, 2010 to include the Fourth of July holiday weekend, which is typically a high-use period. Three public scoping meetings were held on May 26, June 5, and June 16, 2010, in Yosemite Valley, Fresno, and Berkeley, respectively. Written public scoping comments were received online through the Planning, Environment, and Public Comment (PEPC) website (<http://parkplanning.nps.gov/HalfDome>), fax, U.S. Mail, and on comment forms available at open houses during the scoping period. During the public scoping period, 96 correspondence items (including letters, faxes and emails, and meeting notes) were received. Of the 96 items, 88 were from individuals; 3 were from businesses, 2 were from conservation/preservation groups (Wilderness Watch and Friends of Yosemite Valley), 1 was from a non-governmental organization, and 2 were transcripts from public meetings. Each comment letter was carefully reviewed. A total of 361 comments were identified, and 52 concern statements were developed from these comments.

Based on internal and public scoping comments and applicable federal law, regulations, and

executive orders, the NPS determined that an EA would be the appropriate level of compliance for the *Half Dome Trail Stewardship Plan*. Public scoping comments and issues raised by NPS staff were used in the alternatives development process and the analysis presented in the EA.

Internal scoping and consultation with other government agencies and American Indian tribes and groups informed the planning process. See 'Consultation,' below, for more information.

Public Review and Comment Period

The *Half Dome Trail Stewardship Plan EA* was released for public review on January 24, 2012, and the NPS accepted comments through March 15, 2012. The document was available through the PEPC website (<http://parkplanning.nps.gov/HalfDome>) and hard copies were available as requested. Approximately 15 hard copies were distributed to individuals, agencies, tribes, groups, and organizations. Comments on the EA could be submitted online through the PEPC website, the Yose_Planning@nps.gov email address, by U.S. mail, and fax.

The public review period was announced in a press release, a Yosemite electronic news release, the Yosemite National Park Daily Report, the Mariposa Gazette, and on the Yosemite National Park website. During the review period, the NPS held a webinar on February 10, 2012 and an open house on February 29, 2012 to disseminate information and collect written comments on the *Half Dome Trail Stewardship Plan EA*. Following presentations, park staff answered questions clarifying the proposed action; no written comments were submitted at the webinar or open house.

During the 52-day public comment period, the park received 1,649 public comment letters from individuals, 5 from businesses, 7 from organizations (Colorado Mountain Club, Wilderness Watch, Save Half Dome, Central Sierra Environmental Resource Center, Sierra Club's Yosemite Chapter, Tehipite Sierra Club Chapter, National Parks Conservation Association), 1 from a county government agency (Tuolumne County Board of Supervisors), and 1 from a federal government representative (California 4th District Representative Tom McClintock). Public comments included 1,073 form letters supporting the Selected Action. Although most commenters supported the need to address public safety, 41 form letters were received supporting Alternative A (No Action) and a comment letter from Save Half Dome that included an on-line petition with 576 signatures in support of Alternative A and the installation of a third cable. In addition to the letter from Wilderness Watch, 29 form letters supported Alternative E. The majority of individuals who commented were California residents. Many comments focused on the allocation of permits which was not part of the purpose and need statement and, consequently, were not analyzed in the *Half Dome Trail Stewardship EA Public Comment and Response Report*.

Comment analysis identified 1,716 discrete comments, from which 75 general concern statements were generated. The planning team prepared responses to all those comments that were considered substantive. Comments concerning effects of the potential dispersal of Half Dome use to other wilderness trails resulted in a minor change to the cumulative impact analysis on wilderness character. Comments that resulted in (1) changes to the text of the EA for the purpose of clarification and (2) alterations of prescribed actions for implementation of the permit system under the Selected Action are presented in the Errata. All substantive comments and associated responses are documented in the *Half Dome Trail Stewardship Plan Public Comment and Response Report* available online at <http://parkplanning.nps.gov/HalfDome>.

The list below summarizes the spectrum of substantive comments received during the comment period:

Finding of No Significant Impact

- Clarify relationship among safety, crowding, and wilderness character
- Clarify effects to wilderness character as they relate to the Wilderness Act and case law
- Reconsider removal of the Half Dome cables
- Reconsider removal of the Half Dome Trail from designated Wilderness
- Reconsider addition of a third cable
- Clarify methodology used in visitor use studies and future monitoring
- Define NPS' role in visitor safety and managing personal risk in wilderness
- Reconsider allocation of permits for commercial use
- Stipulate how the permit program will ensure equitable access and protect against misuse and scalping
- Reconsider period for which permits are required
- Stipulate considerations in instances of inclement weather
- Describe educational messaging and training associated with the permit system
- Quantify displacement impacts on other wilderness areas in Yosemite
- Clarify relationship of the Half Dome Trail Stewardship Plan to other plans in Yosemite and other national wilderness areas

CONSULTATION

Culturally Associated American Indian Tribes and Groups

Yosemite National Park consulted with traditionally-associated American Indian tribes and groups. These tribes and groups included the American Indian Council of Mariposa County, Inc. (aka Southern Sierra Miwok Nation), Tuolumne Band of Me-Wuk Indians, North Fork Mono Rancheria, Picayune Rancheria of Chukchansi Indians, Bridgeport Paiute Indian Colony, Mono Lake Kutzadika'a Tribe, and Bishop Paiute Tribe. Consultation was initiated in a letter of correspondence on June 24, 2010. Each tribe or group received a hard copy of the EA mailed in February 2012. The NPS did not receive any direct comments or responses from traditionally-associated American Indian tribes and groups during the planning phases of this EA. Consultation will continue through implementation of the *Half Dome Trail Stewardship Plan* project to ensure that any potential concerns are addressed accordingly.

California State Historic Preservation Officer

The 1999 *Park Programmatic Agreement Among the National Park Service at Yosemite, the California State Historic Preservation Officer and the Advisory Council on Historic Preservation Regarding Planning, Design, Construction, Operations and Maintenance, Yosemite National Park, California* (1999 PA) was developed to coordinate consultation and methods for the park to carry out its responsibilities under Section 106 of the National Historic Preservation Act (NHPA).

In accordance with the 1999 PA and consistent with 36 CFR Part 800.3(b) and 36 CFR Part 800.8, consultation with the California State Historic Preservation Office was conducted concurrently for NEPA and the NHPA. The NHPA Section 106 review process is documented in the EA. In accordance with Stipulation VIII B of the 1999 PA, the NPS provided the State Historic Preservation Officer with a consultation letter requesting concurrence on the determination of no adverse effect to historic properties. A response concurring with the no adverse effect was received by email November 1, 2011.

U.S. Fish and Wildlife Service

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 et seq.), requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or adversely modify critical habitat. The NPS requested a list of federally-listed endangered and threatened species for the project analysis area. The list received from USFWS was used as a basis for the special status analysis in the EA. Based on this list, park data, and park staff's professional knowledge and judgment, the park determined that the alternatives would not adversely affect species that are federally listed as threatened or endangered or their critical habitat. The NPS notified the USFWS of this finding and requested the agency review these findings and respond.

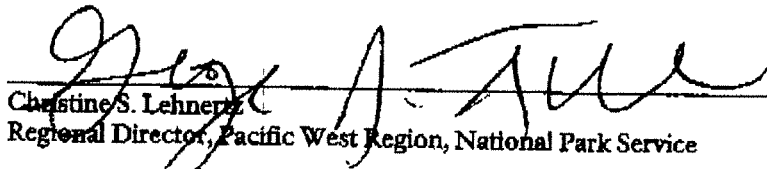
CONCLUSION

Based on information contained in *The Half Dome Trail Stewardship Plan EA*, as summarized above, and the nature of comments received from affected agencies, tribes and groups, and the public, it is the determination of the NPS that the Selected Action is not a major federal action that will significantly affect the quality of the human environment. A "Determination of Non-Impairment" is included. In accordance with the NEPA of 1969 and regulations of the CEQ (40 CFR 1508.9), an environmental impact statement will not be prepared. The Selected Action, as detailed in *The Half Dome Trail Stewardship Plan EA* (with slight modifications to permit allocation for commercial use), may be implemented as soon as practicable.

Recommended:


Don L. Neubacher
Superintendent, Yosemite National Park
Date 12/12/12

Approved:


Christine S. Lehnertz
Regional Director, Pacific West Region, National Park Service
Date 12/19/12

The Half Dome Trail Stewardship Plan Environmental Assessment Determination of Non-Impairment December 2012

Yosemite National Park

DETERMINATION OF NON-IMPAIRMENT

While Congress has given the National Park Service (NPS) management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the NPS must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This cornerstone of the Organic Act establishes the primary responsibility of the NPS, to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The impairment of park resources and values may not be allowed by the NPS unless directly and specifically provided for by legislation or by the proclamation establishing the park. The relevant legislation or proclamation must provide explicitly (not by implication or inference) for the activity, in terms that keep the NPS from having the authority to manage the activity so as to avoid the impairment.

The impairment that is prohibited by the Organic Act and the General Authorities Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts.

An impact to any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. An impact that may, but would not necessarily, lead to impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners,

Determination of Non-Impairment

contractors, and others operating in the park. Impairment may also result from sources or activities outside the park.

NPS' *Management Policies 2006* requires analysis of potential effects to determine whether or not actions would impair park resources. Park resources and values that are subject to the no-impairment standard include:

- park scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Based on enabling and wilderness legislation, legislation of October 1890, the 1984 California Wilderness Act, and the 1980 *Yosemite General Management Plan*, the purposes of Yosemite National Park are to:

- *provide for the preservation from injury of all timber, mineral deposits, natural curiosities, or wonders within said reservation, and their retention in their natural condition.*” (H.R. 12187)
- *preservation of the resources that contribute to Yosemite's uniqueness and attractiveness – its exquisite beauty; outstanding wilderness values; a nearly full diversity of Sierra Nevada environments, including the very special sequoia groves; the awesome domes, valleys, polished granites, and other evidences of the geologic processes that formed the Sierra Nevada; historic resources, especially those relating to the beginnings of a national conservation ethic; and evidences of the Indians that lived on the land.*
- *to make the varied resources of Yosemite available to people for their individual enjoyment, education, now and in the future*
- *[wilderness areas] shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness*

Based on the 1916 Organic Act and 1980 *Yosemite General Management Plan*, topics from the EA that were evaluated for potential impairment due to implementing the Selected Action include wilderness, vegetation resources (including non-native species), wildlife, federally listed species and species of special concern, and historic properties. Non-resource topics such as visitor experience, risk management, park operations, and socioeconomics are not subject to impairment determinations.

Wilderness

Wilderness character consists of four broad qualities: untrammeled, natural, undeveloped, and outstanding opportunities for solitude or a primitive and unconfined type of recreation.

The *untrammeled* quality is unaffected by the Selected Action. No manipulation of natural processes will occur as a result of this action.

The *natural* quality will benefit from the Selected Action because reduced use will result in reduced impact on the natural environment. Additionally, the permit system will afford increased opportunities for stewardship education.

The *undeveloped* quality is unaffected by the Selected Action, as no changes are proposed for the existing trail system.

Opportunities for *solitude* are vastly improved by the Selected Action. Opportunities for a *primitive* experience are essentially the same as at present. Opportunities for *unconfined* recreation are diminished by the new permit system.

The overall effect of the Selected Action is an improvement to wilderness character. While the benefit to *solitude* and the natural environment is partially offset by the requiring visitors to obtain a permit, tradeoffs like this are often required in popular wilderness areas, and diminishment of the unconfined quality does not reach the level of impairment.

Vegetation and Biotic Communities

Most vegetation in the park is classified into five forest vegetation zones and associated meadow zones. Three of the five forest vegetation zones occur along the Half Dome Trail.

Upper Montane Forests – Most of the Trail occurs within the Upper Montane Forests zone ranging from about 5,900 to 7,870 feet above mean sea level. This zone is characterized by montane chaparral and various coniferous forest communities. There are short, cool summers and cold winters there, and nearly all precipitation is in the form of snow.

Subalpine Forests – On the upper slopes approaching Half Dome, the Trail crosses through Subalpine Forests characterized by whitebark pine (*Pinus albicaulis*), mountain hemlock (*Tsuga mertensiana*), and lodgepole pine (*Pinus contorta*). This zone overlaps in elevation with the Upper Montane Forests zone, and it has short summers and long, cold, snowy winters with a lot of deep snow.

Alpine – The last half mile of Trail up to the Half Dome summit goes through the Alpine zone. This area is mostly granite rock with some small pockets of vegetation found in depressions that collect water. Mosses, succulents and other low-growing plants are typically seen in these small pockets.

Impacts to vegetation resources in the project area have been from trampling along the Trail's edge and soil erosion on the Trail's bed -- both caused by high numbers of hikers. The Selected Action will reduce both of these impacts by reducing the number of hikers on the Trail and targeted resource protection education as part of the permit system. The Selected Action would not result in impairment to the vegetation and biotic communities.

Wildlife

The park supports a variety of wildlife that can be seen in a wide range of habitats. Species vary with the types of vegetation that occur, and some vegetation zones are more diverse than others. Wildlife species in the Upper Montane Forest Zone include the great gray owl (*Strix nebulosa*), red-tailed hawk (*Buteo jamaicensis*), olive-sided flycatcher (*Contopus cooperi*), mountain chickadee (*Poecile gambeli*), Steller's jay (*Cyanocitta stelleri*), coyote (*Canus latrans*), black bear (*Ursus americanus*), mule deer (*Odocoileus hemionus*), weasel (*Mustela spp.*), bushy-tailed woodrat (*Neotoma cinerea*), and golden-mantled ground squirrel (*Spermophilus lateralis*).

Patches of meadow habitats support amphibians and provide nesting habitat for water birds. During summer these areas also provide green vegetation for mule deer.

Subalpine Forests near the Trail includes lodgepole pine and whitebark pine/mountain hemlock forests. Wildlife species there include the Yosemite toad (*Bufo canorus*), Clark's nutcracker (*Nucifraga columbiana*), dusky flycatcher (*Empidonax oberholseri*), Williamson's sapsucker (*Sphyrapicus thyroideus*), pine siskin (*Carduelis pinus*), yellow-bellied marmot (*Marmota flaviventris*), and golden-mantled ground-squirrel.

Alpine habitat is dominated by talus, rocky outcrops, and rock slabs characteristic of Yosemite's highest elevation peaks. Wildlife there includes the Sierra Nevada yellow-legged frog (*Rana sierrae*), prairie falcon (*Falco mexicanus*), golden eagle, gray-crowned rosy-finch (*Leucosticte tephrocotis*), horned lark (*Eremophila alpestris*), Belding's ground squirrel (*Urocitellus beldingi*), American pika (*Ochotona princeps*), and Sierra Nevada big-horned sheep (*Ovis Canadensis sierrae*).

Impacts to wildlife in the project area have included trampling of vegetation along the Trail corridor, increased availability of human food and trash to wildlife, and noise and visual disturbance from hikers on the Trail. Wildlife in the area, particularly squirrels and chipmunks, have become habituated to hikers and have received food from handouts and from food left in unattended packs. The Selected Action will reduce these impacts by reducing the number of hikers on the Trail and through targeted stewardship education as part of the permit system. The Selected Action would not result in impairment to wildlife.

Special Status Species

For purposes of this analysis, "special status species" are defined as plants and wildlife that are listed as follows:

- U.S. Fish and Wildlife Service (USFWS) endangered, threatened, proposed or candidate species;
- State of California endangered, threatened, candidate, rare, or fully protected species, species of special concern, or (more specifically) California bird species of special concern; and/or
- Reported observations, scientific research, and NPS professional judgment.

A list of 17 special status species that have the potential to occur in the 6,000 to 9,000 foot range surrounding the Half Dome Trail project area was developed (Table 3-3 in the EA). From this list, NPS staff determined that only the Mount Lyell Salamander is known to occur in the project vicinity.

The Mount Lyell salamander (*Hydromantes platycephalus*) is both a special status species and a California species of special concern. This salamander occurs in a wide range of elevations, mostly above 4,000 feet, in rock fissures, snowmelt seeps, and waterfall habitats. The species has a broad geographic range, but occurs in small local populations.

Mount Lyell salamanders have historically been documented on Half Dome. In the 1930s, NPS ranger-naturalists collected more than 100 salamanders. A breeding population of Mount Lyell salamanders currently exists on Half Dome, south of the Trail. No salamanders have been documented in the immediate vicinity of the Trail since 1993.

