

Missoula County

Rural Initiatives



Introduction

Process

Products

Next Steps

Questions/Discussion

What is the PLACE Project?

An effort to consolidate information about conservation resources in Missoula County for the purposes of

- improving the County's efficiency and consistency in project review (particularly for subdivision and Open Space Bond projects)
- making information about conservation resources available to landowners/developers early in project planning process
- fostering further discussion regarding the County's role(s) in resource conservation

P L A C E Project ~ Practical Landscape Assessment for Conservation and Enhancement

Why has Missoula County conducted a Landscape Assessment?

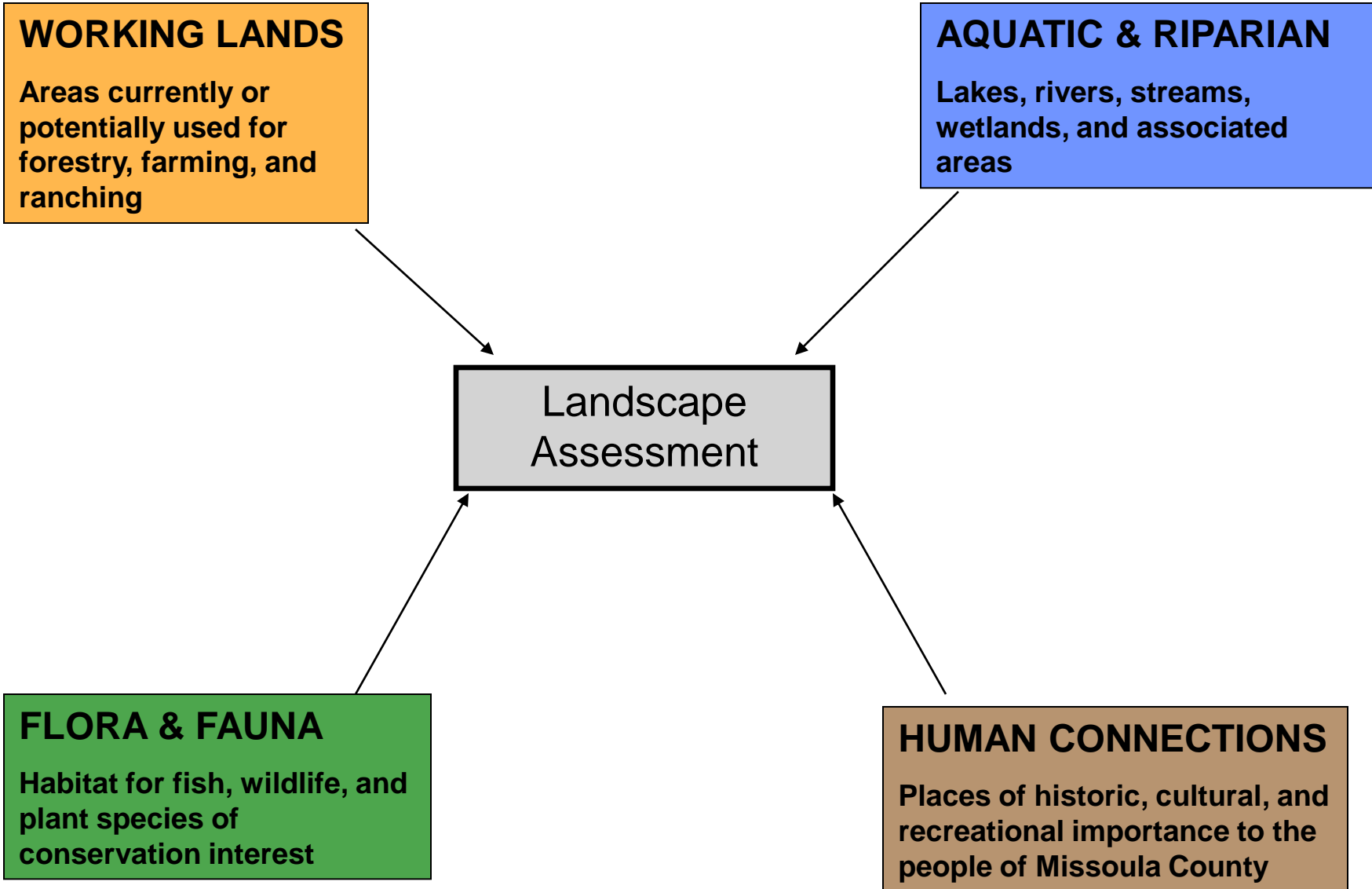
- County is responsible for considering conservation resources in project review and planning
- Much data exist on the location of conservation resources, but data are often scattered or difficult to access
- Information on conservation resources should be available to all parties early in planning process

