6 Conclusion and policy recommendations

This research was commissioned by the National Park Service to inform preparation of an Interagency Trail Management Plan for the Santa Monica Mountains National Recreation Area. The purpose of the research was to determine visitor trail use patterns throughout the trail network within the SMMNRA. Specifically, findings of the research should enable the trail management planning committee to make informed decisions with regard to establishing management policies for the trails and for designating particular trails for single or multiple use purposes. The research should also enable the National Park Service and partnership agencies to enhance the protection of key natural, cultural and recreational resources within the National Recreation Area.

Recommendations for Trail Management

Based on the findings of our research, we now turn towards making some policy-oriented recommendations for trail management. These recommendations address:

(i) user demographics
(ii) recreational activities
(iii) user knowledge of flora and fauna
(iv) trail user interactions
(v) visitor travel behavior
(vi) barriers to access

A brief summary of survey findings precedes each recommendation.

Demographics of trail users

The type of trail user most frequently represented in visitor statistics for the SMMNRA was a white, middle-aged man, who was born in the United States, spoke English, was college-educated, relatively affluent, owned his own home, did not have children under 18 years of age, and lived in a single person household. He typically visited the SMMNRA with friends and was a return visitor. People of color were under-represented in the survey as well as lower income people. In particular, African-Americans, Latinos, Native Americans and Native Hawaiians/Pacific Islanders, and to a lesser extent Asians were all very poorly represented in the survey data. The literature review for this report pointed to connections between leisure behaviors, ethnicity and marginality, and thus it was expected that visitors of color would be under-represented. However, despite the characterization of the sample as largely white, male, affluent and well-educated, there is still considerable diversity among respondents.
Recommendation 1

It is recommended that the National Park Service undertake an assessment of its current outreach programs to people of color and low-income earners living within the SMMNRA catchment area. This assessment should evaluate the success of these programs in raising awareness of the SMMNRA as a recreational resource. The assessment should also identify any impediments to access that might prevent people of color and low-income earners from using the SMMNRA. Based on this assessment, the National Park Service should then modify its outreach programs to ensure that every possible effort is being made to ameliorate the under-representation of people of color and low-income earners amongst trail users.

Recommendation 2

There may also be a need for the provision of additional facilities for aged persons, given the sizeable share of older users in the SMMNRA and the overall trend towards an aging population in the United States.

Recommendation 3

It may be appropriate for the provision of multi-lingual signage at destination trail sites, including Spanish, Farsi and Mandarin. Research demonstrated that many park users obtained information about the National Recreation Area from park signs and brochures, and it is appropriate for the National Park Service to consider multi-lingual signs and brochures.

Recreational activities

Our research has revealed that the Santa Monica Mountains National Recreation Area is a popular year-round recreational destination. An unexpected finding was the high proportion of respondents who visited the SMMNRA during the summer. From our interaction with National Park Service staff, it was evident that there was a preconception that trail use would be lower in the summer than during other cooler seasons. However, the results from this research demonstrate that many park users take advantage of the cooler mornings and evenings to enjoy the trails during the summer. Temperatures during the survey were typical for the summer and yet attendance at the trails was undiminished when compared to the results of previous surveys that were undertaken during the spring. Perhaps unsurprisingly the research also revealed that weekend park use was elevated, but that particular user groups such as picnickers and sightseers were more likely to use the SMMNRA during the summer than other seasons. Winter was the season that many survey respondents reported as their least frequent period of park visitation. It was also clear than many park users were return visitors and that they visited the SMMNRA on average four times a month and the duration of their visit was on average two hours long.

Visitors to the SMMNRA typically were accompanied by friends and family or came by themselves. Surprisingly few trail users came with organized groups or religious groups. Whilst many park facilities such as camping areas are targeted towards organized groups, proportionally fewer are provided for small groups or individuals. A greater number of
camping sites at destination trail sites would provide the opportunity for overnight stays for people traveling longer distances to get to the SMMNRA.

Recommendation 4

It is recommended that trail planning take into account the high level of summer park use and that the provision of facilities are designed accordingly. It is also recommended that closer attention be given to facilities for small groups or individuals, such as additional individual camping opportunities at destination trail sites.

