

WRITTEN TESTIMONY OF HEIDI J. McINTOSH  
ASSOCIATE DIRECTOR OF THE SOUTHERN UTAH WILDERNESS ALLIANCE

THE HOUSE SUBCOMMITTEE ON NATIONAL PARKS,  
FORESTS AND PUBLIC LANDS

Regarding March 3, 2009 Oversight Hearing on

“The Role of Federal Lands in Combating Climate Change”

**Introduction:**

Thank you for the opportunity to provide written testimony for the Subcommittee’s oversight hearing on “The Role of Federal Lands in Combating Climate Change.” I am an attorney and the associate director of the Southern Utah Wilderness Alliance (“SUWA”), based in Salt Lake City, Utah. SUWA is a 15,000 member organization whose mission is the protection of the last remaining wilderness landscapes in Utah on lands managed by the Bureau of Land Management (“BLM”). We seek to ensure lasting protection of the redrock canyons through passage of American’s Redrock Wilderness Act, public education, participation in agency decision making, dialog with land managers, and litigation.

As part of our work, we have monitored BLM land use planning and management decisions such as the approval of off-road vehicle routes and events, review of R.S. 2477 highway claims, oil and gas leasing and the issuance of permits to drill for oil and gas. Most recently, we spent thousands of staff hours monitoring and commenting on six new resource management plans for 11 million acres in eastern Utah. In the course of our work, we have consulted frequently with natural resource experts both within the BLM and elsewhere. As a result, SUWA staff has a comprehensive background in the impacts of various public land uses as well as the impacts of climate change on public lands and resources. I have drawn on that experience and background in this testimony.

SUWA applauds the Subcommittee’s efforts to draw attention to this issue and to encourage the incorporation of climate considerations into public lands management. Unless the BLM begins to incorporate the impacts of climate change on public lands into its decision making, and expeditiously implements measures to mitigate or “soften” those impacts, public lands resources soon may be degraded beyond the point of no return.

**Summary:**

Climate change has already impacted the ecological health of public lands throughout the West, resulting in shrinking and degraded water resources, larger and hotter wildfires, the spread of non-native plants, wildlife stress and habitat fragmentation,

greater soil erosion, and dust storms which settle on higher-elevation snow pack and cause earlier, faster snowmelt.<sup>1</sup> Habitat shifts are also expected, as hotter, drier conditions force plants and animals either northward or to higher elevations in search of suitable habitat. Activities which occur on public lands, such as off-road vehicle uses, road construction, oil and gas development, grazing and other uses exacerbate these changes.<sup>2</sup>

To this day, the Utah BLM (in close partnership with its Washington headquarters) has not analyzed climate change in its NEPA documents, or incorporated predicted climate changes in their long or short-term management decisions, or in its long-term planning. For example, the Utah BLM issued revised land use plans, known as “resource management plans” or “RMPs,” in the fall of 2008 for eleven million acres of federal public land.<sup>3</sup> The draft plans and the NEPA-mandated environmental impact statements (“EISs”) said nothing about climate change. After we provided lengthy comments and cited relevant studies from government and university scientists, the final EISs and RMPs included a few boilerplate paragraphs which acknowledged that the climate was changing in important ways, yet ignored the studies we supplied and argued that the science was so uncertain BLM could not incorporate climate effects into the plans or their accompanying EISs.

BLM’S conclusion contradicts a 2008 study by the U.S. Climate Change Science Program which noted that, while more study is certainly needed, there is sufficient information now to make recommendations for future management.<sup>4</sup> BLM’s refusal to incorporate climate change as a factor in its land use planning is also at odds with statements made by its own science coordinator, Ron Huntsinger. In a hearing before the House Interior Appropriations Subcommittee in May 2007, Mr. Hunsinger explained that BLM managers were seeing dramatic climate-related changes and that public lands uses would have to change as a result.<sup>5</sup>

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<sup>1</sup> These impacts are well documented in the scientific literature and were discussed at the hearing by a number of expert witnesses. This testimony will not repeat that information other than to describe specific examples of how climate change is manifested on Utah’s public lands, and how climate change might be effectively addressed.

<sup>2</sup> U.S. GEOLOGICAL SURVEY: IMPACTS OF CLIMATE CHANGE ON WATER AND ECOSYSTEMS IN THE UPPER COLORADO RIVER BASIN (2007).

