

Game and Fish Department
Fiscal Year 2011
Report on the 2011 Strategic Plan

Department: Game and Fish
Director: Scott Talbott
Agency contact: Glenn Pauley
Address: 5400 Bishop Blvd.
Cheyenne, WY 82006
Phone: (307) 777-4652
Web site: <http://gf.state.wy.us>

The Wyoming Game and Fish Department operates under the direction of the Wyoming Game and Fish Commission. Our headquarters office is in Cheyenne. Our regional offices are in Jackson, Pinedale, Cody, Sheridan, Green River, Laramie, Lander and Casper.

Statutory references:

The Wyoming Game and Fish Commission is created and empowered in Title 23 of the Wyoming Statutes. The Department is created and placed under the direction and supervision of the Commission in W.S. § 23-1-401. The responsibilities of the Commission and the Department are defined in W.S. § 23-1-103. In these and associated statutes, the Wyoming Game and Fish Department is charged with providing “an adequate and flexible system of the control, propagation, management, protection and regulation of all Wyoming wildlife.”

Clients served:

The Department’s clients include, but are not limited to, Wyoming residents, hunters, anglers and non-consumptive users of wildlife.

Results Statement:

- Wyoming’s wildlife and wildlife habitats are managed to maximize the economic, environmental and social values of importance to current and future generations.
- Wyoming values the unique aspects of its wildlife heritage, providing residents and nonresidents expanding access to wildlife-associated recreational experiences.
- The Department is a responsible steward of State assets and effectively responds to the needs of residents and nonresidents.

Contribution to Wyoming Quality of Life:

- Conserve Wyoming’s wildlife and wildlife habitat for current and future generations.
- Provide residents and nonresidents access to wildlife-associated recreational experiences.
- Manage Department assets responsibly and actively involve people in wildlife management decisions.

Total Wyoming Game and Fish Department Expenditures for FY 10:
\$65,203,505

Department Facts:

The Wyoming Game and Fish Department is made up of five major administrative divisions, including 23 programs, listed below with number of staff and 2010 budget:

<u>Division</u>	<u>#FTEs*</u>	<u>2010 Annual Budget</u>
Wildlife Division	157.9	\$ 21,397,993
Fish Division	101.7	\$ 11,918,414
Services Division	99.8	\$ 14,049,873
Fiscal Division	51.9	\$ 6,138,489
Office of the Director	18.8	\$ 3,149,576
Other**	<u>55.3</u>	<u>\$ 15,095,168</u>
TOTAL	485.4	\$ 71,749,510

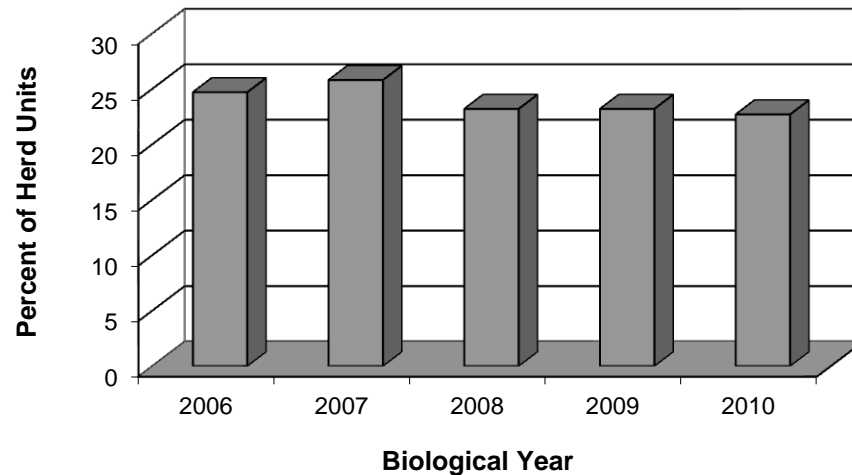
*Includes permanent, contract and temporary positions authorized in the FY 10 budget. Any positions added during the budget cycle require Wyoming Game and Fish Commission authorization or must be funded from supplemental grants.

**Includes Wildlife Trust, Access Fund, State Wildlife and Landowner Incentive Grants, Competitive Grants, Nonrecurring Projects and General Fund appropriation (excluding 2010 AIS legislative appropriation).

Primary Functions of the Game and Fish Department:

- **We conserve wildlife** by providing wildlife and wildlife habitat management, including scientific data collection, law enforcement, wildlife/human conflict management, research, habitat conservation and wildlife health services.
- **We serve people** by managing wildlife populations, providing access for wildlife-associated recreation and providing information and education about wildlife and wildlife-related issues.
- **We manage the human, fiscal, physical and other resources** necessary to carry out our mission, including people, money, lands, information, buildings and other facilities needed to support wildlife conservation in Wyoming.

