

GREATER YELLOWSTONE
COORDINATING COMMITTEE



2009 Annual Report



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COORDINATING COMMITTEE



2009 Annual Report

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2010

On the cover: Running the Gallatin River, Gallatin National Forest

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Photos and maps are from GYCC files or as indicated.



Sage Grouse

Photo: Craighead Beringia South

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INTRODUCTION

The Greater Yellowstone Area (GYA) is a unique and special place. Home to the world's first National Park and to our nation's first National Forest, the GYA is widely viewed as the largest intact ecosystem in the lower 48 United States. Federal lands managed by six National Forests, two National Parks and two National Wildlife Refuges are geographically contiguous, ecologically interdependent, and unalterably linked.

The Greater Yellowstone Coordinating Committee (GYCC) formed in 1964 between the National Park Service and the U.S. Forest Service. The U.S. Fish and Wildlife Service joined the committee in 2000. The GYCC fosters communication, coordination and cooperation in GYA federal land management.

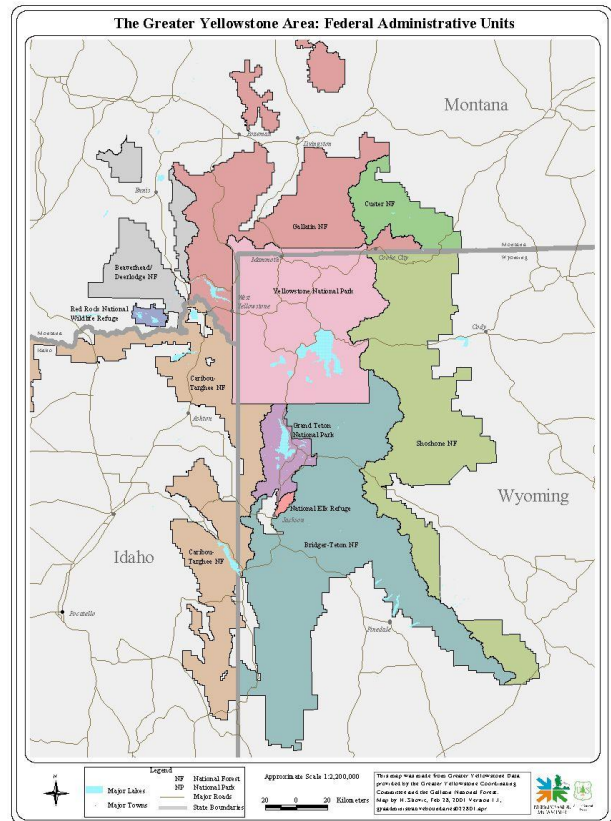
The GYCC consists of the top leaders of ten federal management units, which together comprise nearly 14 million acres.

- Park Superintendents of Yellowstone and Grand Teton National Parks.
- Forest Supervisors of six National Forests: Beaverhead-Deerlodge, Bridger-Teton, Caribou-Targhee, Custer, Gallatin, and Shoshone National Forests,
- Refuge Managers of Red Rock Lakes National Wildlife Refuge and the National Elk Refuge.

GYCC managers set regional level priorities and assign financial and staff resources to achieve those priorities. The GYCC units pool funds for coordinated work addressing these resource priorities.

In 2009, the GYCC affirmed its priorities as:

- Sustainable operations.
- Protect greater Yellowstone landscape integrity.



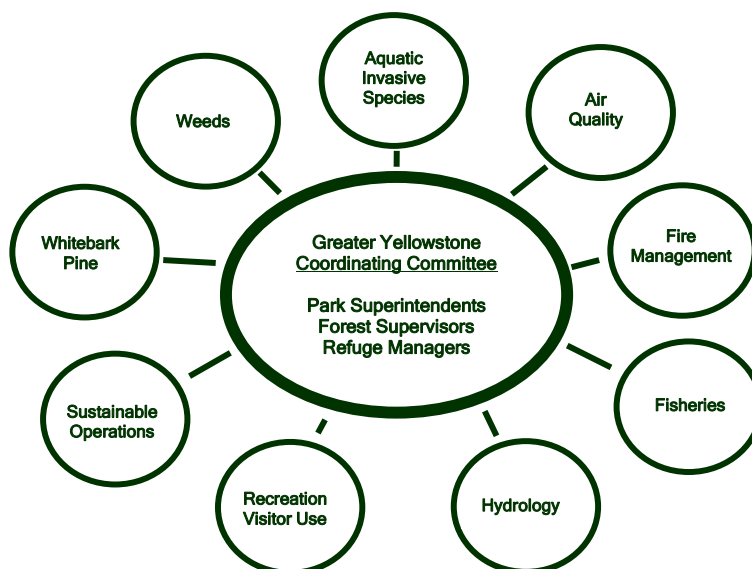
- Ecosystem health, in particular climate change, air quality, invasive species and disease, species on the brink, and water quality and flow.
- Connect people to the land.