<sup>3</sup> The RMPs are required by Section 202 of the Federal Land Policy and Management Act, 43 U.S.C. § 1712 (1976), and are in effect for twenty years or more.

<sup>4</sup> U.S. CLIMATE CHANGE SCIENCE PROGRAM AND THE SUBCOMMITTEE ON GLOBAL CHANGE RESEARCH: PRELIMINARY REVIEW OF ADAPTATION OPTIONS FOR CLIMATE-SENSITIVE ECOSYSTEMS AND RESOURCES (2008) (Final Report, Synthesis and Assessment Product 4.4) (available at <http://www.climatechange.gov/Library/sap/sap4-4/sap4-4prospectus-final.htm>) at 9-14 *et seq.*

<sup>5</sup> Dan Berman, ‘Dramatic’ effects of rising temps being seen on public lands, Earthnews, <http://www.earthportal.org/news/?p=93>. Mr. Huntsinger explained:

[w]e can anticipate further reductions in the level of allowable uses on public lands due to the loss of productivity and capacity . . . . The results are more fragile ecosystems, a greater susceptibility

In fact, no changes in land management were made in the Utah RMPs as a result of climate change.

Solutions to this unprecedented challenge must recognize and meet both the need for an immediate and effective response and the need for additional scientific study of the impacts of climate change and how to lessen those impacts to maintain ecological sustainability for as long as possible. Thus, we suggest here a triage approach in which large blocks of undisturbed public lands are protected immediately, while also creating an interagency and interdepartmental “climate commission,” advised by a standing body of scientists, to devise and refine continuing solutions as our understanding of climate change and its impacts on public lands evolves. (Dr. DellaSalla, who testified before this subcommittee on March 3, 2009, also noted the need to protect roadless areas as a way to shelter public lands from climate change.)

The following is based on our research on the effects of climate change on public lands, discussions with climate scientists, and on our experience with the recently-concluded BLM land use planning process. We reviewed reports issued by the Intergovernmental Panel on Climate Change, the U.S. Geological Survey, the U.S. Climate Change Science Program, the Environmental Protection Agency, and numerous other academic and news reports. Concepts supporting the legislative solutions suggested for consideration here are borrowed from existing laws such as the National Environmental Policy Act, National Forest Management Act, the Federal-Aid Highways Act, the Department of Transportation Act, and the Global Climate Change Research Act of 1990, all of which present interesting conceptual models which can be adapted to address climate change and its threat to public lands.

Underlying our testimony and the suggestions offered here is a deep sense of urgency. We may have already waited too long to address this problem effectively; we must act now, and decisively, to protect our nation’s remarkable public lands legacy. BLM’s failure to account for climate change, and make needed management adjustments results from a lack of clear direction on this issue. We hope that the subcommittee’s work will change that by, among other things, requiring the Department of Interior, and the U.S. Forest Service, to consider the effects of climate change on the public lands and manage those lands to maximize their long-term health and resilience to climate change.

### **Recent Events Demonstrate the Need for Decisive Action**

We see the effects of climate change in Utah, and throughout the West. We have also witnessed how the land managers have engaged in their day-to-day management, as well as their long-range planning, without consideration of climate change impacts. BLM’s failure to protect water sources in eastern Utah is particularly noteworthy. For example, the new RMPs in Utah designated approximately 20,000 miles of ORV trails,

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to the outbreaks of attacks by parasites and disease, increased vulnerability to wildland fire and erosion and an overall reduction in the carrying capacity of the land.

many of which are located in riparian areas and streams which are increasing rare and particularly vulnerable to the effects of climate change. They are also disproportionately important because these small ribbons of green in an otherwise arid landscape provide habitat for an estimated 80% of native species. ORV use in riparian areas commonly creates deep rutting which can lower the water table below the reach of native plants. Rutting also creates gullies which channel flash flood waters, which exacerbates the erosive effects of the rapidly flowing water, and keeping it from slowly absorbing into the ground. ORVs and other vehicles also cause siltation and water pollution in riparian areas. Moreover, ORVs are a remarkably efficient mechanism for the dispersal of weeds, including highly flammable cheatgrass, already a plague in much of the West. Yet BLM has not analyzed how ORV use in these places would exacerbate the ongoing effects of climate change such as shrinking water resources, loss of habitat, and spread of invasive and highly flammable weed species. There is no explanation of whether and how the land and its ecosystems can withstand that level of ORV use in an era of climate change.