Performance Measure #1: Percentage of big game herds within 10 percent of population objective (Personnel in this program will work to ensure that at least 30 percent of big game herds are within \pm 10 percent of the population objective).



Story Behind the Last Year of Performance:

While the Department is responsible for managing over 800 species of wildlife in Wyoming, many of our constituents are focused on the management of big game species (pronghorn antelope, mule deer, white-tailed deer, elk, moose, bighorn sheep, mountain goat and bison). In addition, most of the Department’s annual revenue is derived from license sales for these species. Management of these species is the responsibility of the regional terrestrial wildlife biologists, regional game wardens and the regional terrestrial wildlife administration. Percentages reported are based on post-season population estimates of each species presented in the annual Big Game Hunting Season Recommendation Summaries (2006, 2007 and 2008) and the final big game Job Completion Reports (2009 and 2010).

Hunting seasons and harvest quotas developed by the Department are the primary tools for managing big game species. These are designed to manage herds for population objectives and desired male to female ratios.

Other factors, usually beyond the Department’s control or difficult to address, such as access, weather extremes and wildlife disease outbreaks affect the Department’s ability to manage herds toward objective. Lack of hunter access to some hunt areas, especially in eastern Wyoming, limits the Department’s ability to obtain the harvest needed to maintain or obtain herd objectives. Weather conditions (drought, severe winters) have limited productivity of many deer and pronghorn herds, and many of these herds remain below objective. The Department currently manages some herds below objective because of the effects drought and other factors have had on wildlife habitat. Even with the drought ending, it takes several years for habitat conditions to improve enough to allow many herds to move towards objective. Elk populations are, in general, above objective despite increased cow harvest in recent years. Landscape-scale habitat

improvements to benefit big game and other species are needed in many areas and could be funded by the Wyoming Wildlife and Natural Resource Trust, the Wyoming Governor's Big Game License Coalition and other sources.

Since 2006, an average of 23.9 percent of big game herds in Wyoming were within 10 percent of their population objective. Of the total 150 big game herds in Wyoming in 2010, 34 herds (22.7 percent) were at objective (+/- 10 percent), 47 (31.3 percent) were above objective, 41 (27.3 percent) were below objective and 28 herds (18.7 percent) had incomplete data. The percent of herds within 10 percent of their population objective has ranged from 23.2 percent to 27.3 percent.

What has been Accomplished:

The Department began implementing the Strategic Habitat Plan (SHP), including incorporating nongame priority areas with those previously identified for big game. The revised SHP was adopted by the Wyoming Game and Fish Commission in 2009. Personnel continue to emphasize habitat management and monitoring to federal land management agencies and to the public. The Department informs land management agencies and landowners of habitat improvement priority areas and, as resources are available, encourages joint collaboration on projects. Implementation of the SHP depends upon the cooperation of land management agencies and private landowners.

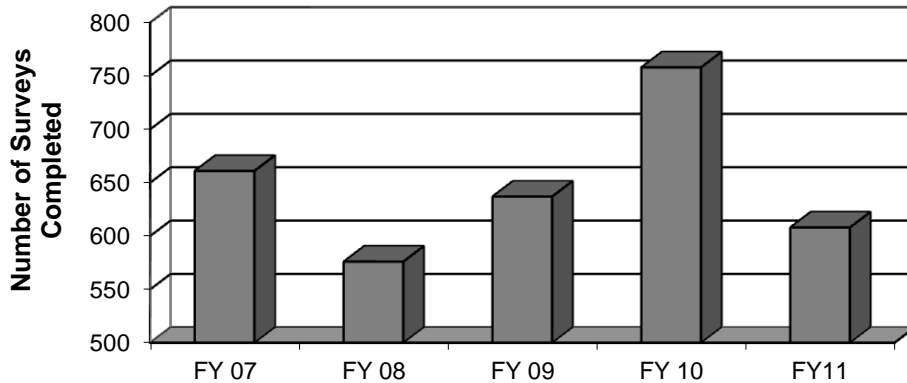
The Department employs habitat biologists in each region and habitat extension biologists in eastern Wyoming that focus on habitat monitoring and improvements on both public and private lands. Much of their effort pertains to big game, and funding from many sources is being pooled to address priorities in the SHP. Wildlife Division personnel continued to apply for habitat improvement funds from a variety of sources, including the Wyoming Wildlife and Natural Resource Trust, the Wyoming Governor's Big Game License Coalition, many non-governmental organizations (NGOs) and federal programs.

Big game disease surveillance and research continue to be high priorities. Surveillance efforts for brucellosis in northwest Wyoming and chronic wasting disease across the state continued in 2010. The Department continued to vaccinate on the state's feedgrounds to reduce the prevalence of brucellosis in elk. Recently, carotid artery worm, *Eleophoris*, has become a concern in Wyoming moose and statewide surveillance was conducted in 2009 and 2010. Funding for the Department's Veterinary Services program was approximately \$1.70 million in FY 11.