P L A C E Project ~ Practical Landscape Assessment for Conservation and Enhancement

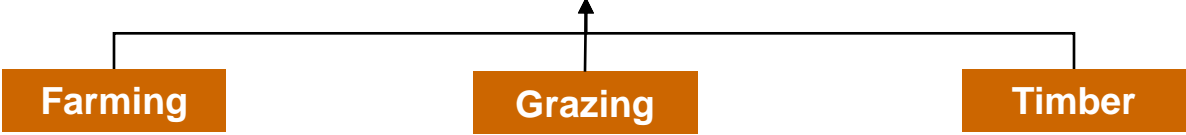
Process:

- Define “Conservation Resources”
- Gather data
- Map conservation resources
- Review with technical advisors
- Public review & sharing

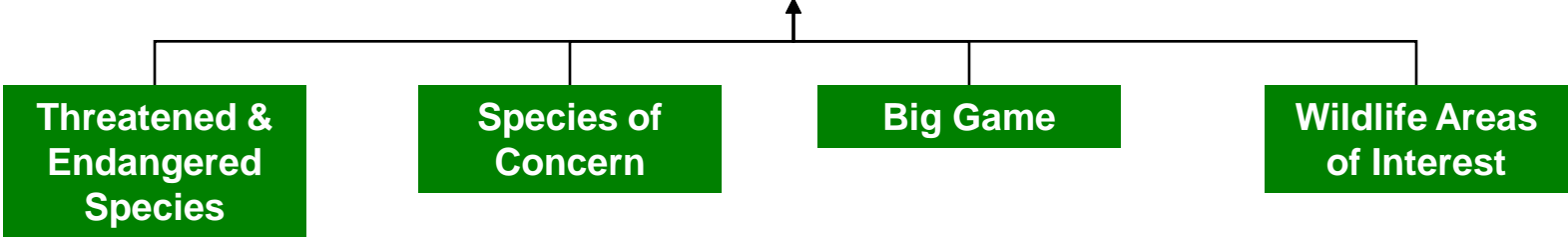
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WORKING LANDS



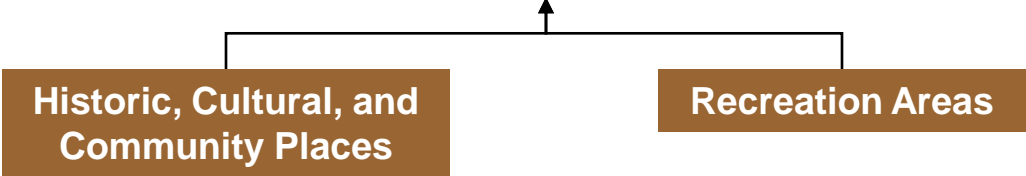
FLORA & FAUNA



AQUATIC & RIPARIAN



HUMAN CONNECTIONS



P L A C E Project ~ Practical Landscape Assessment for Conservation and Enhancement

Process:

- Define “Conservation Resources”
 - GIS data downloaded from websites
- Gather data
 - GIS data requested from agencies
 - Non-GIS data that we digitized
- Map conservation resources
- Review with technical advisors
- Public review & sharing

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P L A C E Project ~ Practical Landscape Assessment for Conservation and Enhancement

Process:

- Define “Conservation Resources”
 - Geodatabase for GIS users
 - Hard-copy maps for non-GIS users
- Gather data
- Map conservation resources
 - Map info as-is
 - Perform simple queries
 - Perform more complex analyses
- Review with technical advisors
- Public review & sharing

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YOUR INPUT IS NEEDED!

