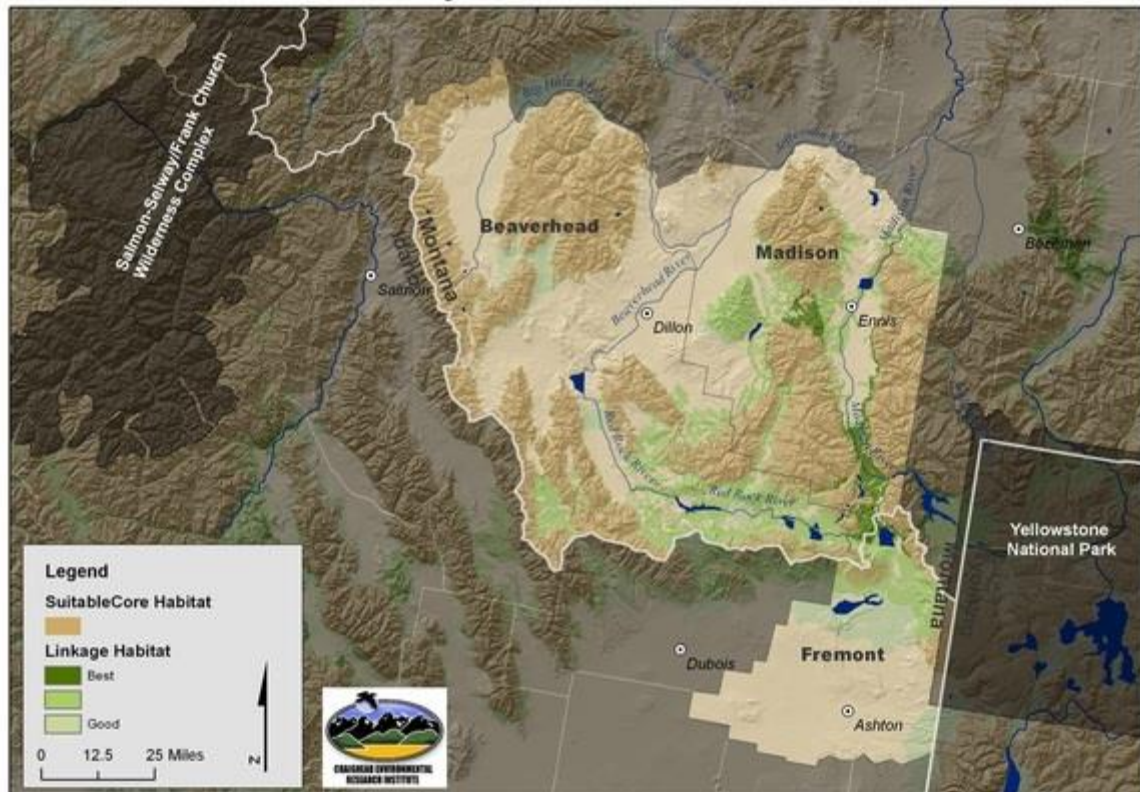


The High Divide: Working with counties, developers, landowners and state agencies

A long-term adaptation strategy for climate change

The High Divide region straddles Montana and Idaho and is home to numerous mountain ranges, valleys and rivers including the Madison and Jefferson Rivers; the Tobacco Root Mountains; and the Madison, Bighole and Centennial Valleys. Adjacent to the Greater Yellowstone Ecosystem (GYE), experts consider it one of the most intact biological areas in the lower 48 states, with abundant wildlife populations of elk, antelope, and deer. The region is also critically important for wolverine and grizzly bear recovery. It is not surprising that this scenic landscape and abundant wildlife have attracted many new residents to the area. This ongoing development, however, has led to an increase in road density, habitat fragmentation, and human-wildlife interaction.

Project Area Map Showing Potential Linkages Between Core Habitats for Grizzly Bears and Wolverines



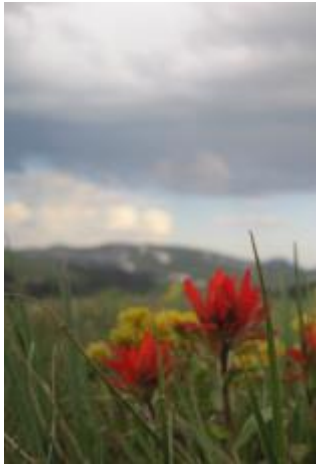
The Craighead Institute believes that development that respects wildlife habitat and corridors is possible. However, it must be founded in good science based on the best available data.



Planners, wildlife managers, and landowners need access to this information in an understandable and applicable format in order to make informed decisions about future development. The Craighead Institute engages landowners, planners and government entities in a collaborative process to guide development, inform land-use decisions and improve land stewardship so that wildlife linkage routes are maintained in the High Divide region.

Collaboration

Currently there are several broad conservation initiatives focusing on the High Divide. These include the Heart of the Rockies [High Divide Collaborative](#) with support from the [Great Northern Large Landscape Cooperative](#); [Yellowstone to Yukon](#); and a collaboration between the [National Fish and Wildlife Foundation](#) and a diverse group of stakeholders in the region. Craighead Institute involvement expands on our [current land-use planning initiative in the Madison Valley](#) which incorporates the most extensive and current data on wildlife conservation into subdivision regulations for the county. Using GIS-based tools developed by our staff, this framework provides fine-scale analyses at the parcel level, enabling decision-makers to determine areas that warrant unique mitigation, balancing development with wildlife corridor integrity, and it includes planning for transmission line locations. Based on success to date with local stakeholders and conservation partners, the next step is to expand this process to neighboring counties in the High Divide region. The Craighead Institute is laying the foundation for a development planning strategy which will preserve the qualities of the High Divide so critical to humans and wildlife.