Mount Lyell salamanders are nocturnal and live in areas not frequented by day hikers. They spend the day under flat rocks that cover small, water-carved cavities in gravel. They avoid bare, dry areas and, consequently, they are generally not disturbed by hikers.

The NPS evaluated effects of the alternatives according to guidance outlined in the 1998 USFWS and National Marine Fisheries Service *Endangered Species Act Consultation Handbook: Procedures for Conducting Section 7 consultations and Conference Activities*, and as described below:

- *No Effect*: The project (or action) is located outside suitable habitat, and there would be no disturbance or other direct, indirect, or cumulative impacts on the species. The action would not affect the listed species or its designated critical habitat.
- *May Affect, Not Likely to Adversely Affect*: The project (or action) occurs in suitable habitat or results in indirect impacts on the species, but the effect on the species is likely to be entirely beneficial, discountable, or insignificant. The action might pose effects on listed species or designated critical habitat, but given circumstances or mitigation conditions, the effects might be discounted, insignificant, or completely beneficial. Insignificant effects would not result in take. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not (1) be able to meaningfully measure, detect, or evaluate insignificant effects or (2) expect discountable effects to occur.
- *May Adversely Affect*: The project (or action) would have an adverse effect on a listed species as a direct, indirect, or cumulative result of the proposed action or its interrelated or interdependent actions, and the effect is not discountable, insignificant, or beneficial.

The impact evaluation for special status wildlife species was based on the following: (1) the known or likely occurrence of a species or its preferred habitat in the vicinity of the project area; (2) the direct physical loss or gain, or modification of habitat; and (3) the effective loss of habitat (through avoidance or abandonment) due to visitor activity or noise or other species' sensitivity to human disturbance.

Direct impacts to the Mount Lyell salamander would be negligible because this species is nocturnal and is not typically affected by day-use activities. Local indirect impacts from improper disposal of human waste or moving boulders could affect this species' habitat, especially if hikers enter areas where this species and its habitat occur. The Selected Action will reduce these impacts by reducing the number of hikers on the Trail and through targeted resource protection education as part of the permit system. Therefore, the Selected Action may affect, but is not likely to adversely affect, special status species.

Cultural Resources

The area of potential effect for this project is a 100 meter buffer on either side of the two miles of the Half Dome Trail. This area was determined to include all resources that might be affected by visitor use of the Trail.

The Half Dome Cables and Trail National Register nomination was prepared by the park's Cultural Resources staff to fulfill National Historic Preservation Act (NHPA) Section 110 requirements stating that federal agencies identify, evaluate, and nominate properties to the National Register of Historic Places (NRHP). This draft nomination was submitted for concurrence from the California State Historic Preservation Officer (SHPO) and the Keeper of the National Register in September 2011. The property was determined eligible to the National Register and was listed on the NRHP in August of 2012.

The Half Dome Cables and Trail nomination reached the following conclusions:

- The Half Dome Cables and Trail is eligible for listing in the National Register as a Historic District with a period of significance extending from George Anderson's ascent of Half Dome and concluding after the cable route and switchbacks were installed by the Sierra Club (1875-1919).
- The Half Dome Cables and Trail Historic District has three contributing features (Half Dome Trail Alignment, Granite Stone Masonry Steps and Retaining Walls, and the Anderson Memorial Arch Ruins) and one non-contributing feature (Half Dome Cables and Stanchions). Although the Half Dome Cables and Stanchions are listed as non-contributing due to their replacement in 1934 and 1984, they are considered compatible within the historic property.
- The Half Dome Cables and Trail is considered to have local historic significance under National Register Criterion A as one of the earliest trails to a Yosemite Valley high mountain summit and as one of the most difficult trail building projects in the park. It also has local historic significance under National Register Criterion B for its association with George Anderson, and local historic significance under National Register Criterion C for its technological advances in the design and construction of modern technical rock climbing.

Today, the Half Dome Cables and Trail remains much as it did in 1919. It maintains a high degree of integrity in location, design, setting, workmanship, feeling, and association but has substantially diminished integrity of materials.

The historic location of the stairway switchbacks leading to the cables and the cables themselves has not changed. The design of the route remains true to the 1919 installation by the Sierra Club as a granite switchback stairway leading to a pair of steel cables up Half Dome. The setting of the Half Dome Cables and Trail remains unchanged; it is situated in an otherwise undeveloped part of Yosemite's wilderness, towering above the eastern portion of Yosemite Valley. Historic workmanship is evidenced through dry-laid stone masonry and through the many George Anderson and Sierra Club era drill holes that follow the alignment of the cables. The historic feelings of adventure, exploration, and triumph are still experienced by those who ascend the Half Dome cables. Finally, this route conveys a direct and tangible association to the site's significance in recreation, transportation, and invention and to its association with George Anderson. This popular hike has captured the imagination of Yosemite visitors since George Anderson first ascended the granite monolith in 1875 and it remains a definitive experience for park visitors today.

No eligible or potentially eligible archeological resources have been identified along the Half Dome Trail corridor.

Determination of Non-Impairment

The Selected Action would allow the public to continue to experience the historic feeling of the Half Dome Cables and Trail Historic District. Minor structural improvements of the cables would be completed in a manner consistent with the historic workmanship and design and would therefore not affect the integrity of the property and would not impair the cultural resource.

SUMMARY

As described above, adverse effects and environmental impacts anticipated as a result of implementing the Selected Action on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or identified as significant to the park's general management plan or other relevant NPS planning documents, would not rise to levels that would constitute impairment of park values and resources.

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Determination of Non-Impairment

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The Half Dome Trail Stewardship Plan Environmental Assessment Errata Sheets

December 2012

Yosemite National Park

ERRATA SHEETS

The *Half Dome Trail Stewardship Plan Environmental Assessment* (EA) was available for public review and comment from January 24, 2012 through March 15, 2012. During the 52-day public comment period, the park received 1,649 public comment letters from individuals, 5 from businesses, 6 from organizations (Colorado Mountain Club, Wilderness Watch, Save Half Dome, Central Sierra Environmental Resource Center, Sierra Club's Yosemite Chapter, Tehipite Sierra Club Chapter), 1 from a county government agency (Tuolumne County Board of Supervisors), and 1 from a federal government representative (California 4th District Representative Tom McClintock). Public comments included 1,073 form letters supporting the Selected Action. Although most commenters supported the need to address public safety, the park received 41 form letters supporting Alternative A (No Action) and a comment letter from Save Half Dome that included an online petition with 576 signatures in support of Alternative A and the installation of a third cable. In addition to the letter from Wilderness Watch, 29 form letters supported Alternative E. The majority of individuals who commented were California residents. Many comments focused on the allocation of permits which was not part of the purpose and need statement and, consequently, were not analyzed in the *Half Dome Trail Stewardship EA Public Comment and Response Report*.

Discrete comments were screened to determine whether any new issues, reasonable alternatives, potential for significant impacts, or mitigation measures were suggested. Comments in favor of or against the proposed action or alternatives, or comments that only agreed or disagreed with National Park Service (NPS) policy were not considered substantive, if they did not challenge the accuracy of the analysis, dispute information accuracy, suggest different viable alternatives, and/or provide new information that changed the proposal. The comment analysis generated 75 concern statements which were all categorized and addressed by the NPS. All comments and NPS responses are included in the *Half Dome Trail Stewardship Plan Public Comment and Response Report*, which is available on the Yosemite National Park website at http://www.nps.gov/yose/parkmgmt/hdp_information.htm.

The list below summarizes the spectrum of substantive comments received during the comment period:

- Clarify relationship among safety, crowding, and wilderness character
- Clarify effects to wilderness character as they relate to the Wilderness Act and case law
- Reconsider removal of the Half Dome cables
- Reconsider removal of the Half Dome Trail from designated Wilderness
- Reconsider addition of a third cable
- Clarify methodology used in visitor use studies and future monitoring

Errata Sheets

- Define NPS' role in visitor safety and managing personal risk in wilderness
- Reconsider allocation of permits for commercial use
- Stipulate how the permit program will ensure equitable access and protect against misuse and scalping
- Reconsider period for which permits are required
- Stipulate considerations in instances of inclement weather
- Describe educational messaging and training associated with the permit system
- Quantify displacement impacts on other wilderness areas in Yosemite
- Clarify relationship of the Half Dome Trail Stewardship Plan to other plans in Yosemite and other national wilderness areas

Comments received on the EA resulted in either: (1) technical corrections requiring changes to the EA text or (2) responses to substantive comments on the EA that influenced the development of the Selected Action in the Finding of No Significant Impact (FONSI).

TECHNICAL CORRECTIONS REQUIRING CHANGES TO THE TEXT

The following list includes clarifications or technical corrections to the EA. Where a change was made due to a comment received, an excerpt of the comment is noted. None of the corrections listed below significantly affect the analyses or conclusions regarding the effect of the EA.

Page ES-iv, Table ES-1, Add before the table "The numbers included in this table are based on modeling from visitor use studies conducted during the 2010 season."

Page 1-9, Paragraph 3; Page 2-19, Table 2-3; Page 2-21, Table 2-3; Page 2-22, Table 2-3; Page 2-24, Table 2-3; Page 3-7, Paragraph 6; Page 3-8, Paragraph 6; Page 3-9, Paragraph 6; Page 3-10, Paragraph 5; Page 3-11, Paragraph 6; Page 13, Paragraph 6; Page 3-14, Paragraph 2; Page 3-17, Paragraph 7; Page 3-23, Paragraph 6 and Paragraph 10; Page 3-24, Paragraph 6; Page 3-29, Paragraph 10; Page 3-31, Paragraph 4; Page 3-34, Paragraph 5 and Paragraph 6; Page 3-35, Paragraph 5 and Paragraph 6; Page 3-36, Paragraph 5 and Paragraph 6; Page 3-37, Paragraph 1, Paragraph 2, and Paragraph 10; Page A-2, last section; Change "Yosemite Wilderness Stewardship Plan Environmental Impact Statement (EIS)" to "Yosemite National Park Wilderness Stewardship Plan/Environmental Impact Statement." The plan will not be a re-write, revision, or an update. This will be a new management plan which will replace the existing plan. This change was made based on the following comment received "*One concern I have [is] the reference to Yosemite National Park's intention of embarking on a new Wilderness Stewardship Plan. In the document it states it will be a "Plan" (page 2-11 Table 2-3), as a "Plan revision" (page 3-37) and also "plan update" (Appendix A-2). Is the 1989 Yosemite Wilderness Plan to be re-written, updated or revised?*" (Individual, #478)

Page 1-9 Paragraph 4, Change entire paragraph to "Decisions made in this EA regarding use limits and wilderness facilities may be revisited in the forthcoming Wilderness Stewardship Plan/Environmental Impact Statement (EIS) as part of the park's overall wilderness planning effort. This EA does not constrain the range of alternatives that would be considered in the future wilderness EIS. Decisions made in the EIS may supersede those made in this EA. Wilderness stewardship strategies developed for the EIS may also affect day and overnight use of other trails that lead to Half Dome. Such changes could, in turn, affect use levels at Half Dome. Any such changes would be evaluated comprehensively in the new wilderness plan." based on comment received "*One concern I have [is] the reference to Yosemite National Park's intention of embarking on a new Wilderness Stewardship Plan. In the document it states it will be a "Plan" (page 2-11 Table 2-*

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3), as a "Plan revision" (page 3-37) and also "plan update" (Appendix A-2). Is the 1989 Yosemite Wilderness Plan to be re-written, updated or revised? (Individual, #478)

Page 2-4, Paragraph 2, Add "Wilderness Permits are required only for overnight wilderness users." Based on comment received "Page 2-4 second paragraph; make sure it is clear that YOSE Wilderness Permits are ONLY required for overnight wilderness users." (Individual, #478)

Page 2-7, Paragraph 3, Delete "400" and replace with "300" based on the comment received "I've already emailed you about the cut and paste errors on pages 2-7 (alternative B) and 2-11 (alternative D), the management target number of hikers is under these alternatives is not 300, but rather 400 and 140, respectively." (Individual, #51)

Page 2-16, Paragraph 4, Add "Public Safety – Managing Personal Risk" as a factor for evaluation based on comment received "Then there is the list on page 2-16, which described the "seven evaluation factors" for the alternatives. Perhaps a bit of a Freudian Slip that there are just six items listed, not one of which is safety oriented." (Individual, #537)

Page 2-22, Table 2-3, Natural Resources-Wildlife Cumulative Effects for Alternative A, Change "A primary objective of the Wilderness Stewardship Plan Revision is to protect and enhance wilderness character, which includes protecting the fauna in its natural state." to "A primary objective of the Yosemite National Park Wilderness Stewardship Plan/Environmental Impact Statement will be to protect and enhance wilderness character, which includes protecting the fauna in its natural state."

Page 3-16, Paragraph 2, Change "Once off the cables, visitors can travel at their own speed and are unconstrained in finding safer ground." to "Once off the cables, visitors can travel at their own speed and are less constrained in finding safer ground." based on comment received "Page 3-16 second paragraph; once off the Half Dome Cables the trail is still "constrained" and in places like the Sub-Dome it is constrained with potentially deadly consequences if you stray off of the trail." (Individual, #478)

Page 3-30, Add after 4th paragraph "For approximately 4 days at the beginning of the summer season and 4 days at the end of the summer season an additional 6-12 park staff will stay at the NPS Camp at Little Yosemite Valley to put up and take down the cable section of the trail." based on comment received "Just the nature of and increased need to manage Half Dome means and increased administrative presence unless clearly stated why not (limited number of people require less management then unlimited numbers)." (Individual, #478)

Page 3-39, Paragraph 4, Remove "However, the amount of soil, vegetation, and wildlife habitats affected by the presence of the Trail is very limited relative to what is available in the park."

Page 4-1, Paragraph 1, Change "Internal scoping included analysis from specialists such as historical landscape architects, archeologists, hydrologists, biologists, social scientists, maintenance and facilities staff, park rangers, and other NPS staff. . .", to "Internal scoping included analysis from specialists such as historical landscape architects, archeologists, hydrologists, biologists, outdoor recreation planners, wilderness specialists, social scientists, maintenance and facilities staff, park rangers, and other NPS staff" based on comment received "Page 4-1, first paragraph; list of specialists in 2nd sentence should include Outdoor Recreation Specialist; Wilderness Specialist - you can confirm this with the list of prepares on page 5-1." (Individual, #478)

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Page 4-2, Paragraph 4, Change “The list received from USFWS on was used as a basis for the special status analysis in this EA.” to “The list received from USFWS on November 14, 2011 was used as a basis for the special status analysis in this EA.”

Page 7-1, Add “California Wilderness Act of 1984. Public Law No. 98-425”

Page A-3 to A-4, last sentence, Change "The National Park Service is updating the 1989 *Yosemite Wilderness Management Plan*. The objective associate with updating the plan is to assess current conditions and trends..." to "The National Park Service is replacing the 1989 *Yosemite Wilderness Management Plan* with a Yosemite National Park Wilderness Stewardship Plan/Environmental Impact Statement. The objective associated with replacing the plan is to assess current conditions and trends..." based on comment received “*One concern I have [is] the reference to Yosemite National Park's intention of embarking on a new Wilderness Stewardship Plan. In the document it states it will be a "Plan" (page 2-11 Table 2-3), as a "Plan revision" (page 3-37) and also "plan update" (Appendix A-2). Is the 1989 Yosemite Wilderness Plan to be re-written, updated or revised?*” (Individual, #478)

RESPONSE TO SUBSTANTIVE COMMENTS THAT INFLUENCED THE SELECTED ACTION

This section is a summary of substantive public comments regarding the Preferred Alternative in the EA that influenced development of the Selected Action in the FONSI.

Concern: The NPS should analyze how reducing the number of hikers on Half Dome Trail will affect Wilderness Character on other trails within the park.

In each section of the affected environment, the preferred action failed to analyze the effects on other areas of the park. If the NPS proposes to limit access to Half Dome through a permit process there is a possibility that potential users will be forced/decide to use other trails to accommodate for the quota. This could lead to an increase in crowding, user conflict, soil erosion, and SAR within other areas or trails of Yosemite NP.

The preferred alternative will be beneficial to Half Dome, but has potential to cause problems in other areas of the park.