The GYCC subcommittees displayed on page 2 carry out the on-going coordination of GYA management activities. Subcommittees include agency staff and partners. More subcommittee detail can be found at:

http://www.fedgycc.org/gycc_subcommittees.htm

This report summarizes 2009 accomplishments of the GYCC, their staff and many GYA-wide subcommittees. The GYCC allocated about \$265,000 to projects advancing their priorities. Appendix A describes 2009 GYCC projects.

GYCC Subcommittees



ACCOMPLISHMENTS

Sustainable Operations

The Sustainable Operations Subcommittee (SOS) facilitates coordination of sustainable operations throughout GYA public lands, such as water and energy conservation, waste prevention and recycling.

In 2009, the GYCC completed the first regional interagency greenhouse gas emission inventory in the nation.

"The Greater Yellowstone Coordinating Committee is to be commended for completing their inventory and can now seek specific ways to implement collective actions across three federal agencies to reduce our greenhouse gas footprint. We believe this is groundbreaking work that will serve as a model for other agencies and ecosystems as well."

Forest Service Chief Tom Tidwell, July 31, 2009

The Beaverhead-Deerlodge National Forest purchased a compressor to aid plastic recycling in the Ennis, Montana area.



Compressed Bales of Plastic for Recycling

The Kohler company generously donated 27 low flow toilets and 10 waterless urinals to replace higher water using fixtures at several locations around the GYA. GYCC funds supported fixture installation.

See more SOS information at:
<http://www.fedgycc.org/SOSOverview.htm>

Protect Landscape Integrity

Development patterns on private lands near public lands can affect wildlife migration, water resources, public access and fire fighting on federal lands. In the context of rapid land development over the past decade, the landscape integrity priority looks at land ownership patterns with attention to ecological integrity, retention of public access, and management efficiencies.

Beaverhead-Deerlodge National Forest employees, private organizations, and local officials initiated a wildlife conservation overlay toolbox for Madison County, MT planners to minimize long-term wildlife impacts from rural development. Gallatin National Forest staff and several partners supported an informational workshop on conserving land, water and resources of Park County, MT.

Funds from the Federal Land Transfer Facilitation Act (FLTFA) enabled the 40 acre Willow Creek purchase near Pinedale, WY on the Bridger-Teton National Forest.