What we propose to improve performance in next two years:

Recommendations for big game hunting seasons will continue to consider factors such as habitat condition, drought, access and management of wildlife diseases in addition to the population objective. The Department will continue to fund and promote the Access Yes program in a cooperative effort between the Department and willing landowners. This program has allowed the Department to more effectively distribute hunter harvest by providing access to private lands.

Performance Measure #2: Number of stream and lake surveys completed (Personnel with this program will work to complete at least 540 stream and lake surveys per year).



Story behind the performance:

The quality of Wyoming’s fisheries is a direct reflection of the quality of Wyoming’s lakes, rivers and streams. Stream and lake surveys are conducted to determine the condition of fisheries. Until recently, surveys have been targeted towards evaluating the need to change management approaches, primarily for native and introduced sport fishes. Our survey strategy now includes more intensive surveys that emphasize watershed-level fishery evaluations for both our sport fish and native species.

In FY 11, a total of 608 streams and lakes were surveyed. This is somewhat below the five-year average of 648 surveys per year. The acute concern and need to respond to aquatic invasive species (AIS) issues has reduced the time available for lake and stream surveys. Public information, public contacts and response for vessel inspection were crucial to restrict or stop the movement of invasive species into Wyoming waters. These duties were a high priority for our biologists as we got this new program up and running. The AIS efforts account for the decline in surveys conducted in 2010. We continued sampling associated with natural gas-field development and potential impact to native herptiles. Crews continued working to protect three species of fish native to the Green River. We continued to survey for native species of concern as identified in the State Wildlife Action Plan (SWAP) for the Big Horn, Powder, Belle Fourche, Niobrara, Little Missouri, Cheyenne and Green River basins. Funding through the Governor’s Endangered Species Office and General Fund appropriations fueled a good portion of this of activity.

Intensive population estimates that require multiple electrofishing passes through one sampling site were conducted most notably on the North Platte, Green, Bear, Snake, Salt, Greys, Hoback, Wind, Bighorn, Shoshone and Tongue Rivers for both wild and stocked fishes. These repeated sampling of the same reach over one week’s time with multiple boats and crews only count as a single completed survey. Enhanced water conditions this year provided better opportunities to survey sport fisheries on our major rivers and reservoirs.

What has been accomplished:

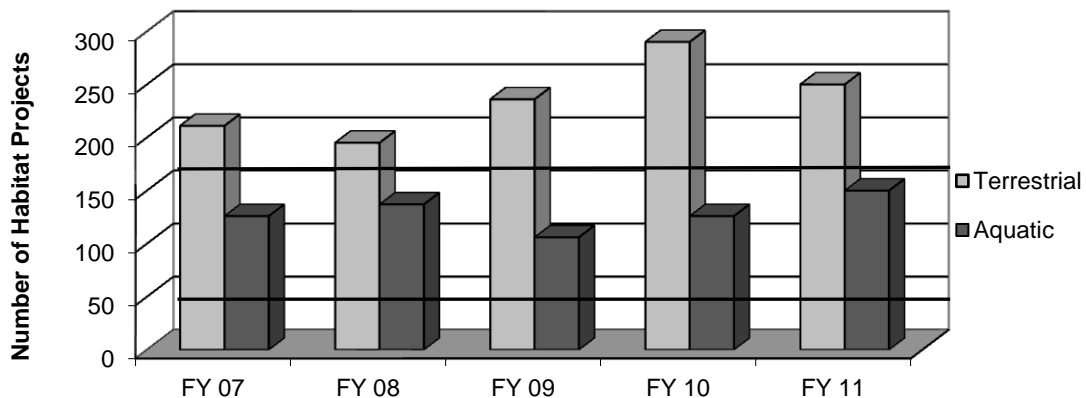
The Aquatic Assessment Crew (AAC) completed a significant number of herptile surveys and stream surveys. The majority of the surveys were completed by the Regional Fisheries Management Crews as part of their routine management. Many of those surveys were designed to monitor management strategies and adjust as needed.

The SWAP revision was completed in 2010. The Department continually surveys streams and lakes in order to meet data needs that were identified for aquatic species in the SWAP. Surveys typically gather baseline inventory or trend monitoring data for SGCN. The continued availability of funding from the Governor's Endangered Species Office and General Fund appropriations greatly accelerated the pace of our investigations for many SGCN.

