











## Wilderness: Increasing Utah's Public Land's Resilience to Climate Change

New studies by federal and international agencies predict that climate change will bring dire consequences to our public lands - conditions that will rival those of the Dust Bowl.

According to the U.S. Geological Survey<sup>1</sup>, we can expect:

- Hotter, drier conditions, with temperature increases of 4 to 6 degrees Celsius in this century;
- Larger, hotter wildfires that change the ecological makeup of broad areas:
- The spread of non-native invasive plants which burn easily and fuel wildfire;
- Riparian areas and other water resources stretched to their limits;
- Stressed wildlife, extinctions, and loss of habitat, especially as native plants and water sources are lost;
- Large dust storms where ground disturbance and loss of plant life combine to send erosive soils into the air;
- Rapid snowmelt, caused in part by the heat-trapping effects of particulates settling out of dust storms;
- Increased pollution from fires and particulates.



Dust from ORV damage near Factory Butte. Copyright Ray Bloxham/SUWA.

According to the U.S. Climate Change Science Program<sup>2</sup>, managing public lands now to enhance their resilience to climate change is essential. More research is needed, but we know that reducing the human impact to public lands is crucial to the survival of healthy ecosystems and the services they provide, like water, clean air, and wildlife.

Unfortunately, new land use plans for 11 million acres of BLM land in Utah ignored these studies and the critical need to manage for climate change. These plans must be revised.



Soil disturbance from drill pads and roads in the Uinta Basin. Copyright Lin Alder.

We must protect the integrity of undisturbed native landscapes by:

- Cutting back on unnecessary roads and off-road vehicle trails that churn the soil, degrade our water sources, and introduce non-native plant species.
- Protecting streams and water resources from erosion, pollution, and use by oil and gas companies;
- Minimizing the development of oil and gas fields. Not only do these areas emit tons of greenhouse gases, but they increase ground disturbance, fragment habitat, and use precious water.

Wilderness designation in Utah will help mitigate short-term and long-term impacts associated with climate change in the arid southwest.

For more information, please contact:

Richard Peterson-Cremer (Southern Utah Wilderness Alliance) 202-266-0471; Suzanne Jones (The Wilderness Society) 303-650-5818; Amy Mall (Natural Resources Defense Council) 720-565-0188; Myke Bybee (Sierra Club) 202-675-2389; Sean Babington (Earthjustice) 202-667-4500 x202

<sup>(1)</sup> CCSP, 2009: Thresholds of Climate Change in Ecosystems. A report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Fagre D.B., Charles C.W., Allen C.D., Birkeland C., Chapin F.S. III, Groffman P.M., Guntenspergen G.R., Knapp A.K., McGuire A.D., Mulholland P.J., Peters D.P.C., Roby D.D., and Sugihara G.] U.S. Geological Survey, Departement of the Interior. Washington D.C., USA.

<sup>(2)</sup> CCSP, 2008: Preliminary review of adaptation options for climate-sensitive ecosystems and resources. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. [Julius, S.H., J.M. West (eds.), J.S. Baron, L.A. Joyce, P. Kareiva, B.D. Keller, M.A. Palmer, C.H. Peterson, and J.M. Scott (Authors)]. U.S. Environmental Protection Agency, Washington, DC, USA, 873 pp.