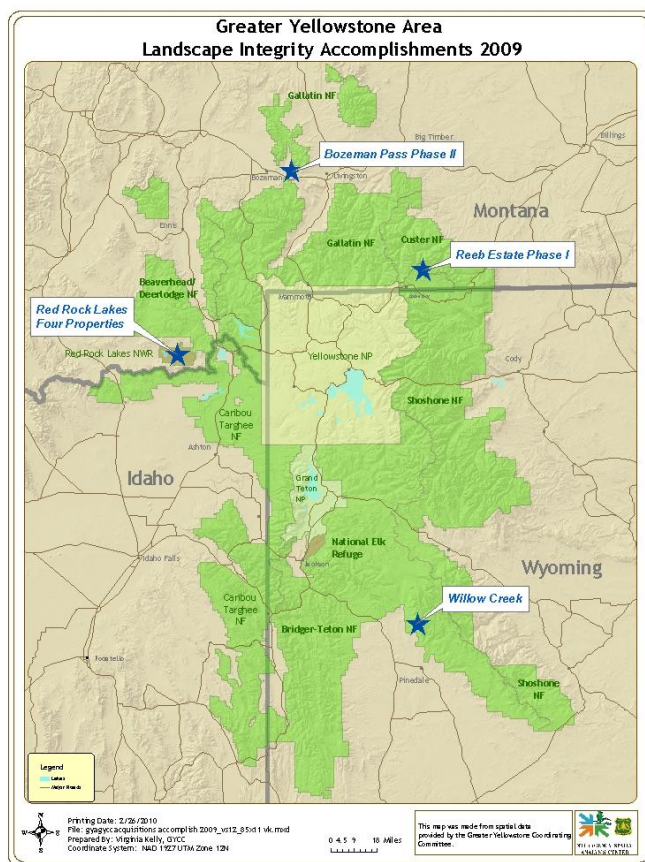


Reeb Estate Acquisition

With \$4 million of Land and Water Conservation Funds (LWCF), the Gallatin and Custer National Forests purchased 697 acres of the Reeb Estate near Cooke City, MT, including two private inholdings within the Absaroka-Beartooth Wilderness.

The Gallatin National Forest purchased 395 acres at Bozeman Pass, MT with \$1.58 million of LWCF funds. The Forest Service received a donation of another 47 acres and two public access trail easements at Bozeman Pass.

Red Rock Lakes Refuge received donations of three conservation easements totaling 1,480 acres. The US Fish and Wildlife Service purchased another 950 acres using \$0.5 million of FLTFA funds and \$1 million from the Migratory Bird Conservation Commission. The Refuge holds over 20,000 acres in conservation easements.



Ecosystem Health

The Ecosystem Health priority includes the air, water, soil, plant, fish and wildlife resources of the Greater Yellowstone Area. The GYCC focused this priority on climate change, air quality, invasive species and disease, water quality and flow, and species on the brink (native fish, wildlife and whitebark pine).

Climate Change

The GYCC seeks to understand the effects of climate change on GYA lands and resources, and how to manage these resources in light of the potential effects.

The National Park Service, GYCC and many partners facilitated a GYA Science Agenda Workshop: *Climate Change, Land Use Change, and Invasive Species as Drivers of Ecological Change*, to identify high-priority science needs for next 10-20 years. Meeting materials and summary available at: <http://www.greateryellowstonescience.org/gyascienceworkshop>

Air Quality

The Greater Yellowstone Area Clean Air Partnership (GYACAP) includes federal and state air resource program managers and specialists. The GYACAP advises the GYCC on air quality issues, shares air quality information and regulatory issues, and coordinates air quality monitoring between state and federal agencies in the GYA.

The fall 2009 GYACAP meeting focused on climate change and air quality in the GYA. Meeting notes and further GYACAP documents are found at: <http://www.fs.fed.us/r1/gallatin/resources/air/gyacap/>

In 2009, the GYCC supported statistical analysis of air quality trends in the southern GYA.

Invasive Species and Disease

Invasive species and disease pose a serious threat to the GYA. Diseases of concern include brucellosis, whirling disease, chronic wasting disease and white pine blister rust. The whitebark pine committee addresses blister rust, while the Interagency Bison Management Plan guides management of bison and brucellosis around Yellowstone NP.

Terrestrial Invasive Plant Species

The Invasive Species Working Group (Weed subcommittee) brings together a broad base of cooperators in the fight against invasive terrestrial plant species in the GYA. See the subcommittee's webpage at: <http://www.fedgycc.org/WeedOverview.htm>

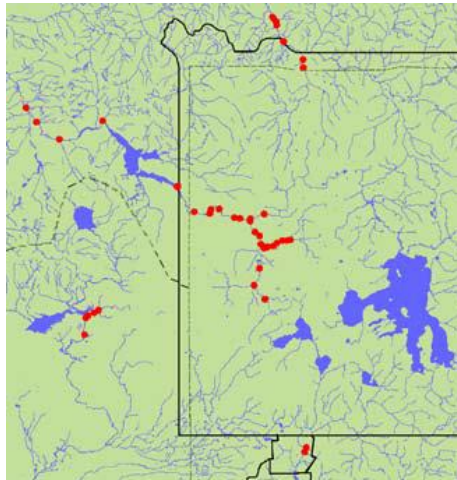


Sand and Gravel Pit Inspection

The GYCC awarded 2009 funds to four weed inventory, mapping and control projects. Since weeds can be transported into the GYA in road or construction gravel, 38 sand and gravel pits around the GYA were inspected for terrestrial weeds. GYCC funds aided an inventory and eradication effort along the Continental Divide between Idaho and Montana. GYCC and partner staff evaluated existing monitoring efforts, and the GYCC continued to support the GYA-wide weed database and GIS map.