This EA has the potential to distribute users who would have climbed Half Dome to lesser-used areas of the park, and this document should state that. (Individual, #45)

The other trails might get more crowded as use is reduced on this trail. This seems to be happening ever since the quota went into effect. (Individual, #517)

If the demand for the Half Dome Trail on weekends is in the neighborhood of 1,000 people per day, with only 300 permits available, it stands to reason that a substantial portion of these other 700 people may choose and are choosing other nearby trails instead, all of which already have substantial use. This impact is wholly unaddressed, and the preferred alternative as well as the interim emergency permit plan may be compounding already overcrowded conditions on these other wilderness trails. Before adopting a final EA, NEPA requires that this impact be addressed. In particular any analysis of this impact should address the compliance of these other trails with the apparent strict requirement for solitude contained in the Wilderness Act, especially with the additional traffic of those turned away from Half Dome. (Individual, #544)

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Response: While the Selected Action is expected to decrease day use on the Trail between the top of Nevada Fall and the start of the Half Dome Trail, it also has the potential to disperse and increase day use and its associated impacts to other areas of the park. The plan will be modified to reflect this possibility. Scientific studies of dispersal of day use have not been conducted. However, NPS social science staff expects that any dispersed use will not be concentrated to one trail, but will instead result in a nominal redistribution to a number of trails around the park. Scientific assessment of use on wilderness trails throughout the park, and the appropriate management response will be addressed in the upcoming *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement*. If demand for overnight use (wilderness camping) shifts to other wilderness areas of Yosemite it will be regulated by existing trailhead quotas which remain unchanged.

Topics related to visitor use are addressed in the Visitor Experience Section located in Chapter 3 of the EA.

Page 3-8, Paragraph 5; Page 3-9 Paragraph 5; Page 3-10 Paragraph 4; and Page 3-11 paragraph 5 Add “While this alternative is expected to decrease day use on the trail between the top of Nevada Fall and the start of the Half Dome Trail, it also has the potential to disperse and increase day use and its associated impacts to other areas of the park. Scientific studies of dispersal of day use have not been conducted. However, NPS social science staff expects that any dispersed use will not be concentrated to one trail but will instead result in a nominal redistribution to a number of trails around the park. Scientific assessment of increased use on other trails in the park and any mitigation needed will be addressed in the upcoming *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement*. Overnight use (wilderness camping) should not shift to other wilderness areas of Yosemite as overnight use is regulated by existing trailhead quotas which remain unchanged.”

Concern: The NPS should develop and implement a process to fairly measure and publically report the impacts from this permit system.

A process to fairly measure and publically report the decline in outdoor recreation from this arbitrary NPS policy needs to be implemented. (Individual, #521)

Response: The Park will make Half Dome Trail use data available annually. This commitment will be added to the Selected Action. During the implementation of the 2010-2012 interim permit system the park has not recorded a decline in outdoor recreation; conversely, it recorded the highest park visitation in recent years.

Page 2-9; paragraph 6 Add: “The NPS would post annual results of Half Dome Trail use data collection on the park website in order to be transparent about the potential adjustments to the allocation system.”

Concern: The NPS should set aside permits for qualified commercial users.

(a) setting aside a number of daily permits (12-15 participants for instance) separate from the public lottery that commercial outfitters such as SYMG can reserve through the wilderness office when we have bookings. All CUA holders allowed to lead day trips up Half Dome would share in this permit pool. This is similar to how the wilderness permitting system operates in Inyo and Sierra National Forests. (Business, #435)

Addressing this issue of commercial guiding groups being able to get 12-15 permits a day, on behalf of Camp Tawonga, I have thought of a possible solution. In order to allow for organizations and

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commercial users to plan ahead and be guaranteed a certain number of permits per day, there would need to be a system in which they could prove their purpose of use (either educational or scenic), and be awarded permits on certain dates thru an advanced reservation service competing with other commercial users (instead of competing with the public). This could be a separate lottery system, similar to the one used for the public for the 2012 season. During the lottery system the commercial user could pay an extra fee, show proof of commercial use and reasons for the Half Dome trip (either educational or scenic). They could be awarded up to 10 extra permits (in addition to the 5 permits per day set aside earlier) for the dates that they desired. Similar to the lottery system this year, there could be a maximum of seven days each trip leader is able to request. As proposed already the policy could cap the amount of commercial educational permits at 30 per day and commercial scenic permits at 15 per day. This system would reduce the competition that commercial users would have if they were allocated permits in the general public's lottery system (as proposed in Alternative C). (Business, #498)

Response: Half Dome Permit Distribution for Commercial Users as described in the Selected Action on page 2-10 will be modified to allow for greater flexibility in the allocation of permits for commercial services. The original Determination of Extent Necessary (DEN) for commercial use prescribed 30 people a day using educational services and 15 people a day able to use scenic services, limited by an overall restriction of 2 guided parties per day. Further evaluation of the DEN (Appendix C of the EA) showed no advantage to imposing the restriction of 2 guided parties per day to meet the allocation goals for educational and scenic purposes.

Daily limits for commercial use, 45 total persons per day -- guides and clients (Appendix C of the EA) will not be changed, but the methods of allocation will remain open. This ensures equitable and efficient distribution, response to changes in use patterns, implementation of new technologies and meets DEN guidelines.

Page C-12, Paragraph 4, delete last sentence, "In order to maximize opportunities of noncommercial hikers, commercial trips will be limited to two per day."

Page 2-10, Replace Paragraph 2 and 3 with:

"Half Dome Permit Distribution for Commercial Use under the Preferred Alternative.

Commercial services providing educational or scenic trips on the Half Dome Trail will be allowed to provide up to a daily limit of 30 persons per day on guided educational trips and 15 persons per day on scenic trips. Commercial use numbers were set by the DEN as part of the EA. Though the amount of commercial use is set by the DEN, the allocation method for permits will be administered annually by the NPS to ensure equitable and efficient distribution, response to changes in use patterns, implementation of new technologies, and to meet DEN guidelines. Public notice will be given for any such modifications to the program."

Page 3-35 Under SOCIOECONOMICS – ALTERNATIVE C - 300 PEOPLE PER DAY (PREFERRED ALTERNATIVE) replace existing second paragraph with:

"Half Dome Permit Distribution for Commercial Use under the Preferred Alternative.

Commercial services providing educational or scenic trips on the Half Dome Trail will be allowed to provide up to a daily limit of 30 persons per day on guided educational trips and 15 persons per day on scenic trips. Commercial use numbers were set by the DEN as part of the EA. Though the amount of commercial use is set by the DEN, the allocation method for permits will be administered annually by the NPS to ensure equitable and efficient distribution, response to

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changes in use patterns, implementation of new technologies, and to meet the guidelines of the DEN. Public notice will be given for any such modifications to the program.

Concern: The NPS should develop a system to allow permits to be transferred between users.

The new system does not allow transference of a permit. I have to apply for a permit four months before my planned hike. At this time, I'm not even sure who will be going with me. Even if I did, if my hiking partner should cancel on me, does this mean I am not allowed to select a new partner, since they won't be able to use one of my permits? That is completely unreasonable. (Individual, 539)

Response: The Plan has been modified to reflect that under all permit alternatives permits are transferrable, except for the trip leaders'. Trip leaders' permits are not transferrable. The public has asked for a degree of integrity that reduces the likelihood of misuse and scalping. The requirement that either a predetermined trip leader or an alternate must be present with the hiking group is one means of meeting this public expectation.

References to the transfer of permits are located on the following pages of the EA: Page ES-vii, paragraph 3, Page 2-7, paragraph 7; Page 2-9, paragraph 4; Page 2-11, paragraph 2.

Concern: The NPS should cite the source which estimated the user numbers for each alternative in table ES-1.

The numbers in Table ES-1 are not explained well and the alternatives are not treated equally. Much of the Table appears to rely heavily on model assumptions. Explain where the numbers are coming from for each alternative. (Individual, #517)

Response: The data populating Table ES-1 was derived from the study Pettebone et al. 2010. The maximum use level of 1,200 persons per day (considered for the No Action Alternative) was derived from data compiled in the 2008 study Lawson et al (2009). This clarification will be added to the plan.

Pettebone, D., B. Meldrum, C. Leslie, K. King, and J. Meath.

2010 Half Dome Trail Visitor Use Monitoring Report. Visitor Use and Social Sciences Branch, Division of Resources Management and Science, Yosemite National Park, El Portal, California. 42 pages.

Lawson, S., J. Choi, N. Reigner, P. Newman, and A. Gibson.

2009 Half Dome Cables Modeling and Visitor Use Estimation Final Report. Yosemite National Park. Updated January 2010. Resource Systems Group, Inc., White River Junction, Vermont. 57 pages + appendices.

Concern: The NPS should clarify that Yosemite Wilderness Permits are only required for overnight wilderness users.

Page 2-4 second paragraph; make sure it is clear that YOSE Wilderness Permits are ONLY required for overnight wilderness users. (Individual, #478)

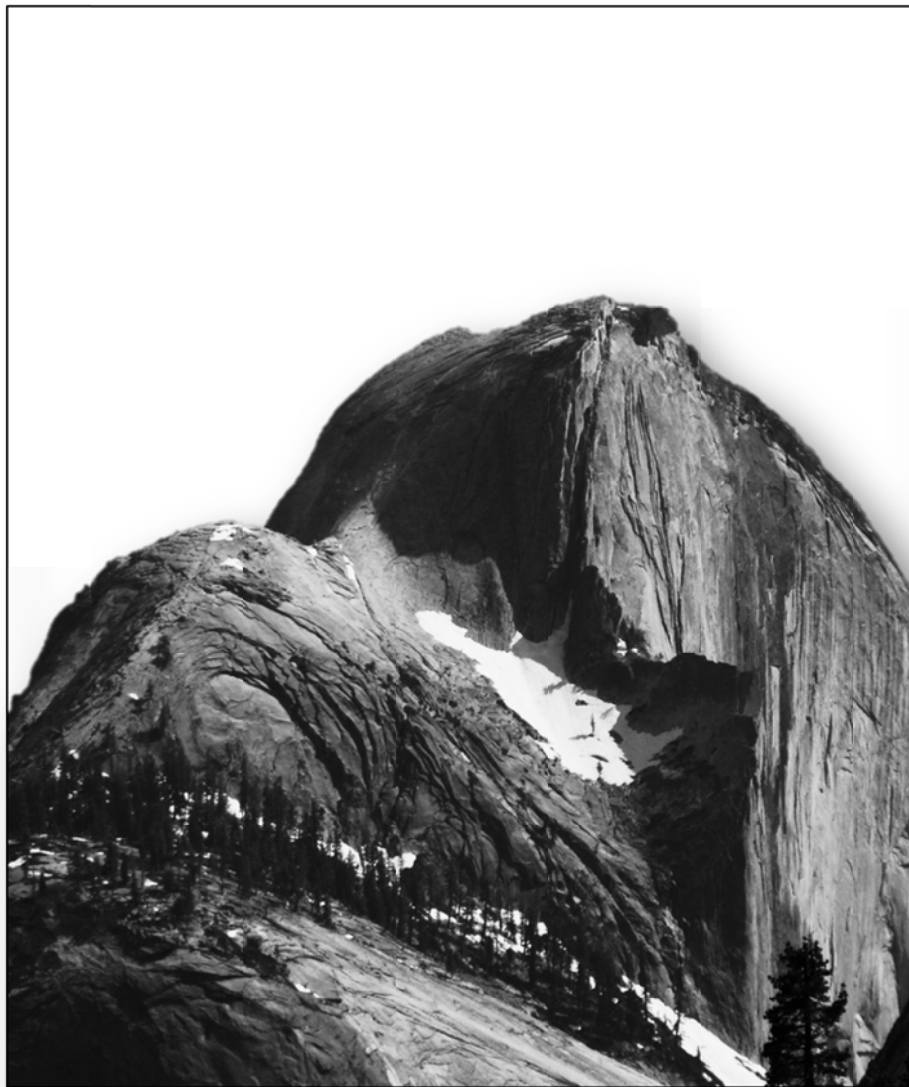
Response: Replace sentence beginning with "Yosemite's current Wilderness Permit System requires that wilderness users enter a specific trailhead," with "Yosemite's current Wilderness Permit System requires that overnight wilderness users enter a specific trailhead"

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Half Dome Trail Stewardship Plan Environmental Assessment

**Public Comment and Response Report
December 2012**



The Half Dome Trail Stewardship Plan Environmental Assessment Public Comment and Response Report

December 2012

Yosemite National Park

PUBLIC COMMENT AND RESPONSE REPORT

This report summarizes concerns expressed in public comment letters submitted on *The Half Dome Trail Stewardship Plan Environmental Assessment* (EA) and National Park Service (NPS) responses to substantive concerns. The NPS released the EA for public review from January 24, 2012 to March 15, 2012. Public comment letters on the proposed project were received through the Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/HalfDome> and by mail.

Once all the letters were coded for individual comments, similar comments were grouped together and a “concern statement” was generated. Concern statements are intended to capture the main points or common themes expressed by similar comments. Concern statements were then screened to determine whether or not further clarification was needed or whether modification of the proposed action was necessary. There are some clarifications and corrections to the EA based on public comment, mainly in the area of commercial use and prescribed actions for the implementation of the permit system. All corrections and clarifications are described in the Errata, and substantive changes are also included in the Finding of No Significant Impact (FONSI).

Lastly, the project team prepared responses to comments considered “substantive.” Substantive comments are those that:

- Question, with reasonable basis, the accuracy of information in the EA
- Question, with reasonable basis, the accuracy of environmental analysis
- Develop and evaluate reasonable alternatives other than those presented in the EA
- Cause changes to the proposal or alternatives
- Suggest factual corrections

All comments received during the public comment period have been duly considered by the NPS and are now part of the administrative record for this project. The full text of public comments can be viewed on the project website at <http://www.nps.gov/yose/parkmgmt/HalfDome.htm>. Personal information included with the comments (e.g., names and contact information) has been redacted in the online version to protect authors’ privacy.

RESULTS OF THE PUBLIC COMMENT ANALYSIS

During the 52-day public comment period, the park received 1,649 public comment letters from individuals, 5 from businesses, 6 from organizations (Colorado Mountain Club, Wilderness Watch, Save Half Dome, Central Sierra Environmental Resource Center, Sierra Club’s Yosemite

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Chapter, Tehipite Sierra Club Chapter), 1 from a county government agency (Tuolumne County Board of Supervisors), and 1 from a federal government representative (California 4th District Representative Tom McClintock). The analysis of these letters identified 1,716 discrete comments, from which 75 general concern statements were generated.

USING THIS REPORT

This report presents public concerns organized by topic, along with “supporting quotes,” that are verbatim excerpts from individual public comment letters. These supporting quotes are followed by whether the comment author was an individual, organization (with a general description of the organization type), agency, or American Indian tribe or group, and the assigned letter number. For example, “(Individual, #2)” is a comment from an individual who is unaffiliated with any organization, agency, or American Indian tribe or group and who submitted the second letter received.

Concerns that were considered substantive include a response from the project team. Substantive concerns and responses are listed first under each topic, followed by non-substantive concerns. Responses are not provided for non-substantive concerns (e.g., comments that oppose the proposed action but do not provide a substantive rationale and/or comments that do not meet the requirements listed above).

Following the list of public concerns and responses to substantive concerns, this report also presents a short summary of comments considered beyond of the scope of this planning effort.

PUBLIC CONCERNS AND RESPONSES

Purpose and Need

Concern 1: The NPS should have included the trail from the Valley Floor to the Half Dome summit in the EA analysis.

However, I question why the area under study didn't include the entire trail from the valley floor. The immense flow of hikers certainly has the same potential for impact all along the trail. (Individual, #34)

Response: Hikers starting at Happy Isles Trailhead in Yosemite Valley are travelling to a variety of destinations and connecting trails and not just to Half Dome. The two miles of the Half Dome Trail, the project area, is the only section of the Trail used almost exclusively by Half Dome hikers and thus is the focus of this EA. Use on the busiest sections of the Trail starting at Happy Isles will be addressed in the *Merced Wild and Scenic River Comprehensive Management Plan/Environmental Impact Statement*.

Concern 2: The NPS should address the goal of providing for public safety separately from reducing crowding.