What we propose to improve performance in the next two years:

- Implement the new actions identified in the revised SWAP.
- Continue evaluating sport fish regulations and our fish stocking programs. Fish stocking evaluations are necessary to assess and update our brood stock management plans and refine our stocking program to make best use of the limited number of fish available. We need to continue to evaluate success of stocking larger trout to avoid walleye predation in our large reservoirs and evaluate our recently initiated Colorado River cutthroat trout and Firehole rainbow trout stocking activities.
- Seek to work with partners such as the University of Wyoming or Wyoming Natural Diversity Database to assist in surveying bivalves, aquatic snails and land snails. Endangered Species Action (ESA) petitioners increasingly are targeting these invertebrate species but we are acutely short on relative abundance and distribution data to respond to requests for information.
- The AIS program will take less time away from important fisheries management duties which should result in an increased number of surveys.

Performance Measure #3: Number of habitat projects implemented annually (Personnel in this program will implement at least 150 terrestrial habitat projects and 45 aquatic habitat projects annually).



Story Behind the Last Year of Performance:

For measurement and tracking consistency, a habitat “project” is herein defined as any habitat restoration, protection, management or enhancement activity associated with implementation requiring at least three or more days of effort that was either planned during the annual work planning process or unplanned and occurred during the reporting period. This definition, for the most part, excludes activities and efforts like training, routine coordination with federal, state and private conservation partners, and providing assistance to other Department programs.

The Terrestrial Habitat Section planned 244 habitat projects and implemented 211 projects (86.5 percent) during FY 11. An additional 39 unplanned projects were implemented. This was accomplished even with the resignation of the Lander Region Terrestrial Habitat Biologist in February 2011, the Casper Region Habitat Extension Biologist in March 2011 and the retirement of the Jackson Region Terrestrial Habitat Biologist in June 2011. These positions were not filled until June 2011. Project implementation components include identification of need and/or opportunity; initial inventory and assessments; development of specific goals, objectives and strategies; coordination, planning and consensus building with partners, developing and submitting funding applications; completing engineering, cultural clearances, or threatened and endangered species assessments; obtaining various permits; granting or contracting the work for on-the-ground implementation and follow-up monitoring and maintenance. A myriad of factors contribute to uncompleted projects including federal and state agency requirements that contribute to delays in obtaining permits, such as USACOE 404 permits; complicated National Environment Policy Act Environmental (NEPA) compliance processes on federal lands; changes in private landowners circumstances; lack of engineering; higher priorities or assignments from administrators; insufficient funding; and lastly delays due to climatic or weather conditions. One of the primary factors contributing to uncompleted projects is almost all projects include private lands and federal or state lands, which require various agreements and concurrence prior to on-the-ground implementation of the projects.

The following describes how the number of habitat projects implemented annually is determined for terrestrial habitat projects. Information compilation is primarily derived from individual employee submission of summaries and includes information from the FY 11 individual employee work schedules. These sources reflect the guidance provided in the Strategic Habitat Plan (SHP) which identifies 110 actions to pursue toward achieving five goals (http://gf.state.wy.us/downloads/pdf/SHP_Jan09.pdf). Information is also obtained from individual employee performance appraisal goals, development of FY 12 funding applications and submission for Department trust funds, other internal funding sources and funding applications to outside entities. Habitat Extension Biologist's project implementation is also tracked in the annual federal fiscal year accomplishments report for NRCS (October 1, 2009 – September 30, 2010). The Department's 2010 Annual report on SHP accomplishments highlights many of these habitat projects. Planned and potential projects, as well as unplanned project processes, are similar to and described in the Aquatic Habitat Section discussion below.

The Aquatic Habitat section achieved 129 out of 150 planned habitat projects in FY 11 (86 percent). An additional 21 unplanned projects were accomplished. On average, aquatic habitat biologists in each region completed 18 projects. The Department's 2010 Annual report on Strategic Habitat Plan accomplishments highlights some of the habitat projects. The Fish Division work plans and progress reports for calendar years 2010 and 2011 contain additional details about aquatic habitat project plans and progress for FY 11. Aquatic section personnel and administration tracked and worked on 17 Department trust fund projects from FY 11 or earlier. An additional 11 new FY 12 Department trust fund aquatic projects were developed. Finally, the aquatic section administered funds from other sources for additional projects. Overall, approximately 50 aquatic projects involving substantial funds were developed, implemented or administered over the fiscal year. One of the great strengths of the habitat program is development of partnerships and collaborative efforts with private landowners, land management agencies, private industry and conservation partners. Personnel spend considerable time on these partnerships and continue to write grants and receive funds from a variety of other sources, including state, federal, private and corporate donors.

The following describes how the number of habitat projects implemented annually is determined for aquatic habitat projects. Potential aquatic projects are identified annually through the Fish Division work planning process. Under this process, regional aquatic habitat biologists list potential projects for the upcoming calendar year and present the draft work plan to the aquatic habitat program supervisor, the aquatic habitat program manager and fish division staff for review. The regional aquatic habitat biologist identifies projects to meet the objectives identified in the SHP. Along with the draft work plan, a progress report is prepared and presented to staff summarizing work accomplished on the previous calendar year's work plan. Finally, a monthly estimate of hours worked by project code is prepared for all activities planned for the upcoming fiscal year. A meeting among staff and regional aquatic biologists is held, typically between late February and early May, to review, discuss and finalize these planning and reporting documents.

