



# Off Road Use of Bicycles

## I. POLICY

### 1. Use in officially designated wilderness:

The Sierra Club reaffirms its support for the Wilderness Act's prohibition of "mechanized modes of transport," including non-motorized vehicles, from entry into designated wilderness.

### 2. Use of vehicles on other public lands:

#### a. Trails and areas on public lands should be closed to all vehicles unless

i. determined to be appropriate for their use through completion of an analysis, review, and implementation process, and

ii. officially posted with signs as being open.

#### b. The process must include

i. application of objective criteria to assess whether or not environmental quality can be effectively maintained, and whether the safety and enjoyment of all users can be protected;

ii. a public review and comment procedure involving all interested parties; and

iii. promulgation of effective implementing regulations where impacts are sufficiently low that vehicle use is appropriate.

#### c. Trails and areas designated for vehicular use must be monitored periodically to detect environmental damage or user interference inconsistent with the above criteria. Where this occurs, the trail or area must be closed to vehicles unless effective corrective regulations are enforced.

*Adopted by the Board of Directors, May 7-8, 1994*

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## II. BACKGROUND

The Sierra Club is concerned about the effects of use of bicycles off-road. Concerns have been raised about effects such as soil erosion, impacts on plants and animals, displacement of other trail users, and impacts on other users' safety and enjoyment. These concerns argue for special regulation, with effective enforcement, of off-road bicycling.

## III. GUIDELINES FOR IMPLEMENTATION

The following Guidelines were developed by the Sierra Club Wild Planet Strategy Team with the help of a Mountain Bicycling Task Force to help interpret and implement the policy on off-road use of bicycles:

### A. Purpose

The Sierra Club recognizes that bicyclists can be legitimate users of many non-Wilderness backcountry trails and supports responsible off-road bicycling. In an effort to find common ground and work for positive and shared environmental and recreational goals, the Sierra Club and International Mountain Bicycling Association (IMBA) agreed to a set of principles (Park City Agreement, Appendix A). The Sierra Club affirms its commitment to those principles.

All backcountry users, including bicyclists, have an effect on the environment (e.g., soil erosion and effects on plants and animals). These Guidelines should be used to identify places and situations where bicycles are clearly not appropriate, to recognize opportunities where bicycle use can be encouraged, to minimize impacts where bicycles are allowed, to foster cooperation between trail user groups, and to maximize the quality of the recreational experience for all users.

### B. Site Specific Analysis

Public lands include a range of landscapes from urban to backcountry, from alpine to coastal, from desert to wetlands, with vastly different amounts and mixes of recreational use. One solution might not work equally well in all places. Therefore, implementation of this policy will be on a site-specific basis.

No general rule can be drawn concerning appropriateness or inappropriateness of use of bicycles on specific trails or areas until the conditions stipulated in the policy have been met: the appropriate land management agency must complete a competent analysis that considers public input.



Single track trails can present difficult management, safety, and environmental protection situations, but may be acceptable for bicycling as determined on a local, case-by-case basis. See Appendix D for suggestions on reducing impacts of bicycles.

### C. Wilderness Opportunities

By law, bicycles are excluded from federal Wilderness areas. Potential for losing opportunities for Wilderness designation should be taken into account when planning bicycle access. Conversely, the potential for losing bicycle opportunities (and replacing such opportunities) should be taken into account when planning Wilderness designation. Sierra Club members are therefore encouraged to work with local off-road bicycle groups when preparing Wilderness proposals.

### D. Cooperation and Education

The Sierra Club encourages its members to join in the spirit of the Park City Agreement (Appendix A) and to work with local off-road bicycle groups on projects of mutual interest.

Trail user etiquette and rider education programs may enhance cooperation and reduce friction between different trail user groups, and may help reduce damage to the environment. The Sierra Club encourages all trail users to cooperate in efforts to heighten awareness of, and participation in, these trail user education programs. These and other programs listed in Appendix E may help reduce the need for closing trails to bicycles.