Additionally, despite unprecedented stress and demand for water resources throughout the West, the RMPs failed to extend interim protection to over 1,000 miles of waterways that BLM itself found to qualify for protection under the Wild and Scenic Rivers Act. And although the BLM is required by FLPMA to give priority to the protection of “areas of critical environmental concern” or “ACECs,” the six BLM RMPs actually stripped protection for a half million acres of ACECs.

Among other climate-related issues the BLM paid scant attention to in either long or short term planning or management activities: impacts on rare, threatened or endangered species; other wildlife loss and habitat fragmentation; the need for new habitat at higher elevations or the pressure to move further north; how the spread of flammable, non-native plants can be curtailed by limiting ground disturbance in certain areas; the factors that contribute to wildfire and how their impact can be reduced; how the denuding of native plant species by grazing and ORV use compounds the negative effects of climate change, especially in riparian areas; and how ground disturbance – especially the loss of crucial cryptobiotic soils in the deserts of the Colorado Plateau – contributes to the effects of climate change. The BLM never considered whether such disturbances should be reduced or managed to avoid key ecological features or how more protective measures could soften the impacts of climate change.

Additionally, oil and gas development on public lands involves not just the drilling activity itself, but often includes hundreds or thousands of miles of new roads, airborne dust, greenhouse gas (GHG) emissions, water depletions and other ground-disturbing activity. BLM analyzed none of these impacts and their contribution to the changing climate even though the need for such analysis appears clear under NEPA. *See Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1216 (9<sup>th</sup> Cir. 2008) (holding that the federal agency’s environmental assessment of the impact of new fuel standards violated NEPA by failing to include a cumulative effects analysis of the rule’s impact on climate change).

As a result, the threat of climate change on public lands is much greater than it needs to be, due in large part because of the unwillingness of land managers to address the challenge effectively, or at all. One of the reasons for this is a lack of direction from within the BLM and an apparent (but hopefully now dwindling) fear of negative repercussions from within the Interior Department. A GAO report issued in August of 2007 highlighted these internal barriers to effective management for climate change, and quoted land managers who explained that addressing climate change was simply not “politically profitable.”<sup>6</sup> Land managers clearly need greater direction and motivation—along with specific direction and tools—to encourage better management in an era of climate change.

### **Should Congress Change Existing Laws?**

As a threshold matter, it is worth considering whether existing laws provide sufficient authority for land managers to undertake effective action to address the impacts of climate change on public lands. The short answer is that the governing laws – in particular, the Federal Land Policy and Management Act, 43 U.S.C. § 1701 *et seq.* (1976) for BLM lands – provide broad authority to land managers to undertake a wide range of management strategies. Thus, land managers have the discretion to implement effective strategies to enhance the public lands’ resilience to climate change, but it is not clear that they are required to do so. (It does seem fairly clear, however, that NEPA requires land managers to consider climate change and its cumulative effects to public lands when making land use decisions. *See e.g., Center for Biological Diversity, supra.*)

FLPMA’s lack of clarity on climate change is not surprising given that it was enacted in 1976, long before we fully understood the looming threat of climate change and its effects on public lands. At best, then, a mandate to manage public lands for climate would have to be pieced together from several FLPMA sections. These would include Section 102(8), which requires that:

The public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.

43 U.S.C. § 1701(8). Section 202(c)(7) further, and somewhat ambiguously, requires the BLM to weigh the long-term benefits to the public against short-term benefits when it prepares RMPs. 43 U.S.C. § 1712(c)(7).

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<sup>6</sup> U.S. GEN. ACCOUNTING OFFICE, CLIMATE CHANGE: AGENCIES SHOULD DEVELOP GUIDANCE FOR ADDRESSING THE EFFECTS ON FEDERAL LAND AND WATER RESOURCES 37 (2007) (attached). The comment regarding the political risks in talking about climate change is at 128 of the report.

On the other hand, FLPMA also specifically incorporated principles of multiple use. Section 102(7), 43 U.S.C. § 1701(7) and Section 202(c)(1), 43 U.S.C. § 1712(c)(1). The multiple use concept is so broad that it can justify an extraordinarily wide range of decision making. FLPMA defines it as:

The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources . . . without permanent impairment of the productivity of the land and the quality of the environment . . .