The assessments of progress on aquatic habitat projects are drawn from this process and the associated reports. The aquatic habitat program manager compiles the assessment of progress for the fiscal year by comparing the activities planned for the previous and current calendar years to the progress reported in the calendar year progress report and the annual strategic habitat plan

report. Since the last 6 months of the fiscal year are not formally reported in a progress report, other information sources (daily activity reports, monthly summaries) are used to assess progress. A project is considered implemented if the activity proposed in the work plan (or the substantial activity that opportunistically emerged during the year) was successfully accomplished. The assessment of progress on all of the aquatic projects for each of the regions was compiled by the aquatic habitat manager, reviewed by the Aquatic Habitat Supervisor and submitted to Wildlife Division staff for combination with terrestrial habitat information. Finally, the combined performance measure is submitted to the Department strategic planner for publication.

What has been Accomplished:

Habitat efforts continue to be guided by the SHP, which identifies 110 actions to pursue toward achieving five goals (http://gf.state.wy.us/downloads/pdf/SHP_Jan09.pdf). Accomplishments include habitat protection efforts, habitat assessments and inventories, development/designing of projects, the on-the-ground projects/enhancements and restorations, maintenance of existing structures or projects and monitoring of completed projects. An example of habitat protection work is the efforts of our Green River aquatic habitat biologist to work with the Little Mountain Coalition, land management agencies and the Governor's Office to identify landscape effects of proposed resource uses on wildlife. The assessment and inventory work provides the basis from which worthwhile habitat projects are identified and, for example, the Wyoming Habitat Assessment Methodology (WHAM) was used in the Laramie Region to characterize Douglas Creek watershed conditions and identify management approaches to ultimately improve fishery resources. Similarly, in the Green River Region, the aquatic habitat biologist monitored riparian and aspen vegetation to inform range and ungulate management decisions. Examples of on-the-ground projects implemented in FY 11 include improvements on Crow Creek and Spread Creek in the Jackson Region, stream bank and fish habitat improvements on the East Fork Wind River in the Lander Region, the addition of cross vanes and other structures to the Encampment River in the Laramie Region to improve stream function and sport fish habitat, planting willows on Thomas Fork Creek in the Pinedale Region and completing the Tongue River Diversion rehabilitation in Ranchester with our partner Sheridan County Conservation District. Maintenance and tuning work at the newly completed Kendrick fish passageway on Clear Creek in the Sheridan region was conducted and is vital to realizing the long-term benefits of this project for the native coolwater fish community.

Examples of unplanned aquatic projects often include responding to landowner questions or concerns related to aquatic issues or responding to technical information or habitat project review requests from other agencies. Examples in FY 11 include providing comments to the Army Corps of Engineers on an improvised culvert crossing obstructing fish movement on a stream in the Sheridan Region; reviewing an aquatic habitat proposal on Brush Creek in the Laramie Region; and coordinating with the Forest Service, Park Service and public in the Jackson region to review values associated with the Snake River Wild and Scenic designated streams.

Fish passage accomplishments included working with a contractor to improve a diversion and screen a ditch on Bear Creek on the Department's Spence/Moriarty Wildlife Habitat Unit and construct a fishway on Bitter Creek at Sidon Canal. The Bitter Creek project is now complete

while work continues on the screen portion of the Bear Creek project. Populating a database for storing and prioritizing fish passage issues on waterways throughout the state remains a significant activity and a contract employee has been pursuing this in priority drainages statewide. Further fish passage work included the administration of block grants to the Lake DeSmet Conservation District and the Sheridan County Conservation District to rehabilitate and provide fish passage at multiple diversion structures, a land survey and starting design for a fishway on the Encampment River at the WYCO diversion, the development of a design and funding for improving passage at the Harmony Diversion on the Nowood River and cooperating with the Greybull Valley Irrigation District and Trout Unlimited to develop a fishway in conjunction with diversion rehabilitation. Finally, the Department worked extensively with Trout Unlimited in reviewing and funding several projects to improve fish passage including the Smiths Fork Whites Water and Twin Creek BQ Diversion Projects.