The goals include the solution, preventing alternative solutions from being considered. The Plan has a stated goal of: "Improve public safety by reducing crowding on the Half Dome Trail", which seems like a pretty good goal until one realizes that it presumes that the only solution to improving public safety is to reduce crowding. Stating a solution as part of a goal essentially eliminates consideration of other alternative solutions. The Plan has another such goal: "Improve the visitor experience on the Half

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Dome Trail by reducing crowding". That has the same pre-defined solution, and thus should simply be: "Improve the visitor experience on the Half Dome Trail". (Individual, #537)

Response: This plan was initiated to address safety and wilderness issues that resulted from crowding. The action alternatives varied in the method of reducing crowding which ranged from a permit system to elimination of the cables. The alternatives also varied in the target number of people allowed on the Trail each day. Under the Selected Action, with a use limit of 300 people per day, use on the Half Dome Trail will be consistent with free-flowing conditions, with an average of 15 people at one time (PAOT) on the cables. Maximum levels would reach 36 PAOT during peak periods. Descent from the summit to Sub Dome during mass evacuations at maximum use levels is estimated to take 47 minutes. Alternative C would rarely result in impediments to free-flowing conditions on the cables even during the highest use levels. These would be greatly reduced compared to the No Action Alternative. Keeping use limits at 300 would better allow hikers to manage their own personal risk than under the No Action Alternative. Visitor perceptions of safe numbers on the cables would be met (below 70 PAOT). Additionally, targeted safety information during the permit process could increase hikers' knowledge of the risks associated with the Trail as well as strategies to manage those risks.

Wilderness

Concern 3: *The NPS should not use the Lawson et al. 2009 study to determine levels of unacceptable crowding because the methodology is flawed.*

In the Half Dome Trail Stewardship Plan, there are references to Lawson et al. 2009, the "Half Dome Cables Modeling and Visitor Use Estimation Final Report - Yosemite National Park". These references cite surveys and number of people at one time (PAOT) on the Half Dome Cables data. However, the data is improperly interpreted and false conclusions are reached. Lawson et al. 2009 determined the visitor-informed threshold for crowding to be 70 PAOT on the cables. They determined this by giving individuals 5 photographs and asking them to rate them from very acceptable to very unacceptable. The pictures contain 170, 105, 70, 34, and 11 people in them with an average of 78 people. The question is flawed because it forces a ranking and a scale. This almost guarantees that the mean result of the survey will match the mean of the number of people in the pictures (70 people vs 78 people). There is a statement in the Half Dome Trail Stewardship Plan that states that 80% of respondents indicated that they would prefer to see no more than 10 to 30 people at one time on the Half Dome cables. This question is a standalone question that does not ask the preference in the context of a tradeoff. A more insightful question would ask about a PAOT in the context of a management plan. When people were asked about potential management actions, only increased signage received a majority of support and a permit system received only 27% support. (Individual, #411)

The whole "visitor informed limit" is bogus--it's based on visitors being shown simulated photos of 10, 30, 70, 100, and 170 people. This methodology is incapable of indicating whether the limit should be 50, 70, or 85 on the cables at once. (Individual, #550)

Response: Evaluation techniques used in conducting research on Half Dome attitudes and values is consistent with practices in the field of social sciences. This practice, known as normative research, identifies where the greatest number of respondents feel a condition or issue becomes unacceptable or reaches a stated level. Current research within this field of study supports the display of simulated ranges of photos that are not contiguous in ascending or descending order but random. The descriptive portions of the research identified significant delays in travel times exist when 30 people PAOT are on the cables. This data supports free-flowing conditions.

Additionally, the visitor-informed limit was only a part of the data the NPS used in choosing the

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Selected Action. Trail encounter rates, along with visitor preference and free-flow travel on the cables were all considered and determined to be optimized in the Selected Action.

Concern 4: *The NPS should assess and consider results from the 2010 permit system in this analysis.*

The current EA is also based on data for the period hikers were unrestricted and that recent changes (the introduction of the permitting system) have not been in place long enough to assess their benefit or detriment. (Individual, #20)

Response: The NPS used and cited data from 2010 when visitor use was restricted by the 2010-2012 interim permit system. This use and its effect on crowding and travel times are described in NPS scientific studies conducted in 2010. PAOT on the cables and trail encounter rates shown in table ES-1 of the EA are based on results of this 2010 study.

Concern 5: *The NPS should prioritize public access over solitude in management decision making.*

The logic of choosing Option C is flawed in that it weighs "a feeling of solitude and wilderness" over "public access" in an area that will not have solitude regardless of the number of other hikers. (Individual, #56)

Response: As directed by law and policy, the NPS is required to manage designated wilderness to provide an opportunity for solitude. Under the Selected Action solitude on the Half Dome Trail will be possible. From page 2-3 of the plan: "Solitude can range from zero encounters with other people and groups to a number of encounters determined appropriate for a given area. In the context of this popular, easily-accessible wilderness area, the upper range for solitude was determined to be conditions that were free from crowding."

Concern 6: *The NPS should prioritize wilderness character and resource management over public access.*

In all of your decisions about wilderness management, the desires of visitors must be subordinate to preservation of wilderness character. Yet your staff appears to begin from the entirely incorrect assumption that wilderness character and visitor preferences for easy access must be "balanced." Such statements by your staff indicate a fundamental misunderstanding of your responsibility under the Wilderness Act. Please see that your staff receives adequate training and direction regarding the Wilderness Act. (Individual, #193)

Response: Protecting wilderness character is stated as the primary purpose of the plan. Only actions that meet this standard were considered.

Concern 7: *The NPS should reevaluate the modeled evacuation descent figures as the methodology was incorrectly based on two-way traffic flow.*

In the Half Dome Trail Stewardship Plan, there are statements about Half Dome evacuation times, fast moving summer times, and a reference to Lawson's and Kiser's 2011 study titled "Half Dome Cables Visitor Use Model Scenario Analysis Final Report - Yosemite National Park". The Stewardship Plan states that 83 minutes would not allow hikers to descend in time to avoid fast moving summer storms, which is meant to imply that a restriction is necessary. This is a false conclusion and a distortion of facts. It is clear that Lawson's and Kiser's 2011 study on mass descent estimated times are improperly modeled to capture real conditions. Their models and estimates seem to be based on two

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way traffic on the cables, which would not be the case during an evacuation scenario. This would lead to evacuation scenario estimates being exceedingly high. Whether their end simulation used two way traffic or one way traffic, their model would be flawed if it was not based on accurate meaningful data. The background data for their models came from photographic observations. These photographic observations do not contain information for evacuation scenarios. This means that the evacuation models are improperly based and thus their results under evacuation scenarios are flawed and unreliable. As for fast moving storms, the Half Dome Trail Stewardship Plan does not point to data that indicates how quickly storms form, how often they form, when they form, what people's reaction to the preceding weather and storms would be, and whether or not solutions exist that give weather warnings. (Individual, #411)

Response: The modeled simulation of evacuation scenarios does assume people are ascending the cable. This is based on actual observations of hikers continuing to ascend the cables even during approaching inclement weather. The NPS acknowledges that this modeling exercise has limitations on predicting actual descent times. One of these limitations is predicting rate of descent on wet, slippery rock which may significantly delay descent. The NPS did not use this model to choose between its action alternatives, but only to illustrate that all conditions being equal there was a significant difference in descent times between unregulated use and proposed regulated use.

Concern 8: *The NPS should directly answer what level of crowding it finds to be a violation of the Wilderness Act.*

The interpretation of the Wilderness Act's requirements for solitude propounded in the Draft EA is flawed technically, is arbitrary, and at the very least is not mandated by the words of the act itself. The most glaring technical flaw is that the comparison trails selected to compare to the Half Dome Trail are completely inappropriate. The EA claims that the highest "published" trail encounter rate is 18 on a National Forest trail in Washington.

These can't be taken seriously as appropriate comparison trails, or actually be the "hard look" required by NEPA. Anybody who has ever spent time in Yosemite knows that many of the other trails that pass through the Yosemite Wilderness, including the Four Mile Trail, Yosemite Falls Trail, and even the Mist Trail which is directly below the trail analyzed in this EA, and on which nearly every Half Dome visitor also travels on, are frequently far busier than the Half Dome Trail. Stating for instance, that an alternative of 500 people or more was not considered because group encounters would be triple the Cathedral Lakes Trail, a "heavily used trail", is laughable. Anybody who has hiked on any of the above Wilderness trails in the summer has experienced group encounter rates far above triple that of the Cathedral Lakes trail. Calling any trail in the high country "heavily used" in comparison to the valley trails simply fails to pass the smell test. At best the comparisons are extremely misleading. Even outside of Yosemite, there are many trails in designated wilderness, like the Ridge Trail up Old Rag Mountain in Shenandoah, which get just as busy as Half Dome.

The failure to develop literature cannot be an excuse to avoid taking a hard look at the reality of wilderness trail use. If the National Park Service really believes that the levels of use on the Half Dome Trail before permits were clear violations of the Wilderness Act, then it is conceding massive and unabated violations throughout Yosemite and many other national parks. The EA should directly answer what level of crowding it finds to be a violation of the Wilderness Act. Is it 16 group encounters per hour? 24? 33? 40? (Individual, #544)

Response: There has been no determination that the park is in violation of the Wilderness Act. Current conditions support the need for park managers to take action to provide for ongoing protection of natural resources and wilderness character. While many sites might present

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opportunities for comparative analysis, without collected, scientifically rigorous data at those locations they lack credibility. The best available science and data were applied to provide comparisons.

This plan only addresses use on the Half Dome Trail, and any proposed change to use levels on other high use Yosemite wilderness trails must be done as part of a separate NEPA planning process. The ongoing *Merced Wild and Scenic River Comprehensive Management Plan* process is examining use on the non-wilderness Mist Trail, and the upcoming *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement* will address use on all wilderness trails in the park.

Concern 9: The NPS should install a third cable as an extension of the Half Dome Trail allowable under the Yosemite Wilderness Management Plan 1989.

In regards to the Half Dome Environmental Assessment document, there are several statements and false premises presented which are factually inaccurate, the most significant being the conclusion (page 45) that a third cable may not be added according to the Approved Wilderness Management Plan approved in 1989 which prohibits the construction of any additional facilities beyond those which existed in 1989. According to this argument, a third cable on the trail would constitute a "facility", a false premise given that the cables (unlike a restroom, drinking fountain or retail shop) are mere extensions of the Half Dome Trail itself, permitted under federal wilderness restrictions. In addition, the U.S. Organic Act Specifically directs you "to conserve the scenery and historic objects and the wild life therein and to provide enjoyment of the same..." Eliminating access to the Trail for tens of thousands of individuals across the United States hardly meets this important goal. (Recreational Group, #559)

Response: This alternative was considered and dismissed, as explained on page 2-13 of the EA. The terminology used in the 1989 I is consistent and clear. On page 14 the plan states that "Facilities in Yosemite wilderness will be limited to those currently present or specifically proposed in this plan" and "There will be no additions to these facilities except the proposed hydro meteorological devices." Appendix D of the plan is titled "Administrative Facilities in Wilderness", and the Half Dome cables are specifically mentioned in Section 1.

Concern 10: The NPS should provide facilities to reduce the impact of human and solid waste in the vicinity of Half Dome.

Another provision that should be considered along with Alternative D are better wildlife-proof containers for trash, recyclables, and food products along the trail corridor. I believe that this is a reasonable compromise, because that experience shouldn't be taken away from aspiring visitors but the health of Yosemite should be our main priority. (Individual, #2)

I would also add a box for the gloves at the cables - has a high wind ever removed the pile (and scattered them over the lower slopes)? Perhaps one of the ecological toilets such as that at the Boulderfield on Longs Peak in RMNP would minimize sanitation issues, especially with fewer users. The toilet could be located in many places, on or close to the Subdome. (Individual, #230)

Response: The 1980 *Yosemite General Management Plan* provides the highest level management guidance at the park level for Yosemite National Park. This document specifically states that "wilderness classification prevents any further development of facilities or services". This prevents the park from installing any additional structures along the Half Dome Trail. Education on proper disposal of human waste and proper food storage will be part of the permit process in the Selected Action.

Concern 11: The NPS should explain more clearly how the cables do not represent a violation of the Wilderness Act.

On page 2-2 you state: "New facilities will not be constructed in wilderness but existing facilities may remain." quoting the YWP. It does not say that anywhere in the Wilderness act and the statement contradicts established case law. Current wilderness management frameworks all state that a managing agency should always work towards full-compliance with the Act to achieve optimal wilderness conditions.

On page 2-3 you state: "Guidance from the Yosemite Wilderness Management Plan, supported by NPS Management Policies 2006, directs that replacing or maintaining facilities such as railings or bridges in wilderness should only be considered in areas "where long tradition and high hazard to wilderness visitor safety requires them" (NPS 2006, YNP 1989). Again, this contradicts the Wilderness Act and a local park plan cannot override a statute and its clear intent. Again, the burden on the NPS is why the cables are necessary to administer the wilderness. Some facilities like radio repeaters, bridges, and even airports in a large wilderness area can pass this test -- the cables cannot. (Individual, #203)

Response: This explanation can be found in the EA in Appendix D: Minimum Requirement Analysis for the Half Dome Trail. Stated on page D-1 paragraphs 1 and 2:

The Wilderness Act directs that wilderness areas “be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness. . . .” National Park Service Policy requires that “All management decisions affecting wilderness must be consistent with the minimum requirement concept.” *NPS Management Policies 2006* also provides specific guidance on trails:

Trails will be permitted within wilderness when they are determined to be necessary for resource protection and/or for providing for visitor use for the purposes of wilderness. . . Trail maintenance structures (such as water bars, gabions) may be provided, under minimum requirement protocols, where they are essential for resource preservation or where significant safety hazards exist during normal use periods.

The Half Dome Trail meets these criteria. The lower part of the trail prevents erosion by concentrating use into a single corridor that is maintained to minimize soil loss. The upper part of the trail provides access to the most popular location in the Yosemite Wilderness and thus helps realize the recreational purpose of wilderness listed in Section 4 (b) of the Wilderness Act. The water bars, walls, and other maintenance structures on the lower part of the trail are essential for resource protection while the steps and cables on the upper part of the trail help mitigate the safety hazards on the upper part of the trail and provide for visitor use.

Concern 12: The NPS should analyze how reducing the number of hikers on Half Dome Trail will affect Wilderness Character on other trails within the park

In each section of the affected environment, the preferred action failed to analyze the effects on other areas of the park. If the NPS proposes to limit access to Half Dome through a permit process there is a possibility that potential users will be forced/decide to use other trails to accommodate for the quota. This could lead to an increase in crowding, user conflict, soil erosion, and SAR within other areas or trails of Yosemite NP.

The preferred alternative will be beneficial to Half Dome, but has potential to cause problems in other areas of the park.

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This EA has the potential to distribute users who would have climbed Half Dome to lesser-used areas of the park, and this document should state that. (Individual, #45)

The other trails might get more crowded as use is reduced on this trail. This seems to be happening ever since the quota went into effect. (Individual, #517)

If the demand for the Half Dome Trail on weekends is in the neighborhood of 1,000 people per day, with only 300 permits available, it stands to reason that a substantial portion of these other 700 people may choose and are choosing other nearby trails instead, all of which already have substantial use. This impact is wholly unaddressed, and the preferred alternative as well as the interim emergency permit plan may be compounding already overcrowded conditions on these other wilderness trails. Before adopting a final EA, NEPA requires that this impact be addressed. In particular any analysis of this impact should address the compliance of these other trails with the apparent strict requirement for solitude contained in the Wilderness Act, especially with the additional traffic of those turned away from Half Dome. (Individual, #544)

Response: While the Selected Action is expected to decrease day use on the Trail between the top of Nevada Fall and the start of the Half Dome Trail, it also has the potential to disperse and increase day use and its associated impacts to other areas of the park. The plan will be modified to reflect this possibility (see Errata Sheets, Page ES-4, paragraph 6). The assessment of if and how much specific Half Dome Trail day use is dispersed has not been scientifically studied. However, NPS social science staff expect that any dispersed use will not be concentrated to one trail but will instead result in a nominal redistribution to a number of trails around the park. Scientific assessment of increased use on other trails in the park and any mitigation needed will be addressed in the upcoming *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement*. Overnight use (wilderness camping) should not shift to other wilderness areas of Yosemite, as overnight use is regulated by existing trailhead quotas which remain unchanged.