43 U.S.C. § 1702(c). Thus, some stakeholders could argue that this provision requires climate-sensitive management because it is the only approach that “takes into account the long-term needs of future generations,” while others could argue that it requires the provision of exploitable resources. So there is a strong argument that while land managers have the discretion to manage public lands resources to heighten their resilience in the face of climate change, Congress did not necessarily require land managers to protect ecosystem functions, biodiversity, water resources or any particular resource at all in the face of competing demands.

In the end, it is little wonder that land managers expressed the ambivalence and confusion about their authority and role regarding climate change so apparent in the GAO study cited above. With statutory authority expressed in such vague and sometimes contradictory terms, agency direction and action (or inaction) on climate change has predictably shifted with the political winds.

Climate change and the management and protection of public lands and healthy ecosystems are far too important to be left to the vagaries of shifting political priorities. We suggest that Congress provide specific direction to public land managers that the long-term sustainability of public lands and their ecosystem function and services in the face of climate change are hereafter their primary management objective.

### **Solutions:**

In a nutshell, the effects of climate change are often exacerbated by exactly the kinds of activities that have long taken place on public lands and are, in fact, specifically envisioned by statutory stalwarts like the Multiple Use Sustained Yield Act. These include oil and gas development, grazing and off-road vehicle use, uses which BLM approved on a broad scale across eleven million acres in Utah BLM’s six new RMPs. The challenge will be to address the damage caused by off-road vehicles, oil and gas development, roads, grazing and the like while still allowing some level of resource use.

We suggest a two-tiered approach to the problem. The basic strategy involves drawing on the existing science which strongly suggests the need to protect large blocks of undisturbed public lands, while at the same time creating an interagency and interdepartmental “climate commission” to oversee and facilitate the development of future research, guidance, and proposed new regulations and legislation targeting the specific needs of public lands managers. This commission, perhaps drawn from the existing Climate Change Science Program, could have a scientific advisory panel of researchers from a broad range of scientific experience and backgrounds who could provide additional insight and advice on areas where focused inquiry is required.

### Tier 1: Immediate Action to Protect Climate-Critical Areas

A number of studies support the argument that the need for protective action is urgent. Several have described the effects of climate change on the Colorado Plateau, or “rangelands” typical of those found on the Colorado Plateau, and have also documented how ground-disturbing activities compound the effects of climate change. The U.S. Geological Survey predicts that by 2050, soil conditions on the Plateau will be worse than conditions typical of the Dust Bowl era, and that runoff will decrease by up to 30% during the 21<sup>st</sup> Century.<sup>7</sup> The report explains that:

Soil disturbing activities, including grazing, energy exploration/development, and recreation, are increasing dramatically on the Colorado Plateau. These uses reduce or remove the natural components that stabilize desert soils (live and dead plant materials, physical and biological soil crusts, rocks). This increases soil loss through wind and water erosion [citation omitted] . . . Surface disturbance also enhances the invasion of exotic annual grasses.<sup>8</sup>

The U.S. Geological Survey report also predicts that soil erosion will lead to large dust storms which can obscure vision for drivers on nearby highways and increase particulate matter in the air. It explains that dust which becomes airborne in Utah settles on mountain snowpack in Colorado, leading to greater solar warming and earlier, faster (and less manageable) mountain runoff. It also discusses the how ground disturbance, and the loss of nitrogen-fixing soil crusts will have serious, negative repercussions throughout the food chain, ultimately impacting native plants and wildlife. Another study warns that climate change could create ecological tipping points much faster than earlier predicted.<sup>9</sup>

The logical solution to this problem is to curb ground disturbance and water degradation, particularly in ecologically important and sensitive areas. And this is

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<sup>7</sup> U.S. GEOLOGICAL SURVEY: IMPACTS OF CLIMATE CHANGE ON WATER AND ECOSYSTEMS IN THE UPPER COLORADO RIVER BASIN (2007).

<sup>8</sup> *Id.* at second and third unnumbered pages.

