

PROTECTING ROADLESS AREAS AND RECOMMENDING NEW WILDERNESS

ISSUE STATEMENT

Protecting Wildlands

Over the decades the Sierra Nevada has been laced with roads to support mining, logging, early settlement, modern urbanization, energy development, water management and even recreation. As a result, more than 26,000 miles of roads currently exist in the Sierra Nevada's national forests (Sierra Nevada Science Review, 1998). Despite this, a great deal of wild country remains, largely as a result of the establishment of some of the most spectacular national parks in the United States and because of the passage of the Wilderness Act of 1964.

Congress passed the Wilderness Act to “secure for the American people of present and future generations the benefits of an enduring resource of wilderness” (PL 88-577, Sct. 2). The Wilderness Act established the most protective designation available for federal land, and it provided legislative mechanisms conservationists could use to add areas to the National Wilderness Preservation System (NWPS) in the future.

In 1971 the USFS initiated its Roadless Area Review and Evaluation (RARE) survey in which the agency sought to identify National Forest System (NFS) lands nationwide that met the definition of wilderness as provided in the Wilderness Act (Scott 2004, pg. 80). This survey, known as RARE I, was followed by a second survey known as RARE II that in 1979 concluded that California's national forests included 6.3 million acres of “inventoried roadless areas” (IRA) that met the definition of wilderness (USDA Forest Service 1979). Of this, the agency found that 3,378,000 acres of IRA lands existed in the California portions of the eleven national forests stretching from the Sequoia to the Modoc. After the passage of the California Wilderness Act of 1984

and the Omnibus Public Lands Management Act of 2009, there are now 2,076,000 acres of IRAs remaining in the eleven forests.

Many of the public land controversies in the Sierra Nevada since RARE have involved conservation groups working to stop development projects proposed in roadless areas, trying to get the areas recommended for wilderness designation by the USFS during individual forest planning processes, or to pass legislation that would designate the areas as wilderness.

In response to these two decades of controversy, on October 13, 1999 President Bill Clinton directed then-USFS Chief Michael Dombeck to prepare a plan to protect the remaining national forest roadless areas. The final version of the Roadless Area Conservation Rule (RACR) was approved in 2001 (USDA Forest Service 2000). The policy prohibited most types of logging and all forms of road construction in IRAs. However, the final plan allowed off-road vehicle (ORV) use, mining, and salvage logging in roadless areas not already protected by more stringent, local rules. Despite these compromises, conservationists considered the policy to be a truly historic step forward in the effort to protect national forest wild areas.

How much of the Sierra Nevada remains eligible for wilderness designation?

Conservationists in California always contended that the RARE surveys failed to identify the true extent of wilderness-eligible areas in the NFS. Many believed that dozens of *de facto* wilderness areas were mistakenly overlooked or purposely excluded because they contained valuable timber or other resources, or because of perceived conflicts with ORV recreation. In addition, while much has changed since the RARE surveys were completed, the IRA maps have never been updated.

As a result of these concerns, the California Wilderness Coalition (CWC) conducted a Citizens Wilderness Inventory (CWI) of roadless land in the

Golden State from 1998-2001. Areas were determined to be eligible for wilderness designation if, as is stated in the Wilderness Act of 1964, they:

- “...generally [appeared] to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable”;
- “...[had] outstanding opportunities for solitude or a primitive and unconfined type of recreation”;
- “...[were] at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition”; and
- “...may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.”

The CWI was the first attempt by any governmental or non-governmental organization to conduct a comprehensive survey of California’s wilderness-eligible lands. From 1998 to 2001 it consisted of the following steps:

1. Using all available USFS, National Park Service (NPS) and Bureau of Land Management (BLM) maps to identify the preliminary boundaries of unroaded areas for further review.
2. Reviewing hardcopy aerial photographs of the areas identified in step 1. This required CWC staff to visit the headquarters of every USFS, BLM and NPS unit in the state. Substantially disturbed areas were excluded from the CWI, including many IRAs that had been developed since the RARE surveys.
3. Draft 7.5 minute topographic maps of wilderness-eligible areas were produced after the aerial photo analysis. The boundaries of these draft maps were then verified in the field by staff and volunteers who surveyed them by foot, vehicle, or mountain bike. All human-caused intrusions were carefully documented with notes and

- photographs. For each intrusion, the surveyor determined whether or not the disturbance was so great that it had to be excluded from the wilderness-eligible area. In addition to documenting damage, surveyors also noted and photographed positive wilderness attributes such as wildlife, scenery, pristine streams and other features and values. The average wilderness-eligible area required at least 20 hours to survey, and often much more time than that.
4. The data from the field was then used to develop final maps of these citizen-inventoried roadless areas (CIRA).