- Are there other resource topics that should be included?
- Are there other maps or studies to enhance the information we've already gathered?
- How can we best make the maps and information accessible for you?
- What additional ways can you see the maps and information being used in your community? In the County?

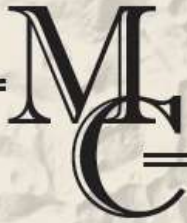
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Products:

- Conservation Resource Atlas (hard copy maps + text)
- **Geodatabase** (GIS data for County staff)
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MISSOULA
COUNTY

RURAL
INITIATIVES



PLACE Project



Practical Landscape Assessment for Conservation and Enhancement

CONSERVATION RESOURCE ATLAS



Grizzly Bear

Flora & Fauna ▶ Threatened & Endangered Species

Background:

Grizzly bears are habitat generalists, meaning they can live in a variety of habitat types such as forests, meadows, riparian areas, and avalanche chutes. Grizzlies occupy large areas, and are opportunistic omnivores, meaning they will eat a wide variety of plants, animals, and insects depending on what is seasonally and regionally available.

Despite their abilities to adapt to a variety of habitats and food sources, grizzly bears are quite sensitive to human development and disturbances. Studies show that grizzlies are negatively affected by higher road densities, fragmentation of large areas of undisturbed habitat, and residential development in previously undeveloped areas. Grizzlies typically react to roads and development either by abandoning habitat that used to be available to them, or by becoming habituated to human presence, which often results in negative human-bear interactions and the end of life for the bear. Thus, conserving grizzly bear habitat and developing in ways that minimize disturbance to grizzly bears are important considerations across much of Missoula County.

Data Source(s):

United States Fish and Wildlife Service (USFWS)^{24, 25}; United States Forest Service²⁶