<sup>9</sup> U.S. CLIMATE CHANGE SCIENCE PROGRAM: THRESHOLDS OF CLIMATE CHANGE IN ECOSYSTEMS, SYNTHESIS AND ASSESSMENT PRODUCT 4.2 (2009) (available at <http://downloads.climatechange.gov/sap/sap4-2/sap4-2-final-report-all.pdf>).

exactly what a June 2008 study by the U.S. Climate Science Program concluded.<sup>10</sup> Based on existing scientific conclusions about the “most likely” impacts of climate change on ecosystems, the report identifies seven adaptation approaches, or best management practices, “to maximize ecosystem resilience to climate change.”<sup>11</sup> Briefly stated, these are:

1. Protect key ecosystem features;
2. Reduce anthropogenic stresses/development;
3. Ensure representation (protecting a “portfolio of several slightly different forms of a species of ecosystem [to] increase the likelihood that one can survive climate change);
4. Ensure replication (protecting more than one example of each ecosystem or species);
5. Restore intact ecosystems;
6. Establish refugia which are less affected by climate change; and
7. Relocate species to the refugia.<sup>12</sup>

The report concludes that reducing anthropogenic stressors—human caused activities that contribute to climate change—is likely the most effective of the seven strategies.<sup>13</sup>

With this information, it should be possible to devise a legislative strategy that would combine the need to reduce ecosystems stress and protect critical areas with the need for ongoing scientific study and refinement of management tactics. This could involve both immediate, substantive protection for certain high-value landscapes and resources, and future process-oriented steps to enhance evolving adaptive management strategies.

Legislative options to consider:

1) *Outright Protection of Landscapes* – These include lands identified by the agencies as roadless, as having wilderness character, or otherwise worthy of protection because they have a particular value and/or vulnerability to climate change, including, for example, riparian areas,<sup>14</sup> critical wildlife habitat for both ESA and non-ESA listed species; and areas with fragile soils. This is where the largest, intact ecosystems are likely to be found. Protecting these areas now as climate refugia is not only supported by the scientific literature, but has at some level the imprimatur of the agency itself which has already documented the special value of these places in recent Utah RMP revisions or other inventories elsewhere. It also has the advantage of targeting an existing category of

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<sup>10</sup> See n 4, *supra*.

<sup>11</sup> *Id.* at 1-2 to 1.6; 9-14 *et seq.*.

<sup>12</sup> *Id.* at 9-19 to 9-21.

<sup>13</sup> *Id.* at 9-22. The report’s recommended best management practices are meant to address climate change in the relatively near future; it concludes that major shifts in ecosystem processes will require other strategies.

<sup>14</sup> Protecting specified categories of land or resources is not new. The National Forest Management Act, for example, requires the Forest Service to protect soils, waterways and other riparian areas from logging. 16 U.S.C. 1604(g)(3)(E)(i) and (iii).



land, so that we do not have to rely on new inventories which may take years to complete. Further, and most importantly, it provides the necessary immediate relief to critical lands and resources in need of attention.

We believe that this option provides the best hope for addressing climate change stress on public lands in the near term, and that the benefit of acting now to protect critical places will also put our public lands on the best possible footing for long-term survival.

As a further analogy, protecting and avoiding impacts to specified critical resources has also been used in legislation to protect parks and other sensitive public lands from highway development. *See* Federal-Aid Highways Act, 23 U.S.C. § 138; Department of Transportation Act, 49 U.S.C. § 303 (“DOT Act”). Both statutes contain virtually identical language stating first that the federal government should make a “special effort . . .to preserve the natural beauty of the countryside,” and that to achieve that goal, the various departments shall cooperate in the development of plans that will maintain the natural beauty of the land affected by highway projects. More significantly, no transportation project requiring the use of parks or other identified special areas may be approved unless “(1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm to the [land] resulting from the use.” DOT Act § 303(c)(1), (2). Further provisions provide that projects may not be approved unless their impact is “de minimis,” or will not adversely affect the “activities, features and attributes” of the lands protected. DOT Act, 303(d).

A similar approach could be used with climate for lands identified as having high-value features in need of protection (roadless areas), or whose ecosystem function were particularly important for resistance to the effects of climate change (riparian areas and other critical wildlife habitat).

2) *Establishing an Administrative Process Resulting in Outright Protection* – This might include setting a deadline for the land management agencies to identify key areas that would serve as climate refugia or which require protection from activities which compound the effects of climate change. This option turns the decision making over to the agencies, but leaves ecosystems vulnerable during the identification process or during administrations which give a low priority to climate change response. (We just experienced eight years of this approach, and lost valuable opportunities to act.) This would require, as an initial step, that agencies apply certain criteria to identify lands and resources critical to the survival of healthy ecosystems, and then protect those places. This could be a time-consuming process where no such inventories exist. One way to speed the process, or overcome administrative foot-dragging if it becomes an impediment to climate-oriented management, is to provide for a process by which citizens, scientists, or others could petition the administration for the designation of certain areas to protect climate-sensitive resources, with judicial review of adverse decisions.