Concern 13: *The NPS should change the designation of Half Dome from wilderness to non-wilderness through a recommendation to Congress.*

No level of reasonable level of user restriction will turn this into a "Wilderness" trail. Removing the wilderness designation and improving the trail and trail facilities to reduce environmental impact would seem to better balance the interests of all users. (Individual, #320)

Obtain an exemption from the 'Wilderness Act.' The act should not be considered sacrosanct. Laws are made by man and may be altered or rescinded by man. (Individual, #492)

The assumption of a true wilderness experience on this trail should be reconsidered. People's expectations are different for heavy use trails. There are plenty of alternatives for people to avoid crowds. (Individual, #517)

Response: This alternative was considered and dismissed, as discussed on page 2-13 of the EA. In addition, removing the Half Dome Trail from designated wilderness does not meet the goal of improving safety conditions because unlimited use levels, which have been shown to impede free-flow on the cable route, would continue. The safety considerations that form part of the purpose and need for this plan exist regardless of wilderness status.

Concern 14: *The NPS should not change the existing management of Half Dome Trail based on its designated Wilderness Status.*

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During the National Park Service's testimony to congress in which they were requesting that the people of the United States designate Yosemite as a national wilderness, the NPS director said "The adoption of our wilderness recommendation for the park will not change the existing management, operation, or programs." (Testimony of Russel Dickenson, Hearings before the Subcommittee on Interior and Insular Affairs, House of Representatives, June 18, 1981, page 292) (p. 1-1). This wilderness included the Half Dome trail. Limiting the use of this trail simply because it is enjoying a surge in popularity means that the testimony was false and misleading. The National Park Service should stick to its original promise and allow unlimited use of the trail to the peak of Half Dome. (Individual, #153)

Response: Legislative history is pertinent when a law is ambiguous. The California Wilderness Act of 1984, which designated the Yosemite Wilderness, clearly and unambiguously states that it "shall be administered by the Secretary of the Interior in accordance with the applicable provisions of the Wilderness Act." (P.L. 98-425 Sec. 106) Furthermore, unlimited use of a trail in wilderness does not meet the goal of improving safety conditions. Unlimited use levels have been shown to impede free-flow on the cable route. The safety considerations that form part of the purpose and need for this plan exist regardless of wilderness status.

Concern 15: *The NPS should address specific language from the Wilderness Act and case law in identifying and analyzing impacts to wilderness character.*

There is no analysis of what the Wilderness Act actually says, and how the courts have interpreted the Act regarding structures and installations in wilderness. (Individual, #258)

Response: Specific language from the Wilderness Act is discussed at length on pages 2-2 through 2-4 of the EA. This discussion is informed by *NPS Management Policies 2006*, interagency guidance on wilderness character, and the Yosemite Wilderness Management Plan.

Concern 16: *The NPS should account for the different weekend and weekday visitation numbers for all action alternatives.*

Also, numbers are separated out for Sat-Sun only for one alternative A. The other alternatives do not make this distinction. (Individual, #517)

Response: With a permit system there will not be weekend fluctuation in visitors. Alternatives B, C, and D all call for the same number of permits to be issued each day of the week.

Concern 17: *The NPS should develop and implement a process to fairly measure and publically report the impacts from this permit system.*

A process to fairly measure and publically report the decline in outdoor recreation from this arbitrary NPS policy needs to be implemented. (Individual, #521)

Response: The park will make Half Dome Trail use data available annually. This commitment will be added to the Selected Action as indicated in the FONSI. During the implementation of the 2010-2012 interim permit system the park has not recorded a decline in outdoor recreation but rather conversely recorded the highest park visitation in recent years.

Concern 18: *The NPS should cite the source which estimated the user numbers for each alternative in table ES-1.*

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The numbers in Table ES-1 are not explained well and the alternatives are not treated equally. Much of the Table appears to rely heavily on model assumptions. Explain where the numbers are coming from for each alternative. (Individual, #517)

Response: The data populating Table ES-1 was derived from the study Pettebone et al. 2010, except for the maximum use level of 1,200 persons in the No Action Alternative which was from data compiled in the 2008 study Lawson et al (2009). This clarification will be added to the plan.

Pettebone, D., B. Meldrum, C. Leslie, K. King, and J. Meath.

2010 Half Dome Trail Visitor Use Monitoring Report. Visitor Use and Social Sciences Branch, Division of Resources Management and Science, Yosemite National Park, El Portal, California. 42 pages.

Lawson, S., J. Choi, N. Reigner, P. Newman, and A. Gibson.

2009 Half Dome Cables Modeling and Visitor Use Estimation Final Report. Yosemite National Park. Updated January 2010. Resource Systems Group, Inc., White River Junction, Vermont. 57 pages + appendices.

Concern 19: The NPS should choose Alternative E.

Alternative E (Remove the Cables) is the only alternative that complies with NPS policies that state, "Park visitors need to accept wilderness on its own unique terms. The National Park Service will not modify the wilderness area to eliminate risks that are normally associated with wilderness." (Individual, #340)

Response: Hiking a steep trail is part of the wilderness experience, even if that trail has rails and steps as found on the Half Dome Trail. There is still skill, challenge, and risk involved in this hike, and the NPS will not modify the wilderness, as part of this plan, to eliminate that challenge.

Concern 20: The NPS should not remove the cables.

Removing the cables would deprive the public of one of the best hikes in the country. (Individual, #545)

Response: The NPS is proposing to keep the existing cable system.

Permits

Concern 21: The NPS should only require permits during peak times (for example between 10am and 4pm) to allow a greater number of climbers access at off peak hours.

A plan that only requires permits during certain hours of the day has much to recommend it - it would preserve opportunities for people to engage in a less confined sort of recreation, and would provide opportunities for solitude by distributing the crush of Half Dome visitors from a few peak hours to broader points throughout the day, both goals encouraged by the Wilderness Act. Letting people climb Half Dome permit free from 6 PM at night to 8 AM in the morning, at their own risk, would meaningfully advance the goals of the plan as a whole. Off-hours climbing probably is occurring and will continue to occur anyway (the famed full moon climbs of Half Dome technically require an overnight permit after all), but there is no need to turn more people into scofflaws. The NPS could conclude that any such plan is unworkable, but that is something that should be carefully studied, not considered, and dismissed outright. (Individual, #544)

Response: The 2010 interim permit system demonstrated that a time period without a permit requirement could shift use from established use patterns causing previously low use time periods to become crowded. Additionally, having periods of low use such as from 6 pm to 8 am is part of

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the expected distribution of use with the permit program. Hikers with permits may access the Trail anytime during their permit day with an expectation that they can have greater solitude by going earlier or later in the day.

Concern 22: *The NPS should enforce the permit system from June 15 to September 15.*

However, I urge you to only impose the limits from June 15th until September 15th. (Individual, #531)

Response: The 2010-2012 interim permit system showed extremely high demand for permits before June 15, and allowing unregulated use during that period could result in crowded conditions. The 2010 interim permit system demonstrated that a time period without a permit requirement could shift use from established use patterns causing previously low use time periods to become crowded.

Concern 23: *The NPS should institute a system to redistribute unused permits on a first-come first-served basis.*

Perhaps for reserved permits, a check in system should be implemented as well, like the system airlines use. Visitors with reserved permits should be required to check in 24hrs prior to the date for which their permit is for. If they fail to check in, their permit is forfeited, and added to the first come, first serve number. (Individual, #12)

Response: The proposed permit system allows for voluntary cancellation and refund of permits and the redistribution to the public of those cancelled permits. Adding a requirement for a check in 24 hours prior to the permit date would increase the costs of the permit process as well as add a logistical burden for people travelling during that 24 hour period.

Concern 24: *The NPS should develop a system to allow permits to be transferred between users.*

The new system does not allow transference of a permit. I have to apply for a permit four months before my planned hike. At this time, I'm not even sure who will be going with me. Even if I did, if my hiking partner should cancel on me, does this mean I am not allowed to select a new partner, since they won't be able to use one of my permits? That is completely unreasonable. (Individual, 539)

Response: The plan will be modified to state that under all alternatives permits are transferrable, except for the trip leaders. Trip leader permits are not transferrable. This was not specified in the plan and has been corrected through the errata and stated in the FONSI. The public has asked for a degree of integrity that reduces the likelihood of misuse and scalping. The requirement that either a predetermined trip leader or an alternate must be present with the hiking group is one means of meeting this public expectation.

Concern 25: *The NPS should reserve some permits for distribution one to two days prior to designated hiking dates.*

Some of the 300 permits per day, perhaps even 100 of them, should not be reservable months in advance. For example, some of the permits for Garnet Canyon in the Tetons and permits for popular canyoneering routes in Zion are available to those willing to get up early and wait in line the day before. Some people cannot plan their lives 6 months in advance, and there should be another way for them to be able to obtain a permit. This is similar to the camping reservation system in the Valley already. You can get campsites 6 months in advance OR you can wait in line at Camp 4. I've used both options with success in the past depending on my circumstances. (Individual, #83)

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Another thing that ought to be contemplated is withholding a large portion of tickets for people to access on a first come first serve basis. (Individual, #122)

Response: The Selected Action specifies a two part permit allocation system – advanced reservation and day-before distribution.

Concern 26: The NPS should increase fees associated with the permit system.

A better alternative might a special fee required for the admission to an exhibit. This would limit the number of locals that show up on a regular basis to climb because "they can." And it would still allow the out of state tourists to visit the iconic rock. The fee needs to be high enough that it becomes cost prohibitive to do every weekend but not so expensive that it takes away from the family vacation. Something around \$10.00 person or \$30.00 per family. The funds could then be used maintain the trails and cable system. I'm willing to bet that a fee would reduce the number of people by 60%-75% because many people how are just "looking for something to do" will find other areas for the park to enjoy! Which will in-turn limit the amount of environmental damage done by overcrowding.

Again the cost of the fee is the key. Make it cost prohibitive to do every weekend but not so much that it impacts the family vacation. After all, the purpose of the park system is to leave nature natural so that families can enjoy nature untouched by modernization. (Individual, #69)

The current limit doesn't work because the permits are TOO CHEAP. Many people buy up blocks of permits at the beginning of the season, planning to use only a few of them and making permits unavailable for those of us who do not apply for them on time. (Individual, #283)

Response: The NPS does not limit use through pricing of permits. The Congressional authority for cost recovery does not support congestion pricing but rather to offset costs associated with managing and administering the program.

Concern 27: The NPS should use caution to avoid setting a precedent for charging fees for day use wilderness access.

The cost recovery proposal for the Half Dome trail permit system must not set precedent for establishing fee requirements for general access in other NP and NF wilderness areas. While in general the Sierra Club opposes fees for public land use, other than long-customary entrance fees for national parks, and most especially fees for visiting wilderness, which could be viewed as illegal commercialization of wilderness, we recognize that the Half Dome situation is exceptional. It can be compared to the USFS administration of the Mt. Whitney trail, where special administrative restrictions had to be put into effect due to crowding. We understand that the permit system puts a special administrative burden on the NPS. We would not condone payments for permits for the Half Dome being used as a precedent for other wilderness areas or the NPS raising the level of fees beyond the nominal amounts described in the EA. To do so would pose a grave negative risk of allowing commercialization to affect the wilderness experience, against which the agency should always be on guard. Fees and their associated commercialism profoundly alter the relationship of the American public with its unique system of public lands-and with its perception of the value of those lands. Fees also discriminate against those with less ability to pay and present a form of "confining recreation" thus a departure from the ideal of wilderness for "unconfined" recreation. (Organization #479)

Response: The NPS in Yosemite has been able to avoid charging additional fees for both wilderness camping and day use in contrast to other NPS and federally managed areas where fees are charged for using the wilderness/backcountry. The Half Dome permit system is an

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exceptional situation for managing wilderness in Yosemite that necessitates a fee, but it should not be viewed as precedent setting. Table 3-4 of the EA shows that other wilderness areas are already charging fees for wilderness day use. The NPS in Yosemite strives to limit costs to visitors whenever possible. Wilderness permits remain free, as does day hiking in the remainder of Yosemite's wilderness.

Concern 28: The NPS should further evaluate and improve the computer-based permit system.

My biggest concern continues to be the permit system. While you've had a lot of flags raised on this from visitors and press, the permit system was not addressed in any depth in the plan. Managing the permit system and preventing illegal reselling of permits has been a nightmare over the past two years. Also the demand is now global, making it all that much more difficult to secure a permit from the US. Further, it's difficult to plan a trip five or six months in advance, adding to the challenge.

The 2012 system, featuring a lottery and team leaders seems really complex and may be difficult to manage for visitors and NPS alike. I'm sure there will be lots of confusion. For example, you're going to have groups of people with permits showing up without their leader (who couldn't make it at the last second for all sorts of reasons) and rangers will have to deal with that in the heat of the moment, either turning the group back or letting them go without the leader.

In looking at your list of planners and reviewers, it wasn't clear that anyone had a very deep technical knowledge of current web technologies that could be helpful. At a very minimum, you need to prevent automated "bots" from gaming the system. That was at the core of the 2010-2011 scalping problems. Your website was operating in the dark ages in terms of security. For 2012, with the right software, I'm sure someone could overwhelm the lottery system with automated entries, tilting the odds in their favor. I'm not confident that the "leader" requirement will neutralize this.

So, my input would be to take a close look at the permit system to be sure it is simple, fair and easy to administer on the trail. Also, it's essential that you have an independent technical expert, current on the latest web security methods as related to ticket transactions review your on-line systems. I would not rely on whatever company ran the on-line transaction process in the past. (Individual, #58)

Response: The park has taken public comments regarding the permit allocation process and made adjustments to reduce fraud and scalping. Permits are available to U.S. and international visitors. The park is not the exclusive user of Recreation.gov rather Recreation.gov is the common platform for all federal agencies. The park continuously works with the vendor to seek solutions to system vulnerabilities, and during the 2012 preseason lottery the NPS and Recreation.gov culled numerous duplicate applications from the lottery pool.

Concern 29: The NPS should coordinate timing of the permit system to ensure visitors are able to secure lodging in the park.

With this year's lottery system, there is no provision for tying a permit in with park lodging. That is, people must wait until "early April" to know if they will even receive a permit, and for what day that might be. They must then arrange for lodging, by which time it might be impossible to find lodging in the park for the date of their permit. (Individual, #539)

It is difficult to plan lodging in concordance with the permitting procedure. (Individual, #512)

Response: The Selected Action directs that the permit allocation system has specific standards for success (see page 2-9 of the EA), but keeps some of the details of that system open to

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adjustment throughout the life of the plan. This is to keep the system flexible to ensure the ability to respond to changes in use patterns and technology and to make the system as equitable and efficient as possible. The NPS understands the concern regarding coordination of permits and lodging/camping reservations. The flexibility of the permit allocation system will allow the NPS to take advantage of opportunities in the future to improve upon equitable and effective coordination.

Concern 30: *The NPS should clarify if hikers using the trail to access Cloud's Rest will be impacted by the permit system.*

It is not clear if hikers using the "Half Dome Trail" to access Cloud's Rest would be impacted by the quota. (Individual, #78)

Response: The requirement for Half Dome Trail permits will not affect hikers accessing Cloud's Rest via the John Muir Trail. Permits will only be required for hikers on the Half Dome Trail as described in the Project Scope, page 1-2 and on page 2-9 Regulatory Component of the EA.

Concern 31: *The NPS should allow wilderness permit holders access to the Half Dome cables.*

The current alternatives allow for holders of Wilderness Permits to receive a Half Dome permit with their wilderness permit if their wilderness itinerary reasonably includes Half Dome. I contend that this is prejudicial to day hikers. It seems that the honor of getting a backpacking permit should be special and that winners of that system are already being rewarded by being able to enjoy Yosemite's backcountry in a camping experience. Why should that group (currently 25% of the total Half Dome permits) be additionally rewarded with a Half Dome permit? Many visitors simply can't go camping in the wilderness. They are not trained or prepared for such trips, but they can do a one-day hike up to Half Dome. I believe the system would be made more accessible to more hikers if ALL of the allotted Half Dome permits were for day hikes only. (Business, #337)

My only concern would be incorporating wilderness permits into the summit permits so backpackers don't have to try for 2 different permits on the same date. (Individual, #253)

Backpacking trips that occur in the area of Half Dome should include permits for Half Dome. On a backpacking trip in the area surrounding half Dome it is a reasonable expectation that one will want to hike to the top of Half Dome. The freedom to hike the surrounding summits is a normal part of a Wilderness backpacking experience. Making certain areas off-limits to people with permits for a given area will change the Wilderness experience for those people, and thus the Wilderness Character. (Individual, #529)

Allow wilderness permits passing by HD free access as before. (Individual, #477)

Response: The Selected Action prescribes that wilderness permit holders leaving from specified trailheads will be able to receive a Half Dome permit with no additional competition due.