Insofar as user groups are concerned, results of the survey have specific implications for trail management. The most frequently reported activity was hiking. Indeed, it clearly outranked all other trail uses. The next most often reported activity was sightseeing, followed by mountain biking, jogging and dog walking. As far as primary activities on the trails are concerned, hiking was still the most popular activity, followed by mountain biking and jogging. Sightseeing and dog walking were the next most popular activities.\

Respondents stated that the reason for their visit was most often to be outdoors. Exercising was second, followed by enjoying the scenic beauty of the SMMNRA, getting fresh air, escaping the city and suburbs, communing with nature and socializing.

It was also noted in the report that although beaches and popular swimming areas are present within the SMMNRA, few users reported swimming/wading as an activity. This could be ameliorated by increasing the community’s awareness of the SMMNRA and the various attractions it offers.

Recommendation 5

Trail planners should take account of the popularity of the various types of recreational pursuits on the trails, and direct management efforts accordingly.

Recommendation 6

Trail planners need to promote greater awareness amongst the community of the attractions offered by the SMMNRA and the boundaries of the SMMNRA, so that people availing themselves facilities and attractions within the SMMNRA of are cognizant of this recreation asset.

Local park use

An important finding of the survey was the emergence of a portrait of localized use. The National Recreation Area is used by some trail users as if it was a local or neighborhood park. Indeed, 12.2% of respondents indicated that they did not use their local parks or that the question about local park use was not applicable to them. The low median travel time

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18 Interestingly, although equestrians have a history as a prominent lobby group within the SMMNRA, they only constituted 5% of trail users and horseback riding constituted only 3.4% of primary recreational activities. Trail use planners should therefore be attendant to the risks of catering to vocal user groups over the needs of more popular recreational activities.
to the SMMNRA has highlighted the residential proximity of trail users. In particular, joggers, equestrians and dog walkers and to some extent mountain bikers all use the SMMNRA on a regular, high frequency basis. Equestrians were the group that most frequently reported never using a local or neighborhood park.

Recommendation 7

Trail management planners should be cognizant of the role that the SMMNRA plays for the various recreational user groups, and the way it is treated as a de facto neighborhood park by these groups. This use characteristic has implications for facilities provision and trail maintenance.

Environmental attitudes and knowledge and information sources

Perhaps the most surprising finding of this study was the high level of ecocentricism among surveyed trail users. The majority of respondents (53.2%) felt that the preservation of habitat for plants and animals was the most important reason for protecting the Santa Monica Mountains. When this is combined with those respondents who refused to, or were unable to, decide between recreation and habitat protection, over seventy percent of park users prioritized the ecological integrity of the Santa Monica Mountains. Only one-fifth of respondents felt that recreation was the most important reason to protect the mountains.

Recommendation 8

The preservation of habitat for flora and fauna should receive paramount attention in trail management planning.

Nature observation was the most frequently cited source of knowledge about plants and animals in the Santa Monica Mountains. In addition, many users were dependent upon park signs and park brochures for their environmental information. When these three knowledge sources are considered as being interdependent, an imperative emerges for trail managers. Another key finding was the growing importance of the Internet as a source of information for the SMMNRA, with trail users writing it into the survey as an information source.

Recommendation 9

Park signs and brochures should be easily accessible and should contain information that will augment trail users’ own observations. This information should be interpretative, enabling trail users to link their observations to park information. Non-intrusive interpretative signage placed along the most popular trails should assist trail users in broadening their understanding of plants and animals within the park and the unique needs of these species. The use of the Internet should also be considered as a means of disseminating nature information for the SMMNRA.
Conclusion and recommendations

**Trail user interactions**

A key purpose of this survey was to ascertain whether or not conflict was occurring between trail users and to gauge the causes of conflict. Although the majority of respondents reported that their trail experience was affected by the presence of other trail users, for some this impact was positive whereas for others it was not. In the aggregate, respondents reported either a favorable or at worst slightly below neutral reaction to other trail users activities and behaviors. However, compared to other users, mountain bikers, picnickers and dog walkers were less well-regarded. Mountain biking was the activity that attracted the least positive responses, and hiking received the most positive reviews. The issues that attracted the most concern were uncooperative behavior, leaving animal wastes and litter. Corroborating the evidence supporting ecocentricism amongst trail users, damaging plants and scaring animals also attracted considerable attention as problems requiring attention.