Craighead staff often collaborate closely with [Future West](#) to help with facilitating meetings and implementing the results into county planning processes. The approach outlined here will allow appropriate development of subdivisions, their supporting infrastructure, and accompanying

commercial developments without forming barriers to wildlife movement. It will offer alternatives to minimize the negative impacts of rural subdivisions on the best wildlife areas, thus maintaining connectivity to a large complex of unfragmented wildlife habitat in the High Divide, and providing space for animals to respond to development pressures and climate change.

Craighead Institute - Building Tools for counties, developers, landowners and state agencies



The overall goals of our High Divide Work are:

Goal 1: To maintain and/or restore connectivity for biodiversity between the GYE and Central Idaho Wilderness through the High Divide region, for perpetuity.

Goal 2: To maintain and/or restore connectivity for biodiversity between the GYE and Northern Continental Divide Ecosystem through the High Divide region, for perpetuity.

Goal 3: To ensure connectivity for wolverine and grizzly bear as focal species surrogates for biodiversity.

Notes: Connectivity to Central Idaho is direct and relatively unfragmented. There are alternatives to many of the route segments, but no completely separate route alternative. Connectivity to the NCDE has alternate routes, some of which may be more feasible. In short, the High Divide is essential for connectivity from the GYE to Central Idaho, but not to the NCDE.

Major Objectives are:

- Improving detailed knowledge and information on key wildlife habitats, corridors and linkage areas.

- Identifying priority actions in the High Divide region that counties, developers, landowners and state agencies can take to better manage growth and land use practices in a manner that reduces impacts on habitats and habitat linkages and on the fiscal well-being of the counties.
- Assisting Madison, Beaverhead and Fremont counties in updating land use policies, subdivision regulations, development codes, and land trust priorities, and improving site specific development proposals to reflect recommended actions for mitigating the impacts of rural development on habitats and habitat linkages and on the counties' fiscal well-being.
- Implementing a landowner outreach strategy for assisting rural landowners in adopting wildlife stewardship practices including application of various stewardship and easement incentives.

Specific Objectives include:

1. Identify and prioritize the best routes, and alternatives, for animals (grizzly bear and wolverine) to travel without coming into conflict with human beings between the GYE and Central Idaho Wilderness. Routes should be mapped and inventoried at the finest scale possible to facilitate other objectives.

2. Secure protection of those routes from development and disturbance by human activities that would impede movement of wildlife species. Such protection would include these strategies:

- a. Purchase of private lands by land trusts or other agencies
- b. Establishing conservation easements on private lands
- c. Directing management of public lands to maintain habitat and preclude development such as timber harvest, oil and gas development, mineral extraction, and road building.
- d. Limiting hunting activities under direction of State wildlife management agencies to allow species such as grizzly bears, lynx, and fisher, to re-colonize previous habitat without being harvested as they travel.
- e. Guiding development of private lands through county planning and regulations. Model subdivision regulations, model zoning regulations, and model guidelines for stream setbacks and other environmental issues will be provided and explained to county government officials and planning departments. Provide training workshops in planning tools (see Objective 3c below)
- f. Providing landowners with information and support to make their lands more wildlife friendly by reducing attractants, siting new infrastructure in appropriate locations, removing fences or installing wildlife-friendly fencing, etc.

g. Providing sportsmen and recreationists with information and support to make their camps and activities clean and secure so that wildlife conflicts do not occur, and so their activities have minimal impact on habitat and wildlife behavior.

3. Educate and inform people in local communities, and the general public, of the importance of connectivity to provide wildlife species with options for movement and survival as the climate changes. Educational activities would include:

a. Public informational meetings to share data and facts about climate change, habitat change, wildlife requirements, connectivity, and movement routes.

b. Classroom modules to introduce students to the topics of climate, climate change, habitat, ecology, connectivity, and land use.

c. Conservation planning workshops in local communities for planners, agency managers, local decision-makers, and other stakeholders to share tools and methods for identifying habitat and connectivity options, guiding development and monitoring change.

4. Evaluate the success of strategies and adapt to use most effective approaches. Evaluation can include:

a. Listing all strategies necessary to protect each route segment, parcel by parcel, or management unit by management unit, at the beginning of the process.

b. Establishing benchmark dates for strategy evaluation.

c. Determining which strategies have been completed successfully, and which remain to be implemented, at each benchmark date.

d. Determining the degree of success of each strategy, ie. How many acres purchased out of total needed, how many acres of easement secured, how many counties have adopted guidelines or regulations, how many homeowners associations have adopted guidelines or regulations

e. Considering other strategies to replace those that are not successful.

f. Monitoring populations and individuals of wolverine and grizzly bear to determine population status and movement through connectivity habitat.

g. Conducting surveys of public meeting participants to measure effectiveness of meetings.

h. Conducting surveys of the general public at the beginning of this process and at periods throughout the process to determine the state of public awareness of the concepts being discussed.

i. Monitoring the use of classroom modules; how many schools are using them, what grades

are using them, what states are using them.

j. Conduct surveys of students and teachers to measure effectiveness of classroom lessons.