Mr. Dale Bosworth Chief U.S. Forest Service Washington DC 20250

Dear Chief Bosworth:

As professional scientists, we applaud you for recognizing that unmanaged off-road vehicle use is one of the great threats to the long-term health of our Forests and Grasslands. We appreciate the opportunity to express our concern about motorized recreation impacts on the 192 million-acre National Forest System. As the agency develops new management policies, we strongly encourage you to ensure that those policies are based on valid scientific research and are focused first and foremost on natural resource protection.

It is well established by a large body of published scientific literature that off-road vehicles, including all-terrain vehicles (ATVs), dirt bikes and jeeps quickly strip vegetation and rut the land, leading to erosion of soil at rates much greater than are natural. Soil eroded into streams and rivers can dramatically reduce the quality of native fish habitat as well as that of most other aquatic life. Declining soil quality and quantity cannot support vegetation, thus harming wildlife, and degrading entire ecosystems. Off-road vehicles can also negatively impact wetlands. For example, damage caused by "mud bogging" can take decades to recover.

Off-road vehicles crush, bruise, shred and otherwise destroy trees, shrubs, and other plant life. Soil and vegetation disturbances create ideal conditions for invasive weeds and other exotic plants, such as knapweed, to become established. Damage to native vegetation only makes it easier for exotic invaders to out compete native plants. Furthermore, off-road vehicles can spread invasive weeds across pristine wildlife habitat when traveling cross-country and along unplanned routes.

Wildlife are also jeopardized by unmanaged off-road vehicle use. Off-road vehicles can disturb and be used to harass wildlife. These adverse effects are exacerbated during winter when wildlife are already stressed by weather conditions and low food supplies. Poorly planned and user-created routes fragment and degrade wildlife habitat. Vehicle noise can directly impede the ability of wildlife to find prey, avoid predators, and successfully reproduce.

Off-road vehicle engines, especially two-stroke engines, are highly polluting. Emissions of carbon monoxide, polycyclic aromatic hydrocarbons, MTBE, particulate matter, and other pollutants seriously degrade the quality of the air, soil, snow, and water, and have demonstrated adverse human health effects.

In the above description, you may recognize that many of the environmental impacts caused by off-road vehicles are cumulative, and sometimes synergistic, combining to produce impacts that are greater than the sum of their parts. In fact, you alluded to this in your speech last April. When one considers the role that dirt bikes, ATVs and other off-road vehicles play in fragmenting wildlife habitat and spreading invasive weeds—two of the major threats you

identified—the far reaching nature of negative impacts from uncontrolled off-road vehicle use come into focus. This can be particularly significant if off-road vehicles are allowed in roadless areas, which act as important refuges for wildlife. Additionally, off-road vehicles are a potential ignition source for fires, which is also a great concern to the Forest Service.

By enhancing controls and regulations on off-road vehicles in National Forests, the Forest Service would minimize adverse effects on soil, vegetation, wildlife, ecology, and other forest users. As scientists who have studied this or related issues for many years, we urge the Forest Service to ensure that new regulations governing off-road vehicle use on National Forests are based on the abundant peer-reviewed scientific research available, and resource protection. To meet this goal, the Forest Service must:

- Permit off-road vehicle uses only under conditions that protect natural resources, environmental values (e.g. quiet, landscape character), public safety, and the experience of other forest users.
- Analyze new recreational technologies/activities before permitting their use, to determine whether or not those activities are appropriate or, if environmentally harmful, necessary; and if allowed, control the level and restrict the sites of use.
- Designate roads and routes for off-road vehicle travel through full and public environmental analysis processes under the National Environmental Policy Act.
- Designate off-road vehicle routes based on specific ecological criteria, including, but not limited to: prohibiting designation of routes in sensitive habitat areas; and locating routes to minimize erosion, wildlife harassment, impacts to natural wildlife behavior (e.g. feeding, breeding, resting) and habitat fragmentation.
- Permit off-road vehicle use only if monitoring and enforcement are annually funded, implemented, and used to determine appropriate levels of continued off-road vehicle use.

Developing policy using these considerations will help safeguard the environmental quality of our National Forest for the benefit of the millions of Americans who presently enjoy them, and for future generations.

Sincerely,

Dr. Howard Wilshire Board Chairman Public Employees for Environmental Responsibility

Dr. Mary O'Brien Eugene, OR

Dr. William Adair Postdoctoral Researcher Department of Forestry, Range and Wildlife Sciences Utah State University

Dr. Jonathan L. Atwood Director, Conservation Biology Program Antioch New England Graduate School

Dr. Paul Beier Professor of Conservation Biology & Wildlife Ecology Northern Arizona University

Dr. Elena Bennett Researcher Center for Limnology University of Wisconsin, Madison

Dr. John G. Carter Staff Ecologist Western Watersheds Project

Dr. James Catlin Project Coordinator Wild Utah Project

Dr. Anthony P. Clevenger Research Scientist Western Transportation Institute Montana State University

Dr. Scott Creel Professor of Ecology Montana State University Dr. Todd Crowl Professor of Aquatic Resources Utah State University

Dr. Lisa Dale Natural Resource Policy Fellow The Wilderness Society

Dr. Dominick A. DellaSala Director WWF Klamath-Siskiyou Program World Wildlife Fund