Concern 32: *The NPS should allow technical climbers to descend the Half Dome cables without a permit.*

I read a lot of the EA and did not see how technical climbing users would be treated if they wanted to descend the cables and last 2 miles of the Half Dome trail. I believe a person does not need a permit to engage in technical climbing, so if they are stopped by a Ranger who is performing compliance checks on permits, how will this be addressed by both the Ranger and the technical climber(s)? (Individual, #237)

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Response: Technical rock climbers ascending Half Dome without entering the Sub Dome area do not need a permit to descend the cables.

Concern 33: *The NPS should establish a system to allow larger non-commercial groups to secure permits.*

Overall I like the new lottery system because it seems like a more fair and flexible method, (especially since you can request flexible dates.)

But for a group larger than 6 even if we split them into three groups, there is no way to ensure all 3 groups would get the same date. I suggest you offer some method for larger groups to "link" their lottery applications, so that they all get accepted, or rejected or moved to a second-choice date, all together as a unit. (Individual, #231)

Response: The Selected Action directs that the permit allocation system has specific standards for success (see page 2-9 of the EA), but keeps some of the details of that system open to adjustment through the life of the plan. This is to keep the system flexible to ensure the ability to respond to changes in use patterns and technology and to make the system as equitable and efficient as possible. The NPS understands the concern regarding coordination of obtaining permits for larger non-commercial groups. The flexibility of the permit allocation system will allow the NPS to take advantage of future opportunities to improve upon equitable and effective coordination.

Concern 34: *The NPS should choose Alternative A.*

There is no reason to alter or regulate the route in any way. Keep access to our national treasures free and open for all to enjoy. (Individual, #178)

Keep the cables available to the public. (Individual, #240)

I strongly urge the National Park Service to adopt Alternative A, which would eliminate the current permit system and place no limits on the number of hikers allowed to climb Half Dome. (Individual, #288)

Response: The NPS is mandated to consider public concerns in the development of a reasonable range of alternatives and selection of the Selected Action. After full consideration and review of environmental impacts associated with each alternative, the NPS decided that the Selected Action would meet project goals and objectives and would result in the least environmental effect.

Concern 35: *The NPS should choose Alternative B.*

Alternative B seems to provide for a greater number of people to experience Half Dome per day while still providing for a reduction of environmental impacts from the interim day use plan currently in effect. I prefer Alternative B for these reasons. (Individual, #496)

Response: The NPS is mandated to consider public concerns in the development of a reasonable range of alternatives and selection of the Selected Action. After full consideration and review of environmental impacts associated with each alternative, the NPS decided that the Selected Action would meet project goals and objectives and would result in the least environmental effect.

Concern 36: *The NPS should choose Alternative C.*

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The alternative recommended by NPS strikes a fair balance between the Park Service's mission to make park resources and recreational opportunities available to visitors, while respecting safety concerns and the Wilderness Act. 300 permits/day will promote an acceptably low-level of environmental impact, and allow for a wilderness experience. (Individual, #199)

Response: The NPS is mandated to consider public concerns in the development of a reasonable range of alternatives and selection of the Selected Action. After full consideration and review of environmental impacts associated with each alternative, the NPS decided that the Selected Action would meet project goals and objectives and would result in the least environmental effect.

Concern 37: The NPS should choose Alternative D.

I believe that Alternative D, which allows 140 hikers per day, should be implemented. Climbing Half Dome is an absolutely exhilarating experience, and I hope to climb those cables one day. The access to this trail absolutely must be limited, however, after being informed of the environmental damage that the excess of visitors is causing to Yosemite and the threat to the Mt. Lyell Salamander. I believe that Alternative D is the best choice for the health of the wildlife and their habitat because it will cut the amount of visitors that hike on the trail by nearly 90%, and it will bring the wilderness experience back into the hike. (Individual, #2)

Response: The NPS is mandated to consider public concerns in the development of a reasonable range of alternatives and selection of the Selected Action. After full consideration and review of environmental impacts associated with each alternative, the NPS decided that the Selected Action would meet project goals and objectives and would result in the least environmental effect.

Commercial Use

Concern 38: The NPS should set aside permits for qualified commercial users.

(a) setting aside a number of daily permits (12-15 participants for instance) separate from the public lottery that commercial outfitters such as SYMG can reserve through the wilderness office when we have bookings. All CUA holders allowed to lead day trips up Half Dome would share in this permit pool. This is similar to how the wilderness permitting system operates in Inyo and Sierra National Forests. (Business, #435)

Addressing this issue of commercial guiding groups being able to get 12-15 permits a day, on behalf of Camp Tawonga, I have thought of a possible solution. In order to allow for organizations and commercial users to plan ahead and be guaranteed a certain number of permits per day, there would need to be a system in which they could prove their purpose of use (either educational or scenic), and be awarded permits on certain dates through an advanced reservation service competing with other commercial users (instead of competing with the public). This could be a separate lottery system, similar to the one used for the public for the 2012 season. During the lottery system the commercial user could pay an extra fee, show proof of commercial use and reasons for the Half Dome trip (either educational or scenic). They could be awarded up to 10 extra permits (in addition to the 5 permits per day set aside earlier) for the dates that they desired. Similar to the lottery system this year, there could be a maximum of seven days each trip leader is able to request. As proposed already the policy could cap the amount of commercial educational permits at 30 per day and commercial scenic permits at 15 per day. This system would reduce the competition that commercial users would have if they were allocated permits in the general public's lottery system (as proposed in Alternative C). (Business, #498)

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Response: Half Dome Permit Distribution for Commercial Users as described in the Preferred Alternative on page 2-10 of the EA will be modified to allow for greater flexibility in the allocation of permits for commercial services. The original Determination of Extent Necessary (DEN) for commercial use prescribed 30 people a day using educational services and 15 people a day able to use scenic services, limited by an overall restriction of 2 guided parties per day. Further evaluation of the Determination of Extent Necessary (DEN, Appendix C of the EA) showed no advantage to imposing the restriction of 2 guided parties per day to meet the allocation goals for educational and scenic purposes.

Daily limits for commercial use, 45 total persons per day -- guides and clients (DEN, Appendix C of the EA) will not be changed, but the methods of allocation will remain open. This ensures equitable and efficient distribution, response to changes in use patterns, implementation of new technologies and meets DEN guidelines.

Concern 39: *The NPS should not prioritize public use over commercial use.*

The EA commonly makes a distinction between "commercial use" and "public use." Distinguishing the guided-public purely as "commercial use" is inherently discriminatory, because it unfairly pits them against "the public" in competing for access. This implies that the guided public is a commercial user, competing with the public, and thereby less qualified to have access to Half Dome. The guided-public and the non-guided public should have equal access to Half Dome, without discrimination. The non-guided public should not have preference over the guided public. (Individual, #546)

Response: The distinction between commercial use and public use in the EA is based on the Wilderness Act and its requirement for an evaluation of the necessity for commercial use in designated Wilderness. The need for this type of specialized finding has only recently been articulated, stemming from a 2004 decision by the U.S. Court of the Appeals for the Ninth Circuit in the case *High Sierra Hikers Association v. Blackwell*. In the Blackwell decision, the Ninth Circuit ruled that wilderness managing agencies must complete a specialized finding of necessity prior to authorizing commercial services in wilderness. This finding must be made after considering the extent to which commercial services are necessary to achieve the purposes for which the affected wilderness area was set aside. This resulting determination is not discrimination against commercial services and their clients but a case law mandated requirement.

Concern 40: *The NPS should further study the commercial use analysis and decisions presented in the EA.*

The prohibition on commercial enterprise is one of the most restrictive in the Wilderness Act. The reasons are many, they are not lost on Yosemite National Park officials, and were discussed at length at the recent "commercial outfitting and the Wilderness Act" conference at Stanford University in which Yosemite officials played a major role. As the Ninth Circuit court found in the Wilderness Society case, "These statutory declarations show a mandate of preservation for wilderness and the essential need to keep commerce out of it." (emphasis added). Despite the letter and intent of the law, much of the Half Dome "Determination of Extent Necessary (DEN)" analysis strives to invite commerce in. In this regard, we believe the document is remarkably at odds with both the spirit and letter of the law. (Organization, #527)

We found that the Determination of Extent Necessary (Appendix C) section is very difficult to comprehend. On the one hand, concession operations are defined as "commercial services" as a statement of fact, yet the services provided by concession and other guided services fulfill most of the education attributes listed on page C-8. An individual who is totally or relatively inexperienced in wilderness skills would be inclined to hire a guide (commercial service provider) to acquire the skills

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necessary to enjoy the recreational benefits of wilderness, yet preference is given to those with prior experience by NPS policy by the words on page C-11 that "...the service will, to the extent practicable, afford visitors ample opportunity for inspiration, appreciation, and enjoyment through their own personalized experiences without the formality of program or structure." The net result of the application of these principles is that people who are less knowledgeable about wilderness or have fewer skills than others will be forever disadvantaged in trying to enter and learn about wilderness in a safe and responsible fashion. Further, the general public can compete for permits without consideration of skill or ability. Those who acquire a permit through this process should be able to hire a guide if that is what is necessary for them to actually use and enjoy the permit. Denying a guide to those who have competed with all others for the permit unfairly discriminates against those individuals and deprives the park and others on the trail the benefits of a guided experience as enumerated below. We also encourage NPS to further study the Commercial Use analysis and decisions presented in the EA. We believe that both Alternative B and C unfairly discriminate against the guided public and unnecessarily limit guided services. Appropriate application of the public's right to hire a guide if they choose provides greater opportunity for access and enjoyment of the Half Dome Trail and the wilderness experience. (Business, #553)

Response: Binding court guidance on Determinations of Extent Necessary (DEN) comes from *High Sierra Hikers Association v. Blackwell* (2004), which states that "The Wilderness Act is framed in general terms and does not specify any particular form or content for such an assessment." The analysis in the EA uses a more wilderness-centric approach than was used in the Blackwell case in that the criteria used for determining the extent of the need for commercial services is the realization of the Wilderness Act Section 4 (b) purposes rather than an assessment in the number of potential visitors that are deficient in the skills, experience, or abilities needed to complete a wilderness visit.

The definition of commercial services was also guided by relevant ninth circuit case law: *The Wilderness Society v. U.S. Fish and Wildlife Service* (2003) which established the precedent of analyzing the primary purpose and effect of an activity to determine if it should be considered commercial. For Half Dome, this analysis is presented in Part 5 of Appendix C.

The definition of the educational purpose relied on the plain language meaning of the term, which includes both formal, instructor led education and informal, or self-taught education. It is also consistent with the legislative history: Howard Zahniser, the author of the Section 4 (b) purposes, further articulated the educational value of wilderness in *The Need for Wilderness Areas* (The Living Wilderness, Winter-Spring 1956):

In a culture like that which we call modern we can be sure that it will be increasingly important for students, of the present and future generations, to know what wilderness has to teach – through their own experiences; through educators who are informed and corrected by wilderness experiences; through photographs, paintings, writings, and other educational and informational materials with a validity insured by a still living wilderness.

The Selected Action does allow the public to hire a guide if they choose. The only restriction is that no more than 45 persons per day may be guided on the Half Dome Trail. The NPS believes that this will provide appropriate realization of the educational and scenic purposes of Wilderness as determined by the DEN. Though the DEN was not based on past demand, the commercial use limit established by the DEN exceeds the amount of commercial use that was reported in 2008.

The restrictions placed on commercial use by the DEN analysis are mandated by the Wilderness Act and guidance from case law. People who are less knowledgeable about wilderness, or have fewer skills than others, can still enter and learn about wilderness in a safe and responsible

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manner in other areas of Yosemite Wilderness where commercial use is less restricted, as well as in other wilderness areas.

Safety

Concern 41: *The NPS should further evaluate how the issuing of permits affects their liability in the case of an accident.*

I wonder how issuing permits changes the NPS's liability in regards to injuries and deaths. Suing the NPS is becoming more fashionable and successful. Certainly you are aware of the famous "mountain goat goring" death case against Olympic National Park? When you issue permits you make it even harder to conquer the inexperienced hikers' belief systems around who is responsible for their personal safety and what it means to be in a wilderness setting. The HD permit is different than a wilderness trail permit. It's a permit to hike the last quarter mile of the HD trail that is a cable system installed each year and maintained by the NPS. It is for one day, not overnight. All these factors change expectations. If I am issued this permit I expect that the issuer is providing me with a safe trail and passage. If I am issued a permit I expect to be given all reasonable warnings and protections. If I am in danger on the cables I expect the NPS would require me to wear a harness and clip onto the cable. If this is not the case, and I am injured I may be inclined to sue the NPS.

I believe issuing permits further limits your ability to continue with your current policy of "once you cross this line (the not well marked wilderness boundary) you are responsible for your own safety". (Individual, #17)

When there were fewer people climbing the cables was relatively safe. With overcrowding that was no longer the case. The park service has responded by temporarily regulating the traffic with permits and is now proposing to make those permits permanent. By issuing the permits you give the public the impression that climbing Half Dome is entirely safe. It is not, and when something bad happens the public will certainly come back to the park service and tell them so.

In fact, by regulating the Half Dome climb every accident becomes the park service's fault. Bad weather, rain and thunderstorms has been identified as making the climb hazardous. Can't you hear the accident victims, or worse yet, their families say:

"Why were they even handing out those permits when the forecast called for afternoon thunderstorms?"

"She had waited all year to do this climb, very lucky to get a permit she wasn't going to turn around just because of a little rain."

"Why did the ranger stationed at the bottom of the cables let her climb when anyone could see that the storm was coming in?" (Individual, #46)

Response: The park uses the assistance of agency counsel in developing alternatives. They specialize in agency liability and tort law, the Administrative Procedures Act, and discretionary function. The park has developed a website in conjunction with the permit system to inform visitors of the risks associated with climbing Half Dome. Risk management in wilderness is the responsibility of the visitor consistent with *NPS Management Policy 2006 6.4.1* which states, "Park visitors need to accept wilderness on its own unique terms", and the NPS should only provide visitors with "general information" concerning possible risks.

Concern 42: *The NPS should leave the cables down.*

We should consider leaving the cable down. This would save park service time and money by eliminating the twice yearly raising and lowering and the storage of the poles and boards. Leaving the

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cable on the face of the rock year round would ensure that the summit is still able to be reached and would heighten the accomplishment of it. Indeed, isn't this the way it was first done by Anderson and Muir in 1875? The only drawback here is that the accident rate might go up as it seems there have been 3 accidents with the cables down, 2 of them fatal. I've been up with the cables down about 3 or 4 times and to me it seems safer as you automatically produce a counter weight against the rock by pulling on the cable. Furthermore any accident would be self-inflicted as opposed to a result of overcrowding. (Individual, #28)

Response: Leaving the cables on the Trail without the stanchions and steps in place would limit the ability of many current Half Dome hikers to reach the summit and is not the method of use for which the cables were designed. The NPS considered this alternative to have similar adverse impacts as those from Alternative E, with fewer of the beneficial impacts.

Concern 43: *The NPS should station a Yosemite Search and Rescue employee at the base of the cables to ensure safety.*

I am a rock climber. I would recommend a YOSAR employee be based at the cables either daily or at least on the weekends. Then if someone gets in trouble up there they could, hopefully and quickly deescalate the crisis. Also if one of the boards breaks or shifts (like it was when one woman was seriously injured) please fix it ASAP. It would not cost that much to have an YOSAR person there and would ensure there was a qualified person there to help if someone is having serious issues with the cables. For the YOSAR person it would be a nice up on half dome and little extra money and for Yosemite it would be really good insurance against another needless tragedy. (Individual, #39)

Response: This alternative was considered and dismissed as explained on page 2-14 of the EA because it did not decrease crowding and/or provide opportunities for solitude. Posting a person to regulate the cable system also contradicts established policy for risk management in wilderness. NPS Management Policy 2006 6.4.1 states, "Park visitors need to accept wilderness on its own unique terms", and the NPS should only provide visitors with "general information" concerning possible risks. Using rangers to regulate flow on Half Dome would establish a precedent for other wilderness areas.