Between 2002 and 2009 the CWI maps were used as the starting point for successful wilderness legislation affecting Sequoia-Kings Canyon National Park, Pinnacles National Monument, Joshua Tree National Park, the BLM’s Ukiah, Arcata, Hollister, Palm Springs-South Coast and Ridgecrest field offices and the San Bernardino, Angeles, Inyo, Mendocino, Six Rivers, Humboldt-Toiyabe and Los Padres national forests. Where necessary and appropriate during public comment periods on proposed development projects or management plan revisions CWC and other organizations have asked agencies to protect CIRAs from development. Most notably during the Angeles, San Bernardino, Cleveland and Los Padres land management plan revisions several CWI lands were designated as “other unroaded areas” by the USFS and some were even recommended for wilderness designation.

With the advent of more accurate agency transportation maps, the easy availability of multiple sources of high-resolution aerial photos, and improvements in digital cameras and GPS and GIS technology the CWC began updating the CIRA maps in 2011 and plans to complete its resurvey prior to the start of the scoping periods for each land management plan revision in California. CWC’s survey methods today include the preliminary identification of potential roadless areas using multiple agency GIS layers, the careful examination

of at least two sets of high-resolution aerial photographs per wilderness-eligible area and verification of the boundaries in the field. In this analysis the CWC's goal is to exclude all of the following from the CIRAs:

- With some exceptions, all legally-open roads and motorized trails
- Areas that are excessively marred by illegal vehicle use
- Heavily-logged areas
- Large, maintained plantations
- Heavily-developed private land
- Campgrounds
- Reservoirs (not including a few small stock ponds)
- Areas covered by extensive type-conversions
- Maintained fuelbreaks sometimes described as "shaded fuelbreaks" or defensible fuel profile zones (this does not include mere bulldozer lines constructed during fires)
- Helispots
- Drafting sources
- Communication sites
- Heavily mined areas
- Utility corridors

Despite this, some of the CIRAs include:

- A small amount of forest that may have been logged. While the CWC sought to exclude all heavily-logged areas and obvious plantations it is quite possible that a few areas were overlooked. Regardless, it is worth noting that the NWPS includes many areas that were either partially or completely logged, so the Wilderness Act does not require that an area be unlogged for it to be designated as wilderness.
- Minor historic mining disturbances. Major disturbances were excluded. (Note that old mines and other signs of mineral development exist throughout the NWPS).
- Roads and motorized trails that are no longer legally open to the public. For the

most part these routes are recovering because they are rarely or never used. However, some of them continue to experience a certain degree of unauthorized use.

- Developments associated with grazing allotments. These features exist throughout the NWPS, so they were not excluded.
- Bulldozer lines constructed during fires. Since bulldozers are allowed in designated wilderness during fires and because there are ridges scarred by these machines throughout the NWPS, CWC did not exclude all of these lines.

In 2001 the CWI identified 7.4 million acres of land in over 300 separate areas that still qualified for wilderness designation on federal lands in California. This total included 5,254,228 acres of NFS land, which is 16 percent more than the 4,417,000 acres of RARE IRAs that existed at the time that the RACR was finalized in 2001.

The value of roadless areas

The RACR final environmental impact statement (USDA Forest Service 2000, Volume 1, pages 3-7) provides an excellent summary of several of the ecological and social values that roadless areas provide, including:

- Clean water for domestic, agricultural, and industrial uses, that helps to maintain abundant and healthy fish and wildlife populations, and that provides the basis for many forms of outdoor recreation;
- Undisturbed or less disturbed habitat that conserves native biodiversity by providing areas where nonnative invasive species are rare, uncommon, or absent;
- Habitat for threatened, endangered, proposed, candidate, and sensitive species and for those species dependent on large, undisturbed areas of land;
- Opportunities for people to enjoy high-quality non-motorized recreation activities,

including hiking, camping, mountain biking, picnicking, wildlife viewing, hunting, fishing, cross-country skiing, swimming and whitewater boating;

- “Reference landscapes” that can provide comparison areas for scientists seeking to evaluate and monitor the differences between natural settings and more intensely managed areas;
- High quality scenery that contributes directly to local tourism and to real estate values in neighboring communities; and
- Many important Native American cultural sites and valuable historical resources.

In addition, even a cursory glance at maps of the Sierra Nevada reveals that the remaining roadless areas tend to be much lower in elevation on average than many of the areas that are currently designated as wilderness. This is important because the diversity of flora and fauna generally increases as elevations decrease (Noss and Cooperrider 1994).