Aquatic Invasive Species

The recently formed GYA Aquatic Invasive Species (AIS) Cooperative includes federal, state and county agencies, local outfitters, organizations, and businesses.



Known New Zealand mud snail occurrence in and around Yellowstone NP, 2007.

With GYCC and partner assistance, the AIS Cooperative in 2009 completed strategic and implementation plans, developed an inventory/monitoring framework, published a GYA AIS brochure, organized area wide outreach and inventory crew training, deployed public outreach crews, conducted inventory/monitoring surveys, created a marketing strategy, and developed a website:

<http://www.cleaninspectdry.com/>



GYA AIS Brochure

No new invasive aquatic species were known to have entered GYA waters in 2009.

Species on the Brink

Native Fish

GYCC funding supported a 10 year return status assessment of Yellowstone cutthroat trout (YCT) stronghold populations on tributaries of the South Fork of the Snake River in Idaho. The survey found non-native rainbow trout, brook trout, and brown trout extending their ranges into YCT stronghold streams.



Caribou-Targhee NF Fisheries Distribution Survey Crew

Wildlife

GYCC wildlife biologists began an ecosystem wide assessment of sensitive terrestrial wildlife species (mammal, amphibian, reptile and birds) requiring conservation action or awareness.

The GYCC continued to assist Jackson Hole greater sage grouse population studies. A genetics study examined isolation between Jackson Hole/Gros Ventre populations and populations in eastern Idaho and the Pinedale, Wyoming area. Completed studies include investigations into raven predation pressure on Jackson Hole sage grouse and critical sage grouse winter vegetation characteristics.

GYCC funds supported a Teton Range Bighorn Sheep study quantifying the frequency, timing, and intensity of winter backcountry recreation, to understand potential impact on bighorn sheep movement and habitat use.



Bighorn Sheep

NPS Photo

The GYCC contributed to baseline pika occupancy and distribution data collection in Grand Teton and Yellowstone NPs.

Whitebark Pine

Whitebark pine is a GYA “keystone” species. Its seeds feed wildlife, including grizzly bears and Clark’s nutcracker. Mountain pine beetles and the introduced white pine blister rust reduce whitebark pine stands throughout its range.

The Whitebark Pine Committee involves GYCC agency staff, university and agency researchers, and works to ensure the long-term viability and function of whitebark pine in the GYA. See: <http://www.fedgycc.org/WhitebarkPineOverview.htm>

The NPS, USGS, and Montana State University monitor white pine blister rust infection in GYA whitebark pine. Begun in 2004, the program entered its sixth year in 2009. The whitebark pine monitoring crew also recorded mountain pine beetle evidence in 2008 and 2009, and assisted a 2009 whitebark pine recruitment study on the Bridger-Teton National Forest. The GYCC contributed to the 2009 monitoring effort.

Whitebark pine produced a good cone crop in 2009. The GYCC financially supported cone collection from both rust resistant “plus trees” and other trees, resulting in collection of over 1.7 million whitebark pine seeds over the GYA.

The GYCC helped fund collection of aeciospores (used to test “plus trees” for rust resistance) and scion (used to establish a seed orchard). Collections will continue in 2010.



Whitebark Pine Branches with Cones

The Whitebark Pine Committee drafted a GYA whitebark pine restoration strategy. When completed in 2010, the strategy will guide protection and restoration of whitebark pine.

Connect People to the Land

Outdoor activities among today’s children are declining, with children gravitating towards a virtual indoor reality. Concerned that a growing disconnect from nature affects our children’s health and well-being and the future stewardship of our public lands, the GYCC identified “Connect People to the Land” as a priority.