Concern 44: *The NPS should station a ranger at the Half Dome Trail to regulate traffic and advise hikers on safe use of the cables.*

Instead of issuing permits, simply regulate how many hikers are on or above Sub Dome at any given time. Every time one person comes down off Sub Dome, another will be allowed to go up. It may seem unfair to force hikers to wait in line to go up Sub Dome and the cables as if they were a ride at Disneyland, but this concept is not too different from how it was before the permit system. Hikers who had done their research would know that if they arrived at the cables after about 11am, they would likely have to wait in line to get on the cables, simply due to the sheer volume of hikers. If it is not offensive to liken the cables situation to Disneyland even further, a limited number of "Fastpass"-style permits could be issued in advance. The 200 or so permit-holders would be allowed to bypass the line at the base of Sub Dome while the remaining hikers waited in line for others to descend. This idea would limit the potentially dangerous crowding on the cables and on the summit, while still giving everyone a chance to do the hike, including those people who did not win the permit lottery. (Individual, #509)

Another way to control crowding on the cables and evacuation times would be to have a ranger enforce a limit on the number of people who could be above the bottom of the cables at any given time. If the limit were reached, hikers would be required to queue at the bottom of the cables. This would work best in conjunction with a daily quota, but would allow a larger daily quota while still

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controlling the maximum crowding. For example, there could be a daily limit of 500 with a maximum of 120 allowed on or above the cables at any one time. (Individual, #550)

Response: This alternative was considered and dismissed as explained on page 2-14 of the EA. Using rangers to regulate flow on Half Dome would establish a precedent for other wilderness areas. NPS Management Policy 8.2.5.1 states that park visitors must assume a substantial degree of risk and responsibility for their own safety.

Concern 45: *The NPS should consider how permits valid for one day may increase the likelihood of visitors climbing in bad weather or other unfavorable conditions.*

With the latest news on the death tolls at Yosemite National Park's Half Dome cabled section in 2011, it seems like the policy of permitted climbs for solving the problem of falls and deaths is not working. In fact a permit system can make the trail more dangerous. Those hikers who get lucky enough to get a permit, with little or no hope to get another one at a later time, set foot on a long and strenuous trail of 8.2 miles only to use their permits at the cables and may do so in dangerous conditions. In 2011 a permitted hiker attempted the climb over wet and slippery rocks and fell to her death. Why a hiker should take such a risk? Enforcing a permit requirement does not make the cables safe, but the last 400 feet of Half Dome can be climbed safer with the addition of a third cable and lifting permit requirements. (Individual, #97)

The plan as proposed seems to encourage more risk-taking, rather than less, by making the limited access artificially valuable and pushing people to use their permits even when conditions (or personal factors, such as tiredness or time pressure) are not optimal. (Individual, #288)

Response: There is no evidence that the permit system encourages hikers to climb Half Dome in inclement weather, and even before the 2010-2012 interim permit system was implemented, hikers attempted Half Dome in bad weather. On June 6, 2009, numerous hikers ascended in a rainstorm with one of them slipping and falling and sustaining life threatening injuries in a 100 foot fall. On June 13, 2009, on another stormy day, one hiker fell to his death and 41 others had to be rescued from the cables because of the slippery rock and serious storm conditions. The permit system should improve hikers' access to storm related safety information as part of the permit reservation process.

Concern 46: *The NPS should consider a two-day permit to allow hikers to evaluate weather prior to initiating the hike.*

I think the park service should consider two day windows for permits issued on Sunday through Thursday (Wednesday) of the hiking season. Excluding Friday and Saturday for the reasons stated in the report overcrowding on the Cables.

The main goal of the system is help ensure safety of hikers climbing to the top of Half Dome. Half Dome is unique feature and we all know in inclement weather that individuals who have a permit for that day will still attempt a Half Dome Summit no matter what the conditions maybe. They feel compelled, because of the assigned date, to go despite the safety concerns for themselves or others.

By providing a two day window on the least crowded days at least give the permittee the opportunity to hike to the summit on a better weather day and not feel compelled to hike on the only day assigned.

Yes there may be times when the number of people will exceed 300 or 400 on a given day. But that in my opinion is far safer to have increased people on Half Dome in good weather rather than having

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people climb during bad weather. Which not only presents a danger to hikers but potentially the rescue personnel that may be involved to assist those that get into trouble. (Individual, #5)

If the permit was for 2 days, the hiker could then postpone the hike for a day if rain is in the forecast. (Individual, #140)

Response: A two day permit was considered and dismissed as explained on pages 2-15 and 2-16 of the EA. This action was considered and dismissed because it would not guarantee elimination of crowding, opportunities for solitude, or free-flowing conditions. There is no way of predicting the number of people who would be using the Half Dome Trail on any given day, and it is likely that encounter rates would exceed 16 groups per hour on weekends and on the first day of favorable weather after a period of inclement weather.

Concern 47: *The NPS should consider requiring the use of appropriate climbing equipment (harnesses, via-ferrata) for hikers climbing the cables.*

A good alternative would be to force people (by regulation) to use a climbing harness and a klettersteig-set which would greatly increase the safety of the users. A set could be bought in advance by the user (buyable for 100 USD) or could be rented from the Yosemite NPS for an amount which would have to be calculated. (Individual, #100)

Include a cable on each side that requires individuals to attach themselves via carabiner, and have that cable include 'stoppers' in case of accidental slip. (Individual, #301)

Response: Nothing prevents an individual from using a harness or other climbing equipment while ascending or descending the cables. The NPS does not require people to carry personal safety equipment in Yosemite's wilderness.

As discussed on page 2-4 of the EA, in the wilderness setting the ultimate responsibility for personal safety belongs to the individual. The freedom to make personal assessments about one's own ability and experience in handling risks is a basic concept of wilderness travel. Likewise is the freedom to act on that assessment to evaluate the risk and continue on or decide to turn back.

NPS Management Policies 2006 provide additional guidance about visitor safety. In the case of high adventure recreational activities, the *NPS Management Policies 2006* 8.2.5.1 provide that "visitors must assume a substantial degree of risk and responsibility for their own safety."

Concern 48: *The NPS should evaluate methods to improve the safety of the existing cables (i.e., replacing old boards).*

Make Half-dome cables safer; replace old boards, secure poles better. (Individual, #11)

Response: The cables are maintained twice a year, and boards are inspected and replaced as needed.

Concern 49: *The NPS should reevaluate whether over-crowding is the actual source of accidents and other safety concerns on Half Dome.*

The EA states that the current overcrowding on the cables has caused unacceptable impacts to visitor safety. The presented data directly contradicts this statement. Based on the accidents listed since 2006, the likelihood of a fall is 5 times greater when the cables are not that overcrowded (Sun-Fri) than at

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they most overcrowded (Saturday). The likelihood of a fall is also 18 times greater without cables than under maximum overcrowded conditions.

However, the EA does not even attempt to prove that the overcrowding is causing safety concerns. I would postulate that the exact opposite is true. The data presented in the EA supports the theory that one is the least likely to fall under the most overcrowded conditions. The following accidents are listed in the EA since 2006:

Statistically speaking, then, one is 5 times as likely to fall under Alternative B (similar level of PAOT than under current conditions on Sunday-Friday), than during the worst overcrowding conditions under Alternative A.

Similarly, one is 18 times more likely to fall without cables (Alternative E) than under the worst overcrowding conditions under Alternative A.

I also believe that the data presented does not back up the assertion that the overcrowded conditions are a cause for safety concern. If anything, the presented data seems to say exactly the opposite. I thus do not believe than any of the Alternatives presented meets the Needs and Purpose stated in the EA, as the two presented reasons for the study, restoring wilderness character to the trail and improving safety appear to be mutually exclusive. (Individual, #82)

However the plan lacks data on what the usercount was on the days of the accidents, but does give insight on the weather conditions on the Half Dome. It is most notable that these accidents occurred in bad weather (wet rock, lightning). As a reader I am not convinced that either of the alternatives improves safety for the user of the Half Dome cables. A person can still slip and fall during bad weather with a low amount of users and cause (fatal) injuries, this is not related to how busy it is at the cables. Further safety measures should be taken, for example with security lines to which people attach themselves (a form of via ferrata, being very popular in Europe). The plan really needs a better analysis on the safety measures required for the users of the Half Dome cables. (Individual, #100)

On ES-i, the document states there were "four fatal falls" between 2006 and 2009. However on page 1-5, the document makes clear in two of the cases resulting in fatal injuries, three were on wet rock and in two of these, the cables were down. Recent incidents mainly occurred in off-peak season. The one fatality in July, 2011 involved lightning and wet rock. Consequently, it seems difficult based on the data presented in the document to justify safety concerns regarding the numbers of people on Half Dome.

The National Park Service has presented no useful data in the reference document to justify any Half Dome access permit based on safety concerns. There is no report of any study documenting an increased safety risk that can be ascribed to the numbers of people on the cables or on top of Half Dome. There is no established threshold beyond which the number of people on the cables or on top of Half Dome are at elevated risk. There is no established number of people on the cables or on top of Half Dome at which elevated risk becomes unacceptable. Once these numbers are determined, a scientifically justifiable unsafe peak demand can be defined. No data have been presented indicating when such peak demand times occur, and on which days of the year. At this time, the National Park Service cannot demonstrate the current densities in fact constitute a safety risk. (Individual, #177)

Response: The EA is a public policy making document for implementing an action using the best available information. It is not an absolute to be proven. The purpose and need for the plan is set forth on page 1-2 of Chapter 1 of the EA. The alternatives address the purpose and need.

Concern 50: *The NPS should regulate flow on the cables by creating a one-way traffic pattern.*

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The danger is people going up and coming down at the same time. Have you considered having a traffic pattern. For example up the cables on top of the hour to mid hour, down the cable mid hour to top of hour. Or up on the even hours (12, 2, 4, 6, etc) and down on the odd (1, 3, 5, 7 etc). Enforcement by a seasonal ranger or aide and in place only at peak times. This way there is no plagiarism by people selling tickets or getting privileges because they are considered to be a VIP. (Individual, #43)

Response: Management of hikers' movements up and down the cables by either assigned time slots or by on site park staff was considered and dismissed as explained on pages 2-14 and 2-15 of the EA. This alternative was considered and dismissed because it would not decrease crowding and provide for solitude opportunities. Encounter rates would continue to be high, and crowding would be transferred to the summit and Sub Dome.

Concern 51: The NPS should establish a system that allows for permits to be "deferred" when inclement weather prevents climbing Half Dome safely.

During periods of inclement weather (thunderstorms or rain predicted), permit holders should be offered a chance to defer their permit to an alternate day. This will increase safety by discouraging use on days when it may be dangerous to climb, while allowing the user a choice. (Individual, #16)

Response: This action was considered and dismissed (EA, page 2-15) because it would not guarantee elimination of crowding, opportunities for solitude, or free-flowing conditions. There is no way of predicting the number of people who would be using the Half Dome Trail on any given day, and it is likely that encounter rates would exceed 16 groups per hour on weekends and on the first day of favorable weather after a period of inclement weather.

Concern 52: The NPS should close the cables during periods of inclement weather.

I also believe there should be reasonable education about climbing the cables and the dangers if the rocks are wet or a storm comes in. In addition to educating people about the dangers I believe people who sign up for a permit should sign a waiver and also if it is raining or a storm is coming in the cables should be closed for the day. (Individual, #92)

Response: Closing the cables during storms was considered and dismissed (EA, page 2-14). This alternative was considered and dismissed because it would not decrease crowding and provide for solitude opportunities. Encounter rates would continue to be high, and crowding would be transferred to the summit and Sub Dome.

Similarly, positioning a ranger to "close" the cable system when a storm is approaching contradicts established policy for risk management in wilderness. *NPS Management Policies 2006* 6.4.1 states, "Park visitors need to accept wilderness on its own unique terms", and the NPS should only provide visitors with "general information" concerning possible risks. This would establish an unmanageable precedent for other wilderness areas. In addition, there are hundreds of people at risk from thunderstorms in other locations in Yosemite such as Sentinel Dome, the top of Yosemite Falls, Mt. Hoffmann, and Mt. Dana. If Half Dome is routinely closed when weather threatens, there would be an expectation that other areas would be held to the same standard.

NPS Management Policies 2006 8.2.5.1 states that, "Park visitors must assume a substantial degree of risk and responsibility for their own safety..." This option takes responsibility away from the hiker and places it with a NPS ranger. The ranger would have to make decisions based on a complex set of ever-changing variables, including the potential for bad weather, individual hikers' abilities and confidence to handle wet rock, and estimated crowding on the cables during any

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period of potentially bad weather. If a ranger is contacting hikers at the base of Sub Dome, that ranger would have to determine what the weather will be for the next two to three hours, the average time that it takes hikers to ascend and descend the cables. If there is storm activity or even cloud formation over the Sierra Crest, there is potential for a storm to move over the Half Dome area in that two to three hour period. This can be a daily occurrence from June to August and would result in numerous unnecessary closures.

Concern 53: The NPS should install more educational signage along the trail.

Provide trail signs informing distances to goals of climbers with posted and carved out as to their location in relationship to the posted sign. (Individual, #4)

Also, it seems that it might be helpful to put a sign similar to those you might find at an amusement park ride, saying that people with significant physical problems or who are really overweight, faint of heart, have spinal problems, etc., should not attempt to climb the Half Dome cables. i always hear stories of people who get gassed out on the cables and stop midway up, holding up the giant line of people behind them. It sounds exclusive, but i believe that it will serve to help cut down traffic, and decrease the amount of rescue/first aid necessary by keeping those not capable from potential danger. (Individual, #19)

Response: Park staff will continue its ongoing process of evaluating signage to determine the appropriate content and consistency in messaging. All such signage would be subject to the minimum requirement analysis process for protection of wilderness character.

Concern 54: The NPS should require an appropriate educational training prior to allowing climbers access to the cables.

Permits should be given out only after the visitor attends an education session. The info session would educate the visitors on the dangers of the Half Dome Hike, and instruct the visitors on proper safety measures, including equipment, clothing, food & water, etc. They should also be instructed on proper climbing techniques for the cables. Most importantly, they need education on the dynamic weather condition and how bad weather conditions result in dangerously slippery rock and lightning. (Individual, #163)

Many hikers are not prepared to summit safely. I suggest hikers be required to watch a video that provides instruction on carrying water, proper clothing, behavior on the cables, & Leave-No-Trace hiking. (Something similar to the requirement to hike in the Grand Canyon.) (Individual, #247)

Response: The NPS encourages safe behaviors in wilderness by providing safety information to the public through a variety of media and methods. Half Dome visitors can view web pages which provide wilderness safety tips and videos that can prepare hikers for the potential challenges and hazards associated with the hike. The 2010-2012 interim permit system put this information in view of customers during the on-line permit purchasing process. Preventive Search and Rescue staff (funded by the interim permit system) and NPS Rangers are available throughout the park and trail corridors to answer questions and provide general recommendations for safe decision making in wilderness.

Concern 55: The NPS should require hikers to sign a waiver prior to using the cables.

I also believe there should be reasonable education about climbing the cables and the dangers if the rocks are wet or a storm comes in.

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In addition to educating people about the dangers I believe people who sign up for a permit should sign a waiver and also if it is raining or a storm is coming in the cables should be closed for the day. (Individual, #92)

Response: As part of the 2010-2012 interim permit system the NPS has, and will continue as part of the Selected Action, to provide safety information on the dangers of storms on Half Dome through the permit system, trail signs, Preventive Search and Rescue education, press releases, articles in the media, information at visitor centers and evening programs, web content, and a safety video.

Yosemite Planning Context and the NEPA Process

Concern 56: *The NPS should analyze conditions at Half Dome within the context of the entire park.*

A full master plan for the Yosemite National Park should be undertaken to address overall needs for the Park, with a particular focus on balancing environmental preservation against visitor demand. There are many elements of the current state of the Park that have damaged the reason why it was designated as a national park to begin with. (Individual, #174)

Response: The entire park is currently managed under the 1980 *General Management Plan*. Ongoing and future planning efforts including the *Merced Wild and Scenic River Comprehensive Management Plan*, *Tuolumne River Plan*, and *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement* plan are equivalent EIS documents examining broader issues.

Concern 57: *The NPS should consider that wilderness encounter rates discussed in the Half Dome EA could set a precedent for other federal public lands.*

In the EA you use the example of Snow Lake to put the extreme encounter rates of Half Dome into perspective. There is one important aspect of this that you miss completely, however: The USFS has never legitimized the encounter rates of Snow Lake by covering them in any sort of way in a planning document. Snow Lake is an anomaly and an extreme one at that. The USFS does not indicate that those encounter rates are acceptable. In fact, all the Region 6 information related to encounter rates would indicate that those are unacceptable. Here, you are stating that Half Dome encounter rates are acceptable because you have found an anomaly in the wilderness system that approaches them. It defies logic.

