#### Yosemite National Park

#### Half Dome Trail Stewardship Plan: Wilderness Issues

Half Dome is an iconic, granite dome rising 5,000 feet above the Valley floor in one dramatic sweep of sheer rock. Since its first ascent in 1875, the climb to Half Dome's peak has become a major draw for park visitors. Studies conducted in 2008 observed that Saturday and holiday use averaged more than 800 hikers per day with peak numbers from 1100–1200 hikers. One of the purposes of this plan is to protect the wilderness character of the project area while providing the public the appropriate opportunity to reach the summit of Half Dome.

## What is Wilderness?

In 1964, Congress created the National Wilderness Preservation System "to secure for the American people an enduring resource of Wilderness." In 1984 Congress designated 95% of Yosemite National Park, including Half Dome and the Half Dome Trail, as part of that National Wilderness Preservation System. Many Yosemite visitors travel into the wilderness to seek the beauty, solitude, and challenge that Congress sought to protect with wilderness designation.

Although many intangible aspects of wilderness character are important, the National Park Service has identified four qualities that are practical and measurable and rooted in the Wilderness Act. They are:

- Untrammeled Wilderness is essentially unhindered and free from modern human control or manipulation. This quality is degraded by modern human activities or actions that control or manipulate the components or processes of ecological systems inside the wilderness.
- Natural Wilderness ecosystems are substantially free from the effects of modern civilization.
   This quality is degraded by intended or unintended effects of modern people on the ecological systems inside the wilderness since the area was designated.
- Undeveloped The Wilderness Act states that wilderness is "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation," "where man himself is a visitor who does not remain" and "with the imprint of man's work substantially unnoticeable." This quality is degraded by the presence of structures, installations, habitations, and by the use of motor vehicles, motorized equipment, or mechanical transport that increases people's ability to occupy or modify the environment.
- Solitude or Primitive and Unconfined Recreation The Wilderness Act states that wilderness has "outstanding opportunities for solitude or a primitive and unconfined type of recreation." This quality is about the opportunity for people to experience wilderness; it is not directly about visitor experiences per se. This quality is degraded by settings that reduce these opportunities, such as visitor encounters, signs of modern civilization, recreation facilities, and management restrictions on visitor behavior.

Use of the Half Dome Trail System, which includes the cables, has dramatically increased since the time of designation. This increase in visitation has caused crowding. Crowding threatens wilderness character, by diminishing the outstanding opportunities for solitude, which is one of the wilderness character elements the National Park Service is legally required to provide. In addition, increased use has affected wilderness character by impacting the condition of natural resources along the Trail.

The Half Dome Stewardship Plan and Draft Environmental Assessment is intended to address these and other concerns.

# Effects of High Use on Wilderness Character and Visitor Experience

Increased use of the Half Dome Trail has led to conditions that adversely impact both the wilderness character of the project area and the experience of those visitors using the Trail, including but not limited to:

- Crowding and long lines on the Sub Dome, summit, and cables result in an undesirable visitor experience. Visitors reported a preference for 10-30 people at one time (PAOT) on the cables portion of the Trail and that 70 or more PAOT on the cables represented conditions that were unacceptable. During peak periods of unregulated use there were up to 131 people on the cables at one time- greatly exceeding both visitor-informed standards.
- Queueing and Congestion. During periods of peak unregulated use, queues form at both the top and bottom of the cables and travel times are significantly higher than during periods of desired use (10-30 people at time)
- High encounter rates on the Trail, including on the cables and on the summit, diminish opportunities for solitude. Encounter rates on the Half Dome Trail during the 2008 study reached 118 groups per hour. This is six times greater than the highest previously documented encounter rate reported in any federally designated wilderness area, which was at Snow Lake in Washington at 18 groups per hour (Cole et al. 1999).
- High use levels may impact natural conditions such as:
  - Vegetation damage and soil loss on and near the Trail corridor, with many sections widened and deeply eroded;
  - Wildlife habituation along the Trail corridor, at the summit and Sub Dome from improper food storage and feeding;
  - Potential impacts to a population of Mount Lyell Salamander, a California Species of Special Concern, found on the Half Dome summit; and
  - Increased amounts of unburied human waste along the Trail corridor, along with litter
    and evidence of human presence in the form of rock wind shelters and cairns on the Half
    Dome summit.

### How can I get involved?

- Visit online: www.nps.gov/yose/parkmgmt/planning.htm
- Attend Public Open Houses on the last Wednesday of each month from 1 p.m. to 4 p.m. at the Visitor Center Auditorium in Yosemite Valley. Park entrance fees are waived for visitors who attend the Public Open Houses.
- Submit your email address to receive the park's periodic electronic newsletter yose\_planning@nps.gov
- Provide input during the planning process. You can submit comments by visiting the National Park Service's Planning, Environment and Public Comment (PEPC) project page at http://parkplanning.nps.gov/halfdome Or send regular mail to:
- Mail: Superintendent Attn: Half Dome EA P.O. Box 577 Yosemite, CA 95389 Fax: 209/379-1294
- Phone: 209/379-1369