On April 14, 2009 one hundred twenty-seven scientists sent a letter in support of the RACR to President Barack Obama. The scientists provided a good summary of the ecological benefits of roadless areas:

Scientific research has amply documented the greater health and resiliency of intact forest ecosystems versus those disturbed by roads and logging. Less disturbed forests are less susceptible to tree diseases, insect attacks, and invasions from non-native species, and less likely to have suffered the adverse effects of fire suppression. These healthier ecosystems are in turn more able to withstand the effects of global climate change and act as refugia for sensitive wildlife and plant species, many of which are vulnerable to extirpation in more developed areas. Thus, intact forests can serve as vital reservoirs and safety nets, as surrounding landscapes become genetically impoverished and fragmented, greatly impeding species’ abilities to adapt to the

increasing stress of global warming. Intact forests play an important role in the function of watersheds and aquatic ecosystems. They are spared the potentially massive soil erosion that can accompany road building and logging, which fouls streams and rivers. As a result, roadless areas in our national forests contain some of the most intact aquatic ecosystems in the country, including some of the healthiest salmon stocks. Intact forests provide direct watershed benefits to people by reducing flood threats and supplying clean sources of drinking water. In fact, National Forests and Grasslands are the largest single source of water in the continental U.S., contributing nearly 20 percent of the Nation’s water supply (Alcock et al. 2009).

Despite these important values, roadless areas face an uncertain future in the Sierra Nevada because:

- The current political climate in some regions makes the prospect of a locally-sponsored wilderness bill unlikely;
- Roadless lands outside of IRAs, such as those identified during the CWI, are not covered by the RACR;
- The existing management plans for the eleven Sierra forests recommend to Congress that only 56,000 acres of IRAs be designated as wilderness, and these recommendations can be rescinded in the next round of plan revisions;¹ and
- Even where wilderness recommendations have been made, such as in the Lassen and Eldorado national forests, activities, such as increased OHV use, are allowed that can degrade an area’s wilderness character over time.

¹ Additional acres were recommended for wilderness designation in the Inyo National Forest and the Humboldt-Toiyabe National Forest. A portion of this recommendation was rescinded and the rest was designated as wilderness.

Current minimum requirements for addressing roadless area issues during forest plan revisions

According to the USFS' planning regulations at 36 C.F.R. § 219.7(c)(2)(v), the agency is required to "Identify and evaluate lands that may be suitable for inclusion in the National Wilderness Preservation System and determine whether to recommend any such lands for wilderness designation."

The Forest Service Manual (FSM) 1923.03 and Forest Service Handbook (FSH) 1909.12, chapter 70, offer more detail regarding the areas that must be evaluated:

- 3(a). Newly identified roadless, undeveloped areas and areas (1) previously identified in the Forest Service Roadless Area Conservation Final Environmental Impact Statement (Volume 2, November 2000), (2) in a unit plan, or (3) in a land management plan, which remain roadless and undeveloped and have not yet been designated as wilderness or for nonwilderness uses by law.
- (b). Areas contiguous to existing wilderness, primitive areas, or administratively proposed wildernesses, regardless of agency jurisdiction for the wilderness or proposed wilderness.
- (c). Areas that are contiguous to roadless and undeveloped areas in other Federal ownership that have identified wilderness potential.
- (d). Areas designated by Congress for wilderness study, administrative proposals pending before Congress, and other legislative proposals pending which have been endorsed by the President.

The FSM and FSH further require that for each area subject to evaluation under paragraph 3 of FSM 1923, the determination of the significant resource

issues shall be developed with public participation and, at a minimum, consider:

1. The values of the area as wilderness.
2. The values foregone and effects on management of adjacent lands as a consequence of wilderness designation.
3. Feasibility of management (FSH 1909.12, sec. 72.1) as wilderness, in respect to size, nonconforming use, land ownership patterns, and existing contractual agreements or statutory rights.
4. Proximity to other designated wilderness and relative contribution to the National Wilderness Preservation System.
5. The anticipated long-term changes in plant and animal species diversity, including the diversity of natural plant and animal communities of the plan area and the effects of such changes on the values for which wilderness areas were created.

Furthermore, as is stated at FSH 1909.12 Chapter 72, the USFS must consider the capability, availability and suitability of each area considered for wilderness designation.

POLICY ACTIONS NEEDED

Proposal for Revision to Forest Plan Direction

A. Desired Conditions *The following statements represent the desired future condition of the landscape and may not reflect the current conditions.*

Desired Condition WILD-1. Lands classified as roadless have increased in total acreage and in their distribution across the Sierra Nevada.