### E. Analysis, Review, and Implementation Process

A land management agency must take into consideration the following when assessing bicycle use:

1. Trails open to bicycles must successfully pass an agency review for suitability. Criteria to include in such a review are listed in Appendix C.
2. Trails open to bicycles should fit compatibly into the overall trail system, providing (to the extent possible) a satisfying and safe bicycling experience that will minimize the desire of bicycle riders to enter closed areas. See Appendix D for additional guidance.
3. Trails open to bicycles should be designed to need minimal enforcement, e.g. relying on natural barriers and terrain features such as ridgelines to prevent bicycle riders from straying into closed areas. While signs can be important for regulating bicycle traffic, trails needing excessive and unsightly signage are not appropriate.
4. Implementing regulations should be enforceable, clearly posted in appropriate locations such as trailheads, and emphasized through agency patrols and outreach programs. The regulations should be simple, consistent, and generally understood and widely accepted by all users. See, for example, the Rules of the Trail in Appendix E.



5. Trails open to bicycles should have a monitoring plan developed and implemented. For examples of key elements, see Appendix F.

*Adopted by the Wild Planet Strategy Team, January 31, 1998*

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## **Appendix A - Park City Agreement**

Sierra Club and International Mountain Bicycling Association agree:

1. To work for Wilderness, park, and open-space protection;
2. That mountain bicycling is a legitimate form of recreation and transportation on trails, including single track, when and where it is practiced in an environmentally sound and socially responsible manner;
3. That not all non-Wilderness trails should be opened to bicycle use;
4. To create joint projects to educate all non-motorized trail users;
5. To encourage communication between local mountain bicycle groups and Sierra Club entities.

(Agreement reached at Park City, Utah, April 1994.)

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## **Appendix B - Definitions**

### 1. Bicycle -

A two-wheeled human-powered vehicle. For all vehicles powered by electric or internal combustion motors, the Sierra Club policy "Off-Road Use of Motor Vehicles" applies.

### 2. Single-track trail -

A single-track trail is one where users must generally travel in single file.

### 3. Public Land -

Public land is land managed by federal, state, or local government, and is open to the general public for recreation pursuits.

### 4. Significant -



Any degradation of the environment, user safety, or enjoyment may be considered significant, depending on the permanence, scale, intensity, and context of the impact. Determination of the meaning of significant will rest, to a great degree, upon local entities and the regulatory agencies to which they appeal for such a determination. See, for example, the definition in the National Environmental Policy Act (40 CFR 1508.27).

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### **Appendix C - Criteria**

When a land management agency reviews suitability of a trail for bicycle use, bicycle use should not be allowed where it would cause the following measurable effects. This list is not all-inclusive.

1. Significant soil erosion or significant damage to streams or fish habitat.
  2. Rutting, impairment of trail drainage, breakdown of trail shoulders, and other forms of damage not correctable using U.S. Forest Service trail maintenance standards and techniques.
  3. Significant disturbance of plants or animals or their habitat.
  4. Damage to archaeological, scientific, historical, or other significant resources, including rare natural features of interest for scientific study.
  5. Danger to the safety of bicyclists or other users because of bicycle speed, steep grades, steep terrain, sharp curves, slippery or unstable trail surfaces, or limited visibility. See Appendix D for design features that can improve safety.
  6. Significant displacement or annoyance of other non-motorized users.
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### **Appendix D - Some Methods to Reduce Bicycle Impacts** (not in priority order)

1. Walk bicycles in certain areas.
2. One-way-only trail sections.
3. Speed limits (though these may be difficult to enforce).
4. Restrict use by time of day, day of week, week of month, month of year.
5. Restrict use by season (e.g. to protect soils or sensitive habitats).
6. Separate different types of uses at trailheads and congested areas.
7. Party size limits.
8. Area permits/licenses, reservations, and trip permits, though these should be instituted only in special situations as a last resort.
9. Trail alignment to minimize soil erosion, avoid wetlands, sensitive plant or animal habitat, and sensitive archaeological or cultural features.



