Utilizing the Principles of Strategic Habitat Conservation in the Rocky Mountain Front Conservation Area







U.S. Fish & Wildlife Service

Benton Lake National Wildlife Refuge Complex



Base Map



SHC: Biological Planning

Focal Species

Grizzly bear - a key focal species that may also captures the habitat needs of several of the other key trust species.









SHC: Biological Planning

Population Objectives for Grizzly Bear

Bears in the RMF CA are part of the Northern Continental Divide Ecosystem (NCDE) recovery zone.

As a listed species, recovery objectives were already formulated.

Ten females with cubs inside Glacier National Park, and <u>twelve</u> females with cubs outside GNP over a running 6-year average, both inside the recovery zone, and within a surrounding 10-mile area... etc...

Grizzly Bear Recovery Plan, USFWS 1993





SHC: Biological Planning

Limiting Factors

Habitat development and habitat fragmentation are biggest threats. Both lead to an increase in human interactions \rightarrow human-caused mortality





SHC: Conservation Design







SHC: Conservation Design

Formulation of Habitat Objectives

- •The CEM helped us target valuable habitats for protection.
- •We could see the development and fragmentation occurring.
- •We knew we needed to focus on:
 - protecting intact habitat and connectivity and
 - minimizing potential for fragmentation and human interaction

SHC: Conservation Design



Priority Areas

• We used GIS analysis to rank potential easement areas based on CEM habitat value, potential to preserve connectivity, and size of block.

•Even with the model, we cannot quantitatively determine how many grizzly bears can be added to the population or prevented from dying per acre of easements.

SHC: Conservation Delivery

Working with our partners...

A Recent 12,000 Acre Easement

LWCF Richard K. Mellon Foundation The Nature Conservancy Private donation TOTAL \$1,870,000 \$1,630,000 \$1,000,000 \$500,000 \$5,000,000

SHC: Monitoring and Research

Also a partnership:

MTFWP, USGS -

population size/trend, distribution, linkage areas, mortality and survivorship

Great Northern LCC grizzly bears as a focal species





Scaling Up to a Larger Landscape