Desired Condition WILD-2. Roadless lands are distributed across the range of habitats found within the Sierra Nevada and are important in the conservation of rare and common species and communities.

Desired Condition WILD-3. Wilderness areas and roadless areas continue to provide the ecological and social benefits described in PL 88-577 and Volume 1, pages 3-7 of the RACR FEIS.

B. Objectives

Objective WILD-1. The backcountry management area (BMA) land allocation is incorporated into individual forest plans.

Objective WILD-2. The recommended wilderness (RW) land allocation is incorporated into individual forest plans.

Objective WILD-3. Except for the areas described in WILD-4 and WILD-5, below, the remaining undeveloped portions of all IRAs and CIRAs are designated as BMAs under individual forest plans.

Objective WILD-4. Existing wilderness recommendations from previous individual forest plan revisions are retained.

Objective WILD-5. After extensive consultation with the public, the IRAs and CIRAs considered most suitable for wilderness designation are managed as RW.

Objective WILD-6. The construction of NFS roads is prohibited in other unroaded areas that are 1,000 acres or larger in size.

C. Standards

Standard WILD-1. Apply the RACR standards and guidelines to the BMA land-use zone but prohibit motorized over-snow vehicle use and the construction of new motorized NFS trails. The

BMA standards and guidelines should be consistently applied throughout the eleven Sierra Nevada national forests.

Standard WILD-2. Manage areas in the RW land allocation under the same standards and guidelines that are used to manage designated wilderness. The RW standards and guidelines should be consistently applied throughout the eleven Sierra Nevada national forests.

Standard WILD-3. After extensive consultation with the public, identify the portions of all IRAs and CIRAs that do not contain any NFS roads or motorized trails and place these areas in the BMA land allocation.

Standard WILD-4. Manage areas that were recommended for wilderness designation in previous plans under the RW land allocation until Congress accepts or rejects the recommendations in whole or in part.

Standard WILD-5. Consider public comment and assess all IRAs and CIRAs according to the standards set forth in the FSH to determine whether or not the roadless areas should be recommended for wilderness designation. Deserving areas should be placed in the RW land allocation until Congress accepts or rejects the recommendations in whole or in part.

Standard WILD-6. Map all unroaded areas that are 1,000 acres or larger in size outside of IRAs and CIRAs. Prohibit the construction of NFS roads in these areas except under the circumstances described for IRAs (36 CFR Part 294.12(b)).

D. Regionwide Land Allocations

Table IV.I-2. Land allocations related to roadless and wilderness protection.

Land Allocation	Definition	Management Objective
Wilderness Area (WA)	Congressionally designated areas.	Defined by congressional designation.
Recommended Wilderness (RW)	Area that is recommended for inclusion in the NWPS by the USFS.	Preserve the wilderness character of these lands until Congress accepts or rejects the recommendations in whole or in part.
Backcountry Management Area (BMA)	An IRA or CIRA that does not contain any NFS roads or motorized trails.	Preserve the roadless and backcountry character of these lands. Manage them under the RACR, but prohibit motorized over-snow vehicle use and the construction of new motorized NFS trails.

Recommended Actions at the National Forest Level Not Directly Addressed in the Forest Plan

To meet the intent of forest planning regulations (36 C.F.R. § 219.17) and to fully address the management of roadless areas, the planning teams on the Sierra Nevada forests should complete the following four objectives during the forest plan revision process:

1. Conduct an inventory of all wilderness-eligible land during the forest plan development process, including roadless areas that are not IRAs. It is impossible to fully understand the ecological and social benefits of roadless areas and the impacts of allocating them to non-wilderness zones without a comprehensive survey of what is and is not roadless. It is therefore essential that planners on each forest accurately map *all* roadless areas, including CIRAs that are brought to their attention by the public, during the forest plan development process. Planners should look for new roadless areas or extensions of known roadless areas that have been created as a result of:
 - Road decommissioning;
 - Travel management plans;
 - Land acquisitions; and
 - Wilderness designations.

An area should be identified as roadless if it is free of “classified roads” as defined in the RACR at 36 CFR Part 294.11(1).