10. Trail alignment to maximize compatibility with adjacent land use and connecting trail use.
  11. Natural and artificial design features that restrict bicycle speed, such as barriers and speed bumps, which are not an undue impediment to other non-motorized users.
  12. Design features that enhance sight distance, e.g. locating the trail away from tall brush.
  13. Design features that minimize trail erosion: proper grades, turn radii, tread hardening, and drainage control.
  14. Wide or pull-out sections to facilitate safe passing.
  15. Design features for user enjoyment: loop trails, scenic destinations, picnic/camp sites.
  16. Barriers to prevent leaving trail. Block and obliterate (rehabilitate) unauthorized trails.
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## **Appendix E - Trail User Etiquette and Education**

1. In order to minimize conflicts with other trail users, bicyclists should know and use the established Rules of the Trail: - Ride on open trails only. - Leave no trace. - Control your bicycle. - Always yield trail. - Never scare animals. - Plan ahead.
  2. Bicyclists should know and follow applicable laws and regulations.
  3. Bicyclists yield trail to foot travelers, both animal and human. Yielding trail means: slow down, be prepared to stop; establish communication; dismount when appropriate; and pass safely.
  4. Opportunities to educate users include: audiovisual presentations; public service announcements prepared for television, radio and print outlets; community presentations; production of printed materials such as brochures and posters; information kiosk or trailhead signing; trail information hotlines or Internet sites; bicycle patrols; widely distributing maps and guidebooks; and advertising by equipment manufacturers and suppliers that promotes responsible bicycling. Joint activities can provide rider education, trail planning, volunteer trail maintenance, or just plain fun interaction.
  5. Cross-country bicycle travel off trails is not appropriate.
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## **Appendix F - Monitoring and Enforcement**

If a trail is determined to be suitable for bicycles, the land management agency should develop and implement a monitoring plan:

1. Identify the impacts being monitored, including impacts to water quality, soils, wildlife, flora, and other users (accidents, injuries, enjoyment of the trail).
2. Establish quantitative and qualitative measurement scales for impacts.



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3. Establish impact thresholds which, if reached, trigger correction or closure of the trail to bicycles.
4. Establish a schedule for monitoring activities.
5. Establish a written reporting system.
6. Train personnel to follow the monitoring program.
7. Reliable trained persons from user groups may be used to supplement monitoring by staff.
8. Specify baseline inventories to allow for monitoring of trends.
9. Secure the resources to carry out the monitoring plan.
10. The best enforcement of regulations will come from regular patrolling combined with effective education and an active monitoring program.

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## **Appendix G - Resource List/Bibliography**

The following publications may prove helpful to local Sierra Club groups and chapters. They are only suggested readings, and this is an incomplete list.

Roger Moore, Conflicts on Multiple-Use Trails; Synthesis of the Literature and the State of the Practice. Federal Highway Administration, Report #FHWA-PD-031, August 1994.

U.S. Forest Service Trails Management Handbook, FSH 2309.18.

Mountain Bikes on Public Lands, Bicycle Federation of America.

Andy Kulla, Recreational Specialist, A New Perspectives Approach in National Forest Management and its Application to Mountain Bike Management. USDA Forest Service Region One, Lolo National Forest Supervisor's Office.

Mid-Peninsula Regional Open Space District trail use policies - 1990 Trail Use guidelines and mitigation measures, January 1993.

Strategic Plan - 1994-98, Mountain Biking Program, San Jacinto Ranger District. USDA Forest Service Region Nine, San Bernardino National Forest.

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On January 31, 1998, the Club's Wild Planet Strategy Team unanimously adopted the Background and Guidelines above to accompany the 1994 Policy on Off-Road Use of Bicycles. The guidelines are intended to provide Club groups and chapters with information and guidance useful to making trail use decisions in their area. The roles of policy and guidelines are discussed



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in "Conservation Policy Development," available from Sierra Club's Office of Volunteer Services.

The Wild Planet Strategy Team would like to thank those who reviewed and commented on the several drafts of the guidelines. A summary of comments on the most recent draft, and responses to those comments, is available from the undersigned.

We will appreciate your thoughts on the guidelines as they are put to use in specific situations: what works, what doesn't, and where improvements can be made. We would also like to add to the Appendices new studies and information that can assist Club volunteers dealing with bicycle use questions. Descriptions of group and chapter experiences with bicycle trail planning and projects will also be useful. Please forward all such comments to the undersigned.

Finally, we are working with the International Mountain Bicycling Association and its affiliates on recreation and conservation projects of mutual interest. To that end, Mark Bettinger of the Club's Northeast Office is available to help resolve conflicts over bicycle use. If your Sierra Club group or chapter is having difficulties with bicycle issues and needs assistance, please contact him at 85 Washington St., Saratoga Springs, NY 12866 (518 587-9166; e-mail:[mark.bettinger@sierraclub.org](mailto:mark.bettinger@sierraclub.org)).

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