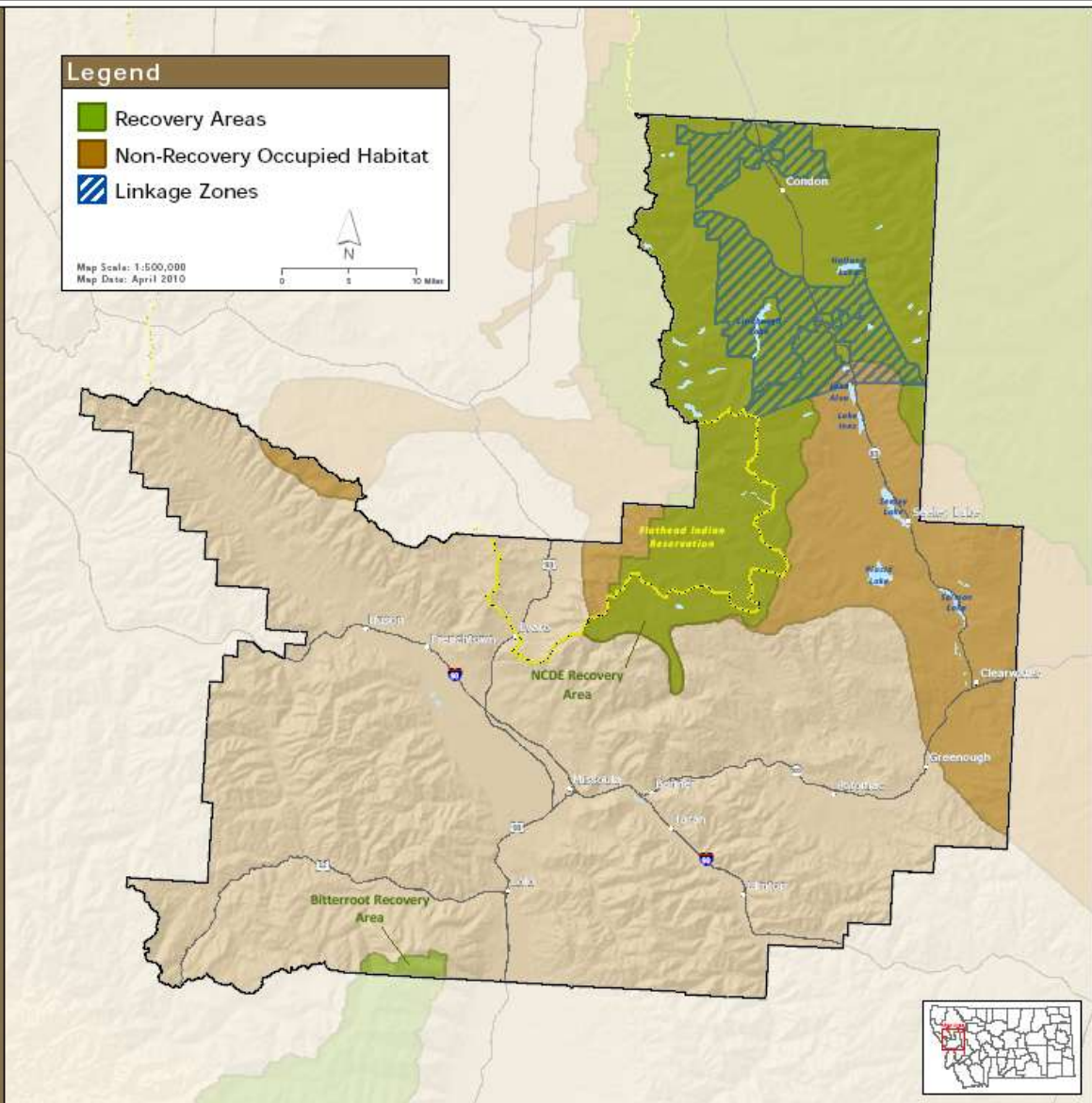
Explanation of the Data:

Several different sources of information were used to help identify potential grizzly bear habitat in Missoula County. Because a single set of potential grizzly habitat data has not been created for Missoula County, we included data from several different sources to map potential grizzly habitat:

Recovery Areas—Portions of two USFWS designated Recovery Areas occur in Missoula County: the North Continental Divide Ecosystem (NCDE) and Bitterroot Recovery Area. Grizzly bears currently occupy much of the NCDE, but are not thought to be established in the Bitterroot Recovery Area at this time.

Currently Occupied Habitat—Areas where grizzly bears are likely to reside on a regular basis also exist outside of the designated Recovery Areas in Missoula County. While grizzlies are most likely to be found in Currently Occupied Habitat, bear managers in Missoula County caution that it is possible to encounter a grizzly bear in any but the most urban areas, as bears continue to expand their range.

Linkage Zones—Linkage zones in general are broad areas of seasonal habitat where animals can find the quantity and quality of food, shelter, and security to meet their needs. Linkage zones for grizzly bears were identified in the Swan valley, representing areas that provide habitat with low levels of disturbance; these linkage zones support grizzly movement between the Swan and Mission Mountain ranges.