2. Provide a full description of every roadless area's wilderness qualities and social and ecological values. Planners on each forest should fully describe the wilderness qualities and social and ecological values possessed by every roadless area. The list of at least some of these qualities and values are listed at 36 C.F.R. § 219.17, in the RACR FEIS and in the April 14, 2009 letter from 127 scientists to President Barack Obama in support of the RACR. In addition, forest planners should include wilderness qualities and social and ecological values brought to their attention by members of the public.
3. Provide *full* and *fair* evaluations of every roadless area's wilderness qualities and, if found deserving, recommend them for wilderness designation in the forest plans. Include an explanation as to why the USFS will or will not recommend to higher authorities that the areas be designated as wilderness in whole or in part. A roadless area should be found eligible for wilderness designation and forest planners should

consider recommending it as wilderness if, as is stated in the Wilderness Act of 1964, it:

- "...*generally* appears to have been affected *primarily* by the forces of nature, with the imprint of man's work *substantially* unnoticeable" (emphasis added—as these qualifiers clearly illustrate, Congress did not intend for only pristine areas to be designated as wilderness);
- "...[has] outstanding opportunities for solitude *or* a primitive and unconfined type of recreation" (emphasis added—some have mistaken the "or" for an "and." Also, note that in the context of the Wilderness Act "unconfined" simply means outdoor);
- "...[has] at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition"; and
- "...may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."

Forest planners should provide a *full* and *fair* evaluation of every roadless area's wilderness qualities, followed by an explanation of why the USFS will or will not recommend that the areas be designated as wilderness in whole or in part. We emphasize the word "fair" because it has been rather common for forest planners to use external "sights and sounds" criteria, rather than an area's undeveloped character, to decide whether or not roadless areas should be recommended for wilderness designation. In so doing, the USFS acts contrarily to long-standing direction from Congress to avoid using sights, sounds and other external influences to judge an area's wilderness quality. Areas that are recommended for wilderness designation should be managed in a manner that is consistent with the Wilderness Act until such time as Congress

decides whether or not to act on the recommendation.

4. Thoroughly examine the impacts of placing all or portions of an IRA or other roadless area under a non-wilderness prescription. For those roadless areas or portions of roadless areas that are not recommended as wilderness, forest planners should include a thorough examination of the impacts of placing all or part of a roadless area under a non-wilderness management prescription.

The RACR FEIS offers a detailed description of some of the issues that should be studied, described and discussed for each alternative in a forest plan (see page 3-21 to 3-242). These issues include:

- The projected amount and impact of road construction in roadless areas;
- The costs associated with maintaining new roads in roadless areas;
- The risks of reducing water quality in roadless areas;
- Impacts to air resources from roadless areas;
- Economic impacts;
- Consequences of and for fire and fuels management in roadless areas;
- Impacts of insects and disease in roadless areas;
- Impacts to the size of roadless areas (as the RAC FEIS states at 3-136, "There is a positive relationship between size of an area protected from human disturbance and maintenance of biodiversity");
- Impacts to roadless areas of development at various elevation distributions;
- Impacts to terrestrial animal habitat, including fragmentation and connectivity, edge effects, habitat suitability and effectiveness, early

- successional habitat, game species and late-successional habitat;
- Impacts to aquatic animal habitat and species in roadless areas, including fragmentation and connectivity, water hydrology and stream channel morphology, habitat complexity, water quality, pools, riparian vegetation, introduction of nonnative species and diseases and over-harvest and illegal introduction;
- Impacts to terrestrial and aquatic plant species in roadless areas, including effects of non-native invasives, habitat fragmentation and temporary roads;
- Impacts to threatened, endangered, proposed and sensitive species in roadless areas;
- Impacts to research, monitoring and reference landscapes in roadless areas;
- Consequences for non-mechanized, mechanized and motorized recreation in roadless areas;
- Impacts to scenic quality;
- Consequences to heritage resources; and
- Impacts from roadless area development on existing wilderness and the possibility of future wilderness designation.
- If all or part of a roadless area is allocated to a non-wilderness prescription, forest plans should discuss what mitigation, if any, the USFS proposes for the loss of wilderness characteristics and the effects on plant and animal communities.

Recommendations for New Regional Direction or Policy

- The Region should provide guidance to each national forest on how individual forests are to evaluate roadless areas during the forest plan revision processes. The guidance should support the development of forest plans that protect all roadless areas, both agency-inventoried and citizen-inventoried, in a manner that is at least as protective as the RACR.
- Retire grazing allotments in designated wilderness areas that are no longer in regular use or those wilderness and wilderness study areas that exhibit continued resource damage, limiting attainment of desired conditions for aquatic-riparian resources or TES species, in the first five years of newly revised forest plans.

Additional Recommendations

- Follow up with advocacy work to promote USFS wilderness recommendations in Congress.
- Work with land conservancies, land trusts and the USFS to acquire private inholdings within roadless areas in order to make them more manageable as wilderness.
- Limit all higher elevation wilderness fish-stocking where lakes and streams were originally fish-less.

REFERENCES

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