**Recommendation 10**

It is recommended that a multilingual code of conduct be developed in consultation with trail users, and that this code of conduct be posted at all trailheads, advising users to be considerate of the needs other trail users and the need to protect the habitat of plants and animals living in the mountains.

**Recommendation 11**

The code of conduct for the trails should be supported by a wide-ranging community outreach and education program. This program should provide in-class school programs, downloadable Internet information and workshops at equipment suppliers and community organization and special interest group meetings to raise awareness of ethical and responsible conduct on the trails.

**Recommendation 12**

There is a clear need to develop a management strategy to address trail users concerns with animal wastes. Trail management planners might consider requiring equestrians to have horses equipped with waste receptacles and fines might be considered for dog owners who do not use the bags supplied at trailheads.

**Visitor travel behavior**

An issue indirectly related to trail management, but allied to park use, and one that patently requires further attention by trail management planners, is mode of travel to the National Recreation Area. The overwhelming majority of respondents traveled to the National Recreation Area by private automobile. Visitors avoid public transit to the SMMNRA, or more likely find it too difficult and inconvenient to use to access the SMMNRA. The public transit routes are on the northern and southern perimeters of the Santa Monica Mountains National Recreation Area, and do not afford easy access to most trailheads. This may also account for the under-representation of particular socio-economic and race/ethnic groups in the survey, together with families with children.
Conclusions and recommendations

Recommendation 13

Trail management planners need to investigate the feasibility of either extending public transit into the National Recreation Area or affording better connection between the proposed shuttle service and public transit connections once the shuttle service becomes operational. Particular attention should be given to those trailheads with the highest visitor counts and to those trails that are of historic, cultural or ecological significance.

Barriers to access

Although a very small proportion of respondents reported experiencing barriers to access at the surveyed trails, a higher percentage reported experiencing barriers to access elsewhere within the SMMNRA. However, the sequence of questions on the survey, and survey language itself, resulted in findings about barriers to access being inconclusive. Further research on this topic is warranted.

Recommendation 14

Further research should be undertaken into barriers to access within the National Recreation Area. The lack of public transportation should be considered as an important issue when prioritizing this research.

Recommendations for Further Research

It would be useful to follow up this survey with qualitative research. Many trail users discussed their experiences with volunteers whilst completing the survey. Some of the issues they discussed included vandalism of cars and car break-ins, concerns about personal safety, fears surrounding the reputed sale of drugs at particular trailheads, gang-related concerns, and adjoining residents’ concerns with pedestrian and vehicular traffic past their houses - disrupting residential amenity. Unfortunately there were no provisions made within this survey to capture qualitative data. However, given that the majority of people completing the survey were enthusiastic about the survey, and willing to discuss their concerns with surveyors, it is likely that qualitative research through focus groups or in-depth interviewing would be a worthwhile and useful complement to this survey.

It is obvious that some socio-economic groups were poorly represented in the survey sample. It is imperative to follow up this issue with under-represented groups. Research should be undertaken, particularly with African-American park users, to ascertain if there are transportation or other issues that present impediments to their use of the National Recreation Area.

The National Park Service should also conduct further research regarding female trail users, to ascertain if there may be barriers to access that this survey did not reveal. Such barriers may include personal safety, fear of property-related crime and the need for additional facilities such as lighting, toilets and secure parking facilities. It is important that the safety issues raised in accounts of trail users be investigated in greater detail. Anecdotal evidence suggested that trail users were concerned by car break-ins, gangs,
drug use, vandalism, loud music, parking shortages, lack of toilet facilities and loss of residential amenity. These issues did not emerge in the survey data.

An important type of information that has been missing from surveys of the National Recreation Area thus far is data about people who do not use the SMMNRA. It is crucial that future research is directed towards understanding the reasons why residents who live in the catchment of the SMMNRA do not use this recreational resource. Such research will provide valuable insights into visitor utilization patterns and barriers to access.

Finally, the weekday data set was very limited in size and coverage of trailheads within the SMMNRA. This raises concerns with regard to the representativeness of weekday data. Future research should be targeted towards better capturing weekday park use.