This has major implications for every agency managing wilderness in the Wilderness Preservation System. For this reason, this decision cannot be viewed as having no significant impact. If you go forward with 300+/day as acceptable, this action will legitimize (by saying an agency managing wilderness believes that this extreme encounter rate still provides opportunities for solitude) a level of non-solitude that exceeds any other planning process for wilderness by a factor of 3 or 4. This is not an action with "no significant impact for that reason alone."

You need an EIS to cover this decision, for your decision has major significant impacts for the wilderness system as a whole. (Individual, #210)

Response: In considering the 10 criteria for significant impact as defined by CEQ regulation 40 CFR 1508.27, it was determined that the Selected Action will not have a significant effect on the human environment, thereby meeting the criteria for an environmental assessment. The "Human environment", as defined in Sec. 1508.14, shall be interpreted comprehensively to include the

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natural and physical environment and the relationship of people with that environment.” This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. All criteria were considered, and it was determined that none of the significance criteria are triggered under the Selected Action.

The NPS recognizes that the implementation of day use permits for a wilderness area is uncommon, but does not consider this a precedent as day use permits have been required for hiking Mt. Whitney since 2001. Park management does not anticipate that any significant political controversy or concerns will result from this plan. While there was a degree of controversy over the 2010-2012 interim permit system particularly regarding equitable allotment, the NPS does not expect that the Selected Action will generate any new or different controversy. Comments from the Sierra Club have been supportive of a permit program while Wilderness Watch supports the removal of the cables (Alternative E) which was considered within the range of reasonable and feasible options.

Cultural

Concern 58: The NPS should further analyze the historical importance of the cable system for traditional users.

The plan does not take into account the historical importance of the cable system and the access it provides to those who have made family tradition out of climbing the mountain. (Individual, #269)

Response: The Selected Action will continue to provide the same method of access to the summit of Half Dome for hikers that it has since the cables were put in place. Hikers will continue to experience the historic feeling of the Half Dome Cables and Trail Historic District. Minor structural improvements of the cables under the Selected Action will be completed in a manner consistent with the historic workmanship and design of the Trail and would therefore not affect the integrity of the historic property. Historic integrity of location, setting, feeling, and association will be retained.

A discussion of the Half Dome Cables and Trail Historic District Nomination is included in the EA on pages 3-26 to 3-27. It states:

The Half Dome Cables and Trail National Register nomination was prepared by Yosemite Cultural Resources staff to fulfill National Historic Preservation Act (NHPA) Section 110 requirements stating that federal agencies identify, evaluate, and nominate properties to the National Register of Historic Places (NRHP). This nomination was submitted for concurrence from the California State Historic Preservation Officer (SHPO) and the Keeper of the National Register. Concurrence has been obtained and it will soon be listed on the National Register of Historic Places.

The nomination for the Half Dome Cables and Trail reached the following conclusions:

- The Half Dome Cables and Trail is eligible for listing in the National Register as a Historic District with a period of significance extending from George Anderson’s ascent of Half Dome and concluding after the cable route and switchbacks were installed by the Sierra Club (1875-1919).
- The Half Dome Cables and Trail Historic District has three contributing features (Half Dome Trail Alignment, Granite Stone Masonry Steps and Retaining Walls, and the Anderson Memorial Arch Ruins) and one non-contributing feature (Half Dome Cables and Stanchions). Although the Half Dome Cables and Stanchions are listed as non-

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contributing due to their replacement in 1934 and 1984, they are considered compatible within the historic property.

- The Half Dome Cables and Trail is considered to have local historic significance under National Register Criterion A as one of the earliest trails to a Yosemite Valley high mountain summit and as one of the most difficult trail building projects in the park, local historic significance under National Register Criterion B for its association with George Anderson. It also has local historic significance under National Register Criterion C for its technological advances in the design and construction of modern technical rock climbing.

Miscellaneous Comments

Concern 59: The NPS should correct errors in the listing of management target numbers for Alternative B on page 2-7 and Alternative D on page 2-11.

I've already emailed you about the cut and paste errors on pages 2-7 (alternative B) and 2-11 (alternative D), the management target number of hikers is under these alternatives is not 300, but rather 400 and 140, respectively. (Individual, #51)

Response: The NPS has corrected this error in the Errata Sheets to the EA.

Concern 60: The NPS should clarify how permits will be split between day hikers and wilderness permit hikers under Alternatives B, C, and D.

The document is vague about the mix of Half Dome day hikers and wilderness permit hikers in alternatives B, C, and D. (Individual, #97)

Response: The Selected Action sets a target for the number of people who may access the Trail per day, but allows for management action regarding the distribution of those between day hikers and wilderness permit holders. The Selected Action directs that the permit allocation system has specific standards for success (see page 2-9 of the EA), but keeps some of the details of that system open to adjustment through the life of the plan. This is to keep the system flexible to ensure the ability to respond to changes in use patterns and technology, and to make the system as equitable and efficient as possible. The flexibility of the permit allocation system will allow the NPS to take advantage of opportunities in the future to improve upon the equitable and effective allocation system.

Concern 61: The NPS should promote hikes other than Half Dome to further reduce traffic on the cables.

Yosemite National Park Authorities should assume some responsibility for the heavy foot traffic at the cables because they use half dome as an advertising tool; putting its picture everywhere they can, from Yosemite's face book page to every park's vehicles and printed literature they put out. May be they should stop promoting half Dome so heavily and consequently draw less attention and fewer people to its trail. For many hikers, visiting Yosemite means climbing Half Dome. (Individual, #97)

The park should also advertise (on their website and park printed materials) other equally challenging hikes in the park to encourage the constructive distribution of veteran hikers. (Individual, #151)

I am in favor of limiting the crowds, but I also believe that this is a problem created by Yosemite as a result of virtually everything having Half Dome as it's signature identifying landmark. Spread out the riches - have pictures, t-shirts, mugs, etc. with something on it other than Half Dome. There are amazingly beautiful places in Yosemite that are virtually ignored in all of the ads and

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marketing materials. So, change how Yosemite is marketed, in addition to doing what needs to be done to limit the traffic up the cables. (Individual, #204)

In conjunction with developing a Half Dome Plan, NPS should simultaneously look at developing alternative, worthy destinations. We all know why people might want to "climb" Half Dome, but maybe these same people could be swayed to "climb" other peaks if only they knew about them. (Individual, #208)

Response: The Yosemite NPS website has numerous other suggested hikes (short, medium, and long) as well as trail descriptions of other wilderness trails (<http://www.nps.gov/yose/planyourvisit/hiking.htm>). Additionally there are numerous published trail guides with trail descriptions and recommendations. The NPS does not want to designate a substitute for the Half Dome hike which could move physical impacts and crowding to a new trail.

Concern 62: *The NPS should consider changing the newspaper of record.*

The newspaper of record should be one in a city more representative of where the vast majority of visitors to Yosemite come from: The San Francisco Chronicle or The San Jose Mercury. Many people are unaware of actions published in the Mariposa Gazette, newspaper that serves a very small community. (Business, #337)

Response: From NPS DO-12 Handbook: The notice that an EA is available for review is, at a minimum, to be published in the local newspaper of record, posted on the NPS website, noticed in the Federal Register, or otherwise made broadly known to the public. 36CFR 1.7 (3) defines *Public Notice* as "publication in a newspaper of general circulation in the affected area". Additionally the park issues press releases to major newspapers at key stages in all of its planning efforts. Many newspapers and other media outlets announced the public review period of this document. Additionally, Yosemite actively updates interested parties through electronic newsletters.

Concern 63: *The NPS should use television to raise awareness about permit system changes.*

People watch a lot of TV. Why weren't TV ads used? As an employee of the concession in Yosemite NP, I have spoken to hundreds of frustrated people (literally!) who didn't know about the Half Dome permit setup until they were at Yosemite or within a few weeks of their visit. Why didn't the NPS do a better job letting its constituency know about these new changes and their right to share their opinion? As tax payers, the United States citizens are all part owners in Yosemite and should have a right to express their opinion.

Response: The notice that an EA is available for review is, at a minimum, to be published in the local newspaper of record, posted on the NPS website, noticed in the Federal Register, or otherwise made broadly known to the public. 36CFR 1.7 (3) indicates publication in a newspaper of general circulation in the affected area is sufficient. For the Half Dome EA, the NPS published notice in the Mariposa Gazette, posted on the Yosemite NPS website, and issued press releases that were carried by major newspapers and many California television stations.

Concern 64: *The NPS should correct the list of seven evaluation factors on page 2-16, as only six factors are included.*

Then there is the list on page 2-16, which described the "seven evaluation factors" for the alternatives. Perhaps a bit of a Freudian Slip that there are just six items listed, not one of which is safety oriented.

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Listed are "Opportunities for solitude" and "Wilderness-based visitor experience and access", but not safety. The 'seven' was clearly not a typo, since that number is mentioned again when it was said: "When seven factors considered equally, Alternative E (Remove the Cables) scored the highest". A slight mention of safety came in a chart at the end of Chapter two, which had "Risk Management" as an "Impact Topic", which merely showed evacuation times for each alternative, where known, implying that the 83 minutes for Alternative A was too long and that the 47 minutes for Alternatives B and C was acceptable. (Individual, #537)

Response: The NPS has corrected the omission of “Public Safety- Managing Personal Risk” as the seventh factor for evaluation through the Errata Sheets to the EA.

Concern 65: *The NPS should refer to the Wilderness Stewardship plan consistently throughout the document.*

Page 3-37; "YNP Wilderness Stewardship Plan Revision" Yosemite does not currently have a "Wilderness Stewardship Plan" but a "Wilderness Management Plan" that was done in 1989.

One concern I have is the reference to Yosemite National Park's intention of embarking on a new Wilderness Stewardship Plan. In the document it states it will be a "Plan" (page 2-11 Table 2-3), as a "Plan revision" (page 3-37) and also "plan update" (Appendix A-2). Is the 1989 Yosemite Wilderness Plan to be re-written, updated or revised? (Individual, #478)

Response: The NPS has corrected this error through the Errata Sheets to the EA. Refer consistently to the document as the *Yosemite Wilderness Stewardship Plan/Environmental Impact Statement (WSP)*. The WSP for Yosemite will provide information and direction to meet requirements of the Wilderness Act and *NPS Management Policies 2006*. The WSP will recommend how the park would avoid, minimize, or mitigate adverse impacts on natural and cultural resources, and wilderness character, while accommodating visitor use for the purposes of wilderness. Development of the plan will involve stakeholders, partners, and staff in comprehensive planning. An environmental impact statement will be required for the completion of the WSP.

Concern 66: *The NPS should consider safety concerns in Table 1-1 along the entire length of the Half Dome Trail, not only on the cables.*

Page 1-5 Table 1-1: Accidents on Half Dome

This table only speaks to the accidents on the Half Dome Cables (a portion of the trail) and does not paint an accurate picture of the accidents and near misses that have occurred on other portions of the trail. A better more complete picture would be painted if it included Sub-Dome and also mention that many visitors who do, or intend to do Half Dome, require assistance elsewhere along the trail corridor (Lost Lake SARs and Sub-Dome near miss of 10/2010 for example). May want to mention the PSAR messaging efforts, its successes and also its lack of success (no fatalities in 2009 and 2010 but fatalities in 2011). (Individual, #478)

Response: The park, as part of its programmatic functions, reviews issues of public safety and makes minor adjustments to trails and signs and implements education programs outside the EA process both of which were done to address the issues discussed in this comment. These issues are important but are not related to crowding on the Half Dome Trail and were not part of this plan.

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Concern 67: *The NPS should move Table 3-1 to page 2-3 to provide a review of the referenced encounter rates.*

Page 2-3 second to last paragraph; may want to include Table 3-1 here to help people see what the encounter rates are you're referencing. (Individual, #478)

Response: The clarification has been made to the plan through the Errata Sheets to the EA.

Concern 68: *The NPS should clarify that Yosemite Wilderness Permits are only required for overnight wilderness users.*

Page 2-4 second paragraph; make sure it is clear that YOSE Wilderness Permits are ONLY required for overnight wilderness users. (Individual, #478)

Response: This clarification was added to the plan through the Errata Sheets of the EA.

Concern 69: *The NPS should evaluate whether a beneficial cumulative effect is possible under the No Action Alternative.*

Page 2-22 Table 2-3; Natural Resources - Wildlife Cumulative effect listed as "Beneficial." Is this really possible to have a beneficial cumulative effect under the no action alternative when visitors will not be regulated? (Individual, #478)

Response: Beneficial impacts from the upcoming Yosemite Wilderness Stewardship Plan/Environmental Impact Statement could benefit the Half Dome Trail because the WSP would also have the goal of protecting wildlife, a component of the natural character of wilderness.

Concern 70: *The NPS should clarify how the more active administrative presence of rangers will impact the area and impact park operations.*

Page 2-23 Table 2-3; Park Operations - there is no mention of the impact of a more active administrative presence and how it will impact the area. (Individual, #478)

Response: Described in Environmental Consequences, Park Operations on page 3-30 of the EA. Compliance enforcement and monitoring would add approximately two staff persons per night at the NPS camp at Little Yosemite Valley. This facility already supports three to five staff persons per night, and the additional staff would not increase the footprint of the administrative use.

Concern 71: *The NPS should state more clearly what sections of the Half Dome Trail are constrained.*

Page 3-16 second paragraph; once off the Half Dome Cables the trail is still "constrained" and in places like the Sub-Dome it is constrained with potentially deadly consequences if you stray off of the trail. (Individual, #478)

Response: That clarification has been made to the plan through the Errata Sheets to the EA, explaining the physical constraints of the Sub Dome steps on page 3-16.

Concern 72: *The NPS should define terms and address current management strategies to mitigate existing impacts.*

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Page 3-29 Talking of impacts under "Park Operations - Alternative No Action" it states "moderate, long-term, adverse impacts" which is confusing? moderate and adverse? Perhaps defining these terms would make it clearer?

Second sentence, "Adverse impacts to natural resources would continue to occur?" What is the Park doing to address these current issues - Half Dome EA and/or what else? (Individual, #478)

Response: Moderate and adverse are defined in Chapter 3 on page 3-2 of the EA. Educational information on how hikers can minimize their impacts will be part of the permit allocation program and will help to mitigate impacts to the natural resources.

Concern 73: The NPS should correct staffing types and numbers throughout the document.

*Page 3-30 fourth paragraph; not an accurate account of current staffing at Little Yosemite Valley;
1-2 social science staff
1-2 bear techs
2-4 commissioned rangers
1-2 SAR techs*

Shoulder seasons see trail crew and other staff; camp can have anywhere from 2 - 30 people staying in it (2011). With a more active administrative presence predicted in the future these numbers are not likely to go down.

*Alternatives B, C, D would likely increase the administrative footprint for example;
In 2012 plan to have 1 GL-09 term LE supervisor, 2 LYV Rangers, 2 HD Compliance Rangers, 1 bear tech, 1-2 SAR techs, unknown social science staff, trail crew to set up and and take down cables, etc.
Just the nature of and increased need to manage Half Dome means and increased administrative presence unless clearly stated why not (limited number of people require less management than unlimited numbers).*

*Page 4-1, first paragraph; list of specialists in 2nd sentence should include Outdoor Recreation Specialist; Wilderness Specialist - you can confirm this with the list of prepares on page 5-1.
(Individual, #478)*

Response: The staffing at the NPS Camp at Little Yosemite Valley (LYV) was 3-5 persons per night before the interim permit system was instituted from 2010-2012. During the interim permit system there was a spike in the number of staff assigned to LYV to manage that program. This amount of staff is not expected in the future. The estimated increase in staff as part of the Selected Action will be 2 persons per night throughout the summer. The extended Trail Crew presence at LYV administrative site was prolonged in 2010 and 2011 due to above average snow years keeping them from moving to their normal camps in the high country. The NPS has corrected this section of the document through the Errata Sheets to the EA to show the trail crew presence at LYV during set up and take down of the cables each year.

OUT OF SCOPE COMMENTS

Some comments expressed were not within the scope of this project; therefore, they are not cited in this report. All comments were considered by park staff and were forwarded to the appropriate specialists for consideration. Out of scope topics included:

- Improving sanitation along the Trail
- Limiting use based on age, height, training, equipment or nationality

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- amount of overnight accommodations in Yosemite Valley
- affordability of overnight accommodations in Yosemite Valley

The full text of all public comments is available for review on the project website at:
<http://www.nps.gov/yose/parkmgmt/hdp.htm>.