GYCC goals include:

- Become relevant to diverse Americans.
- Expand constituency for protected lands.

In 2009, the GYCC supported two projects, including place-based learning about fire’s role in the ecosystem and student leaders through Ecology Project International.



"After the Fire" Ecology Project

Recreation Management

The Forest Service San Dimas Technology Center awarded a grant to examine and revise the National Forests' winter use monitoring protocols. San Dimas staff worked with National Forest recreation managers and wildlife biologists to assess the key monitoring questions and suggested protocols to answer those questions.

The GYCC National Forests updated two recreation special use orders, last revised in 1995. A "GYCC" order provides recreation users with a common set of rules as they travel from Forest to Forest. The two orders regulate recreation use both inside of and outside of Wilderness.

Fire Management

The Greater Yellowstone Fire Management Team coordinates fire management planning within the GYA. The team provides specific operating principles and procedures to ensure effective interagency coordination and management of GYA fires. In 2009, the Team updated its *GYA Interagency Fire Management Planning and Coordination Guide*, last updated in 2006.

For More Information:

The GYCC's website at www.fedgycc.org provides information on the GYCC's roles, participants, history, subcommittees, projects, and meetings and events.

Many of the projects mentioned in this document have a more comprehensive report with project methods, findings and reference materials. The 2009 GYCC project reports may be found at:

<http://www.fedgycc.org/GYCCProjectReports2009.htm>

For additional information please contact GYCC Executive Coordinator Virginia Kelly at vkelly@fs.fed.us. 406-587-6704.

APPENDIX A. Summary of 26 FY 2009 GYCC Projects – In Order of Project Type

Project Reports are available at <http://www.fedgycc.org/GYCCProjectReports2009.htm>.

Project Type: Sustainable Operations. Three Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
GYA	Save 1.5 gallons of water or more per flush in GYA	Replace toilets and urinals to reduce water use. Develop educational signs for two visitor centers.	Replaced 37 fixtures with low flow fixtures donated by Kohler Co. Save 450,000 gallons of water per year.	Kohler
GYA	GYA Greenhouse Gas Emissions Goal Setting and Implementation	Complete greenhouse gas data collection and data reconciliation for GYCC units, begin emission reduction planning.	Completed GHG inventories for each GYA unit - first interagency inventory in USA.	USFS Region 2, & Washington Office, National Renewable Energy Lab.
Beaverhead-Deerlodge NF	Plastic Recycling Pilot and Education Phase I	Purchase relatively low-cost plastic compacting system, pilot and monitor its use at Ennis recycling center.	Installed plastic baler, instigated #1 and #2 plastic collecting and recycling in this area.	Madison County, MT, Headwaters Recycling.
Project Type: GYA Landscape Integrity. Two Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
Beaverhead-Deerlodge NF	Rural Land Use Planning and Wildlife Conservation in the Madison Valley, MT	Create development criteria to manage rural development while minimizing long-term impacts to wildlife.	Project was initiated but not completed due to model complexities.	CERI, WCS, MVRG, Brainerd, Bullit, Harriman, Claiborne-Ortenberg Foundations
Gallatin NF	Reeb Estate Land Acquisition near Cooke City MT	Cost share title review, field inspections, resource studies, appraisal.	Acquired 697 acres, with mineral estate, on Gallatin and Custer NFs, including two wilderness inholdings	Trust for Public Lands
Project Type: Ecosystem Health - Climate Change. One Project.				
Unit	Project	Description	Accomplishments	External Partnerships
GYA	GYA Science Agenda for Climate Change.	Climate Change bibliography applicable to GYA. Support Fall 2009 GYA Science Agenda Workshop.	Completed bibliography, developed a GYA science agenda for climate change, land use change, invasives.	Big Sky Institute, Cannon, NPS, Yellowstone Park Foundation, NPS GRYN