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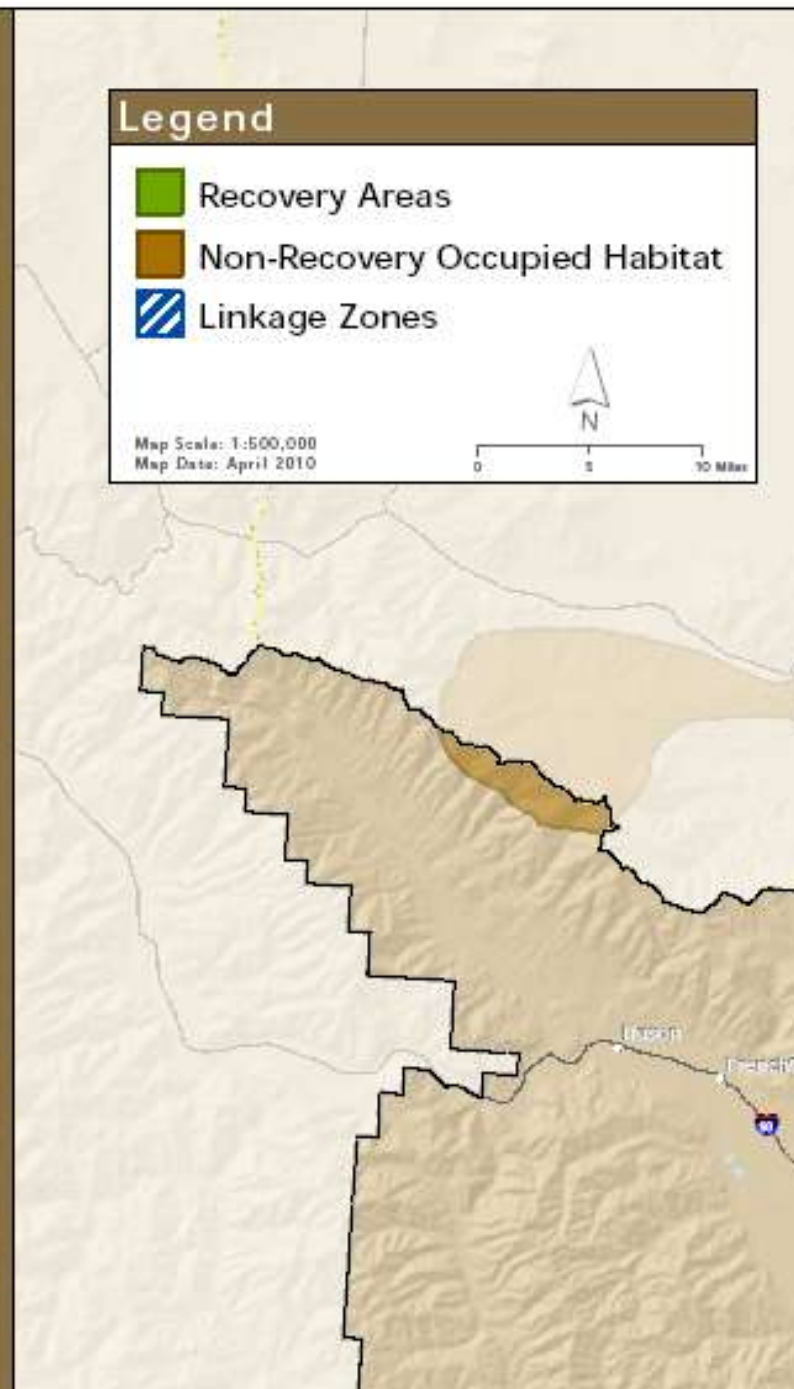
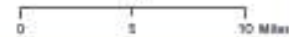
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Legend

-  Recovery Areas
-  Non-Recovery Occupied Habitat
-  Linkage Zones



Map Scale: 1:500,000
Map Date: April 2010



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PLACE Project ~ Practical Landscape Assessment for Conservation and Enhancement

PLACE Does:

- Consolidate information on conservation resources
- Map locations of conservation resources, with a particular focus on those affected by rural development
- Provide a foundation for future conservation and planning discussions

PLACE Does NOT:

- Prioritize resources or areas for conservation
- Develop specific conservation or development strategies or policies
- Include all of the information needed to make conservation or development decisions

Feedback, questions, and ideas are welcome!

To learn more:

Missoula County Rural Initiatives

(406) 258-3432

www.co.missoula.mt.us/rural/PLACE

GIS support provided by:

DTM Consulting, Inc.

Bozeman, MT

www.dtmgis.com