A partial list of terrestrial habitat projects includes: four landscape scale projects using satellite imagery and ground-truthing to document land cover encompassing about 3.5 million acres; finer scale project level intensive rangeland and habitat inventories and assessments on almost 304,000 acres; grazing management plans on 25 areas totaling over 690,000 acres; wildlife stewardship plans on three areas totaling about 22,200 acres; nearly 17,000 acres of prescribed fire; mechanical vegetation treatments on about 7,900 acres; herbicide treatments on nearly 17,000 acres; seeding projects on about 2,900 acres; planting nearly 8,000 shrubs and trees; over 200 private landowners were assisted resulting in 127 on-the-ground habitat projects; involvement in 33 major information and education efforts; collecting information from 114 vegetation monitoring transects to document past projects; collecting information from 126 annual vegetation production/utilization transects and administration and oversight of 128 different funding sources to implement projects. Projects were accomplished by personnel working with partners and soliciting grants from outside sources, including Wyoming Wildlife and Natural Resource Trust, Wyoming Governor's Big Game License Coalition, Rocky Mountain Elk Foundation, North American Foundation for Wild Sheep, Natural Resources Conservation Service Wyoming Farm Bill Programs, Water for Wildlife Foundation, Pheasants Forever, U.S. Fish and Wildlife Service Private Lands Program and Landowner Incentive Program, the Wyoming Governor's Sage-grouse Fund, private landowners, Bureau of Land Management (BLM), U.S. Forest Service (USFS), Wyoming Landscape Conservation Initiative, Jonah Interagency Office Mitigation and private and corporate donors among others. Many of the terrestrial habitat projects include working with a variety of internal and external working groups and partnerships, providing wildlife habitat related wildlife environmental review information, assisting with BLM Resource Management Plan revisions and U.S. Forest Service plan revisions and assisting on various wildlife habitat research projects. Finally, during FY 11 Terrestrial Habitat personnel prepared 22 project requests from internal funding sources and 37 project requests from external funding sources for FY 12 project implementation.

Examples of unplanned terrestrial projects implemented during FY 11 include: developing a statewide sagebrush treatment geodatabase to track proposals for treatments in sage-grouse core areas; hosting the International Moose Conference in Jackson, Wyoming; participating on the Department wetland steering committee; evaluating potential conservation easements; coordinating with the NRCS Sage-grouse Initiative; assisting with development of the sage-

grouse core area Density Distribution Calculation Tool GIS process; and filling 3 vacant positions.

One of the most time consuming but gratifying aspects of the Terrestrial Habitat program is development of partnerships and collaborative efforts with private landowners, land management agencies, private industry and conservation partners. Personnel spend considerable time on these partnerships and continue to write grants and receive funds from a variety of other sources, including state, federal, private and corporate donors.

What we propose to improve performance in the next two years:

The first step to improving performance is maintaining the solid base of habitat achievements currently accomplished by the aquatic and terrestrial habitat sections. With renewed focus on priority wildlife habitats under the revised SHP, personnel will continue to work with land management agencies, private landowners and funding partners to conserve and manage wildlife habitats deemed crucial for maintaining populations of terrestrial and aquatic wildlife for the present and future.

The largest gains in aquatic habitat performance could be achieved through staffing. The Aquatic Habitat section is essentially down two positions. The Casper position was lost during the Wyoming state government position freeze of 2009 and 2010. The Cody position has been reclassified to Fish Passage Coordinator. There are unmet aquatic habitat protection, enhancement and restoration needs in both regions that can only be met by assigning permanent personnel to the issues.

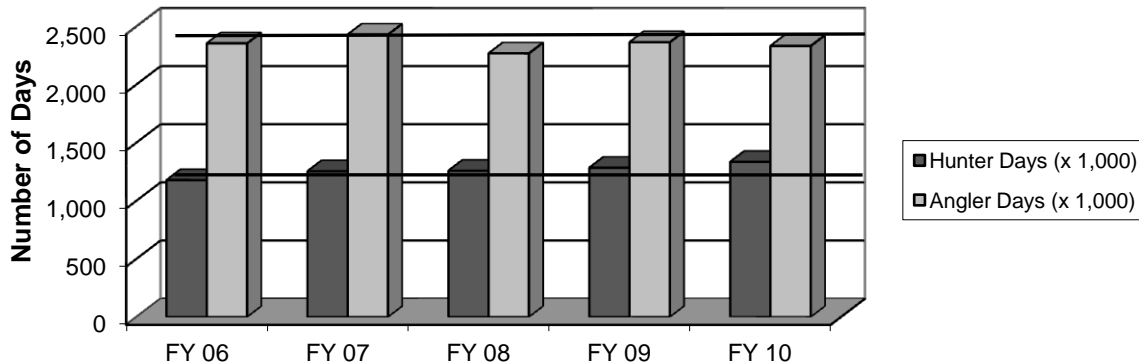
The Department and Commission again approved \$200,000 in FY 11 for developing and implementing habitat projects. Identified issues to be addressed included NEPA planning, archaeological surveys, wetland surveys and acquiring design and engineering services. The contracts and projects conducted in FY 11 appear to be fruitful and leading toward projects; therefore, project planning funds were again dedicated for developing projects in FY 12. Projects developed and obstacles removed in this manner will increase the Department's ability to match the tremendous habitat project funding available in the Wyoming Wildlife and Natural Resource Trust.