Project Type: Ecosystem Health – Air Quality. Two Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
GYA	GYA Air Quality Data Analysis and Report	Evaluate trends and seasonality of lake chemistry, NADP (atmospheric deposition), bulk deposition, and IMPROVE (visibility) using USFS Air Quality DAP (data analysis protocol).	Completed comprehensive analysis and report of the Bridger-Teton National Forest air quality monitoring data.	USFS Rocky Mountain Research Station, NPS, USGS, University scientists
GYA	Air Pollution Critical Load Development Parts of GYA	Identify existing data, and determine a plan to establish a scientifically defensible critical load.	Project not completed in 2009; project deferred to 2011.	Agency and University scientists
Project Type: Ecosystem Health - Invasive Species. Seven Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
Aquatic Invasive Species (AIS)				
GYA	GYA AIS Public Education/Marketing Campaign	Develop AIS prevention and marketing campaign. Design, print, and distribute an informative brochure.	Created and printed over 60,000 AIS awareness brochures. Initiated marketing strategy to inform outreach to specific user groups.	Patagonia, Snake River Fund, MT, ID State, CANS, TU, County Weed and Pest Depts, WYG&F, USFWS, Teton Conservation District, USBR USGS, Outfitters, Businesses
GYA	AIS Prevention and Outreach Activities	Inspection and education crews in multiple locations around the GYA, coordinated crew training.	Coordinated training of 180 staff. Thousands of public contacts made throughout GYA. Data entered into 100 th Meridian Initiative.	Snake River Fund, Fremont Co ID, WYG&F, MT FWP, One-Fly Trout Unlimited, Simms, PPL Mont, Madison River Found.
GYA	GYA AIS Risk Assessment, Inventory and Database	Ecosystem-wide assessment of location and abundance of known and unknown populations of Aquatic Invasive Species.	Surveyed 7 water bodies in WY. Gathered legacy GYA AIS data, created database and GIS layer.	Teton Co WY, Fremont Co ID, ID Dept of Ag, MT FWP, PacifiCorp
Terrestrial Invasive Species				
Beaverhead-Deerlodge NF and GYA	Monitoring for Improved Efficiencies in Terrestrial Invasive Species Management	Develop adjustable framework for noxious weed treatment monitoring across GYA units.	Collected and evaluated existing weed monitoring efforts.	Fremont and Teton Co WY, Center for Invasive Plant Mgmt, GRYN, ID Dept Ag, BLM, Volunteers
Red Rock Lakes NWR	Continental Divide Invasive Weed Barrier Zone – Early Detection Rapid Response	Prevent invasive plant establishment in Missouri River headwaters. Survey & map new weed infestations. Eradicate new populations.	Surveyed 25 miles primitive roads, 60 miles access trails to Continental Divide Trail. Found 4 tansy plants.	Nature Conservancy, Beaverhead County MT, Centennial Valley Association
GYA	County based sand / gravel pit inspection program.	Inspect sand and gravel pits for weeds in 8 counties in Idaho, Montana and Wyoming.	Inspected 38 pits, recommended 14 pits or 37% to be “certified”.	Eight GYA counties, USFWS.
GYA	Support GYA weed mapping, data management.	Continued support of GYA regional weed database and GIS map.	Database has 400,000 records. Over 25 agencies reported in 2009.	Fremont Co, WY, 19 counties, 13 CWMA's.