Dr. Thomas DeLuca Professor of Soil Science University of Montana

Dr. John DiBari Assistant Professor of Landscape Ecology Western Carolina University

Dr. Eric Dinerstein Chief Scientist and VP for Science, World Wildlife Fund

Dr. Paul R. Ehrlich Bing Professor of Population Studies President, Center for Conservation Biology Stanford University

Dr. G. Lang Farmer Associate Professor of Geological Sciences University of Colorado, Boulder

Dr. Gordon A. Fox Assistant Professor of Environmental Science and Policy University of South Florida

Dr. Barrie K. Gilbert Emeritus Assistant Professor of Forestry, Range and Wildlife Sciences Utah State University Dr. Hannah Gosnell Research Associate Center of the American West University of Colorado, Boulder

Dr. Warren B. Hamilton Distinguished Senior Scientist Colorado School of Mines

Dr. Julie E. Korb Assistant Professor of Biology Fort Lewis College

Dr. Donald E. Kiely Professor and Director of the Shafizadeh Rocky Mountain Center for Wood and Carbohydrate Chemistry University of Montana

Dr. William S. Keeton Assistant Professor of Forest Ecology and Forestry University of Vermont

Dr. David S. Maehr Associate Professor of Conservation Biology University of Kentucky

Dr. Robert McConnell Corvallis, OR

Dr. Gary K. Meffe Editor, Conservation Biology University of Florida

Dr. Curt Meine Prairie du Sac, WI

Dr. Brian Miller Conservation Biologist Denver Zoological Foundation

Dr. Sterling Miller Senior Wildlife Biologist National Wildlife Federation Dr. Reed F. Noss Davis-Shine Professor of Conservation Biology University of Central Florida

Dr. Renata Platenberg Reptile Ecologist St. Thomas, US Virgin Islands

Dr. Roger A Powell Associate Professor of Zoology and Forestry North Carolina State University

Dr. Sanjay Pyare Research Ecologist Denver Zoological Foundation

Dr. Mark Cable Rains Assistant Professor of Ecohydrology University of South Florida

Dr. Richard P. Reading Director of Conservation Biology Denver Zoological Foundation

Dr. Thomas P. Rooney Assistant Scientist University of Wisconsin, Madison

Dr. Robert H. Schmidt Associate Professor and Certified Wildlife Biologist Utah State University

Dr. Tania Schoennagel Research Scientist Department of Geography University of Colorado, Boulder

Dr. Doug Smith Professor Emeritus The University of Texas, Austin

Dr. Paul Sneed Environmental Studies Core Faculty Prescott College Dr. Michael Soulé Professor Emeritus University of California, Santa Cruz

Dr. Carol Spencer
Postdoctoral Researcher and HerpNET
Coordinator
Museum of Vertebrate Zoology
University of California, Berkeley

Dr. Wayne D. Spencer Conservation Biology Institute

Dr. Susan Townsend Oakland, CA

Dr. Stephen C. Trombulak Professor of Biology and Environmental Studies Middlebury College

Dr. Vicki Watson Professor of Environmental Studies University of Montana

Dr. David Wilcove Professor of Ecology, Evolutionary Biology, and Public Policy Princeton University

Dr. Seth M. Wilson Postdoctoral Researcher The School of Forestry & Environmental Studies Yale University

Dr. Terence Yorks Research Associate Department of Forest, Range, and Wildlife Sciences Utah State University

Other Signers

Anthony Ambrose Department of Integrative Biology University of California, Berkeley

Greta Burkart Aquatic, Watershed and Earth Resources Department Utah State University

Andreas Chavez Department of Forest, Range, and Wildlife Sciences Utah State University

Lana M. Ciarniello Parsnip Grizzly Bear Project University of Alberta

Courtney Colvin Environmental Education Antioch New England Graduate School

Kathy Daly Conservation Biologist The Wildlands Project

Chad E. Dear College of Forestry and Conservation University of Montana

Jean Dedam RMA student Antioch New England Graduate School

Chris R. Feldman
Department of Biology
Utah State University

C.J. Fotheringham University of California, Los Angeles

Ernest Goitein Member ASME, co founder of BAN Waste Coalition, co founder of PLAN Jim Hayward Diving Safety Officer University of California, Berkeley

Allison Jones, Conservation Biologist Wild Utah Project

Gayle Joslin Wildlife Biologist Helena Area Resource Office Montana Fish, Wildlife & Parks

Liz McKinzie Department of Integrative Biology University of California, Berkeley

Stephen J. Montgomery SJM Biological Consultants San Diego, CA

Daniel R. Patterson Ecologist Center for Biological Diversity

Kathleen Pollet Department of Biology Utah State University

Amy Rheault Antioch New England Graduate School

Sean Rovito Museum of Vertebrate Zoology 3101 Valley Life Science Building University of California, Berkeley

Trey Simmons Aquatic, Watershed and Earth Resources Department Utah State University

Adam Switalski Science Coordinator Wildlands CPR Becky Williams Department of Integrative Biology University of California, Berkeley

Stephanie Wojtowicz Applied Land Ethics Antioch New England Graduate School