Efforts to enhance internal coordination and communication and efficient delivery of the Department's habitat management and enhancement program is an on-going major focus. The Habitat and Technical Advisory Group (HTAG), an internal Department team, is well positioned to actively implement the SHP. One action the HTAG can accomplish is to review 110 habitat actions identified in the SHP and identify any that have languished or could merit additional attention.

Last, but not least, the Department will continue to focus on maintaining and developing additional partnerships and expand collaborative habitat management projects. Personnel will continue to develop large-scale proposals and applications for funding from the Wyoming Wildlife and Natural Resource Trust, Governor's Sage-grouse Fund, Wyoming Governor's Big Game License Coalition, U.S. Fish and Wildlife Service State Wildlife Grants and the Wyoming Conservation Landscape Initiative. In addition, the Department continues to seek expansion of

the Habitat Extension Biologist partnerships with NRCS to facilitate implementation of Farm Bill programs to benefit wildlife on private lands.

Performance Measure #4: Number of days in the field by hunters and anglers (Personnel with this program will work to provide at least 1.1 million hunter days and 2.3 million angler days per year).



Story Behind the Last Year of Performance:

The number of days hunters spent in the field during FY 10 was 21 percent above target levels and four percent above numbers reported for FY 09. Most of this change can be attributed to two sources: an increase in big game days, and reporting days related to trapper effort for the first time. Most of the increase in big game days can be attributed to more hunter opportunity for pronghorn and elk. In spite of the increase in recreation days, declining access for hunting continues to impact hunter days as many licenses continue to go unsold in areas with difficult access. If access for these licenses could be found recreation days would increase even further. The other source of the increase resulted from a change to the furbearer harvest survey. For the first time in several years hunting and trapping effort was estimated. Hunting effort was extrapolated from the pool of respondents to all license holders assuming effort expended by respondents was representative of effort expended by non-respondents. However, trapping effort was only reported for survey respondents (i.e., trapping effort was not extrapolated to non-respondents). Therefore, the reported days for trapping effort represent a minimum estimate. These procedures resulted in an additional 39,270 days of effort reported in the total for 2010.

Despite the poor economic times and spiking fuel prices experienced nationally and statewide, angler days remained nearly unchanged from FY 09. However, angling participation has not regained losses suffered in the previous decade, especially declines in the years 2000-2002. The water conditions in Wyoming's lakes and rivers previously ravaged by drought were completely recharged and improvements in boating and angling conditions should provide increased opportunity in the future. In terms of license sales, resident annual licenses decreased slightly while non-resident annual licenses increased slightly since last year. Daily license sales for residents showed an increase while non-resident daily license sales decline by 8,000 (or four percent) in comparison to last year.

For the period FY 06 – FY 10, Wyoming residents and nonresidents have expended an average of 1,261,381 hunter days (includes the final FY 08 data; preliminary data were used in the 2009 Annual Report) and 2,349,262 angler days. In FY 10, 1,334,416 hunter recreation days and

2,331,446 angler recreation days were provided. Values reflect Lifetime License holders included in the estimate of angler recreation days.

What has been Accomplished:

Declining hunting and fishing access is being partially addressed through the Department's Private Lands Public Wildlife (PLPW) Access Program. The enrollment in each program for calendar year 2010 was: Hunter Management, 1,099,125 acres; Walk-in Hunting, 681,683 acres; Walk-in Fishing lake acres, 4,944 acres; and Walk-in Fishing stream miles, 96 miles. Based on data presented in the 2010 PLPW Annual Report, the average enrollment in each program for 2006-2010 was: Hunter Management, 911,156 acres; Walk-in Hunting, 622,664 acres; Walk-in Fishing lake acres, 2,134 acres; and Walk-in Fishing stream miles, 92 miles. The PLPW Access Program is an important strategy for increasing hunting and fishing access to private and landlocked public land. Combined with public lands that were associated with the enrolled private lands, the PLPW Access Program provided approximately 3.47 million acres of hunting access for the fall 2010/spring 2011 hunting seasons. The Department will continue to explore options for enhancing hunting and fishing access to private lands.