Project Type: Ecosystem Health - Species on the Brink; Native Fish. One Project.				
Unit	Project	Description	Accomplishments	External Partnerships
Caribou-Targhee NF	Yellowstone Cutthroat Stronghold 10-Year Survey.	Assess status of Yellowstone cutthroat trout (YCT) stronghold populations in tributaries of South Fork Snake River at ten year recurrence interval.	Completed the 10-year resurvey of 1999 YCT streams. Stronghold YCT populations are losing ground to non-native trout.	U.S. Bureau of Reclamation
Project Type: Ecosystem Health - Species on the Brink; Wildlife. Four Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
Bridger-Teton NF	Jackson Hole Greater Sage-Grouse Population Demographics, Distribution and Critical Habitat	Four-year investigation into grouse distribution, movements, habitat use, productivity, survival, and genetics.	Gathered over 300 sage grouse DNA samples, analyzing data.	Upper Snake River Basin Sage-Grouse Working Group, USGS, Jackson Hole Airport, BLM, Universities, donors
Shoshone NF	Ecosystem-wide assessment of "Species on the Brink"	Create a comprehensive list of GYA terrestrial species that are sensitive or of concern that require conservation action or awareness. Complete an analysis of threats to this species.	Comprehensive list of terrestrial species completed. Next step is ranking by unit and state biologists.	
Bridger-Teton NF	Teton Range Bighorn Sheep Winter Use Component	Quantify frequency, timing, and intensity of winter backcountry recreation throughout the Teton Range, to understand potential impact on bighorn sheep movement and habitat use.	GPS-collared 8 bighorn sheep. Collected 420 backcountry use GPS tracks. Data to be incorporated into winter resource selection model.	Foundation for NA Wild Sheep, Teton Conservation District, UW- NPS AMK Ranch, WY Big Game License Coalition, WYG&F, CESU
Grand Teton NP	Pika Occupancy and Distribution in Parks	Monitor pika populations, food sources, and temperature trends on talus fields.	Designed survey protocol, mapping, and visited 65 plots.	Teton Science School, Grand Teton Park Foundation, Conservation Research Center
Project Type: Ecosystem Health - Species on the Brink; Whitebark Pine. Five Projects				
Unit	Project	Description	Accomplishments	External Partnerships
GYA	GYA Whitebark Pine Cone Collection	Whitebark pine cone collection from plus trees and an operational collection.	Collected 553 pounds, over 1.7 million seeds, from 99 trees.	USFS Forest Health Protection, Boy Scouts
GYA	GYA Whitebark Pine Scion and Aeciospore Collection	Aeciospore and scion collection in GYCT seed zone.	Aeciospore collected in 2009 not adequate. New collections in spring 2010. Scion collections in 2011.	USFS Forest Health Protection
GYA	GYA Whitebark Pine Monitoring Project	GYA-wide whitebark pine monitoring for blister rust and pine beetle - 6 th year.	Resurveyed 90 permanent transects, whitebark pine recruitment study.	GRYN, USGS, IGBST, MSU
GYA	GYA Whitebark Pine Restoration Strategy	Whitebark Pine committee members develop restoration strategy.	Draft GYA- wide restoration strategy developed, GIS layers created.	RSAC, WBP Ecosystem Foundation, USFS RMRS

Project Type: Connect People to the Land. Two Projects.				
Unit	Project	Description	Accomplishments	External Partnerships
Greater Yellowstone Area (GYA)	After the Fire: Place-based Learning about Fire's Role in the GYA Ecosystem	Teach 4th-8th grade students in GYA community schools about fire's role in the ecosystem through both classroom learning and field trips to federal lands in the GYA.	Fire ecology session for 250 students in southern GYA in 2009. Planned 2010 programs in northern and southern GYA.	Teton Science School, USFS Fire Sciences Lab, University of Montana Western, Central Wyoming College
Gallatin NF	Student Leaders- Yellowstone Ecology Program	High-school students participate in monitoring programs related to ecosystem health, including management of rare species and the integrity of forest environments.	Eighty students did wildlife monitoring. Twenty-seven presentations given to 609 Montana university students.	Ecology Project International, Ohman Family Trust, IGBST, USFS Rocky Mountain Research Station

Partner Acronyms:

BLM: Bureau of Land Management
CANS: Center for Aquatic Nuisance Species
CERI: Craighead Environmental Research Institute
CESU: Cooperative Ecosystem Studies Unit (NPS)
CWMA: Cooperative Weed Management Area
DEQ: Department of Environmental Quality
GRYN: Greater Yellowstone Inventory & Monitoring Network (NPS)
IGBST: Interagency Grizzly Bear Study Team
MSU: Montana State University
MT FWP: Montana Fish Wildlife and Parks
MVRG: Madison Valley Ranchlands Group
NPS: National Park Service

RSAC: Remote Sensing Application Center
TU: Trout Unlimited
USBR: US Bureau of Reclamation
USGS: US Geological Survey
USFWS: US Fish and Wildlife Service
USFS: United State Forest Service
USFS RMRS: United State Forest Service Rocky Mountain Research Station
USGS: United State Geological Service
UW-NPS AMK Ranch: University of Wyoming, NPS Research Center at AMK Ranch
WCS: Wildlife Conservation Society
WYG&F: Wyoming Game and Fish Dept