## Tier 2: Establish a “Climate Commission” and/or Reporting Requirements

We believe that the items set forth in Tier 1 above would provide more immediate relief to lands already stressed by climate change and provide the best protection against climate change. However, over the long run, effective management must be supported by better, more focused and fully funded scientific study. The following strategies would jump-start this process, and better connect the scientists with the land managers who will be implementing changes based on those studies and recommendations.

Options include:

1) The U.S. Climate Change Science Program has produced numerous valuable studies on the impacts of climate change and public lands (their work and recommendations formed the basis for much of the material in this memo). However, it would be worth exploring how the Program could be improved through study and research more closely targeted at the specific and practical needs of the land management agencies, or whether a new science panel, a “climate commission” whose mission would be more directly responsive to agency needs, should be funded.

2) Requiring the Secretary of Interior and Secretary of Agriculture to submit to Congress a coordinated plan for identifying and protecting climate-critical public lands, and requiring annual updates. The plan should acknowledge and address special requirements for species and their need to migrate beyond administrative boundaries in response to climate pressure. While this requirement would reinforce the notion that climate change must be a high priority, we could not reasonably expect that a reporting requirement alone would provide concrete progress in the effort to stem the effects of climate change on public lands.

3) Clearly, there should be authority, encouragement and funding for the various agencies and departments to participate collaboratively in the development of cross-boundary planning and management. This should be a component of both of the reporting and science requirements in No.1 and No. 2, above. We stress that climate-oriented managed should be a multi-agency, multi-departmental effort, including agencies and bureaus within the Departments of Agriculture, Interior and Commerce.

### Additional Suggestions:

- Codify Secretarial Order 3226, which, until it was revised on January 16, 2009, specifically required BLM

*to consider and analyze potential climate change impacts when undertaking long-range planning exercises, when setting priorities for scientific research and investigations, when developing multi-year*

management plans, and/or when making major decisions regarding the potential utilization of resources under the Department's purview.<sup>15</sup>

(Note: we believe that NEPA requires such as assessment, and have challenged the Utah RMPs in federal court in Washington, D.C. for their failure to analyze climate change. *Southern Utah Wilderness Alliance v. Allred* (filed Dec. 17, 2008)).

- Bush administration energy policies required the BLM to identify fossil fuel resources on the public lands, and further, provide written explanations for agency decisions that failed to maximize their development. The identification of greenhouse gas emissions resulting from BLM decisions is an important part of the decision-making process, however, and should be a required component of the agency's energy-related activities. By doing so, Congress can ensure that its climate-mitigation efforts are not undermined by oil and gas development on public lands which continues to emit the pollutants contributing to climate change.
- Create funding incentives to encourage agencies to protect climate-critical resources and to encourage local support. Specifically, Congress should fully fund efforts to restore and ensure lasting protection for healthy ecosystems. This could include, among other things, hiring new employees to monitor the impacts of climate change, and/or to rehabilitate riparian areas and other critical habitat that have been damaged by off-road vehicle and other uses.
- Initiate a comprehensive review of the Endangered Species Act to ensure that both the listing of threatened and endangered species and the designation of critical habitat take the impacts of climate change into account.

### **Conclusion:**

We hope that these suggested solutions are helpful to you as the Subcommittee begins its work on climate change and public lands. Based on our experience, we believe that they would have a strong, beneficial impact on the West's public lands, and that they are workable solutions. We look forward to working with you further on this critical issue.

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<sup>15</sup> See [http://elips.doi.gov/app\\_so/act\\_getfiles.cfm?order\\_number=3226](http://elips.doi.gov/app_so/act_getfiles.cfm?order_number=3226) (emphasis added). The order defines the activities that will trigger a climate change analysis:

Departmental activities covered by the Order include, but are not limited to, programmatic and long-term environmental reviews undertaken by the Department, *management plans and activities developed for public lands*, planning and management activities associated with oil, gas and mineral development on public lands, and planning and management activities for water projects and water resources.