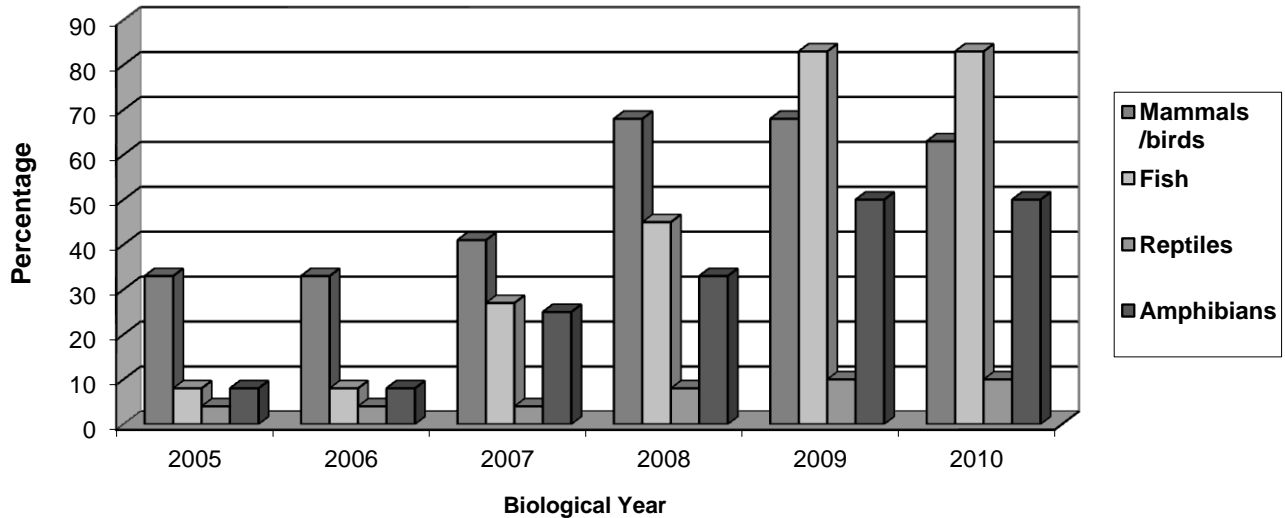
In FY 10, the Department continued to concentrate on modernizing and repairing aging boating access infrastructure. Major repair of aging roads, parking areas and comfort stations was a focus for a majority of work completed by our boating access program. The Department's Fish Wyoming program assisted with angler workshops and fishing rod hand-outs for fishing workshop participants and students attending EXPO.

The Department continues to manage wildlife populations as needed through elk feedgrounds, fish hatcheries and bird farms. Veterinary Services' efforts to address terrestrial wildlife diseases were approved, as were funds to prevent whirling disease at two fish culture facilities. These improvements to fish culture facilities are expected to lead to advancement in disease prevention techniques and allow for greater flexibility in the stocking trout in order to meet angler needs.

What we propose to improve performance in next two years:

With above normal precipitation during the last few years, water levels in our streams and rivers have led to a recovery of fisheries diminished by persistent drought; this bodes well for future fishing success. As fisheries improve in response to improved habitat conditions, fishing success should improve also. Fishing success in terms of improved catch rates tend to improve fishing participation and license sales to the extent economic factors will allow. The increased capacity of the Speas Rearing Station has made it possible to respond to improving reservoir conditions by stocking more pounds of trout which should speed the recovery of our popular reservoir fisheries. Changes in private land ownership, which is affecting public access, the primary and secondary effects of mineral development, and changes in societal interests are also compounding the problem. The Department will continue to encourage hunter and angler recruitment, seek ways to maintain and increase access, improve habitat and advertise the opportunities Wyoming offers.

Performance Measure #5: Percentage of species of greatest conservation need with adequate inventory data, by group (Personnel in this program will work to complete inventories on at least 50 percent of the mammals and birds, 85 percent of the fish, 67 percent of the amphibians and 57 percent of the reptiles on the list of SGCN).



Story Behind the Last Year of Performance:

The 2005 State Wildlife Action Plan identified 279 SGCN in Wyoming. In general, these are species whose populations are greatly restricted or declining, whose habitats may be imperiled, or whose status in Wyoming cannot be documented sufficiently to demonstrate their security. Of the 279 SGCN identified, 54 are mammals, 60 are birds, 26 are reptiles, 12 are amphibians, 40 are fishes, 19 are crustaceans, and 68 are mollusks. A total of 235 species are included as SGCN all or in part due to the absence of important data to document their status in Wyoming.

At the time the SWAP was updated in 2010, the most important priority identified was to complete sufficient inventories on those SGCN whose status could not be adequately documented in Wyoming. The bird and mammal SGCN are reviewed annually by the Terrestrial Nongame Section. Species with distribution and general abundance data to indicate status are included in the adequate inventories total. In order to receive an adequate ranking, data needs to be sufficient to document the security of a species and rank in the 2010 Native Species Status matrix. The distribution data or trend data was used to determine the NSS rank. However, any species with a limiting factor that appears to be increasing in severity or that has been petitioned for listing under the Endangered Species Act must have a program implemented for monitoring population trends. If such a monitoring program is lacking, proposals are developed and funding is solicited, but the species is not included in the count of those with adequate inventory data. As of July 2011, 18 of 54 (33 percent) of the mammals, 55 of 60 (92 percent) of the birds, 2 of 26 (8 percent) reptiles, 4 of 10 (33 percent) amphibians, and 25 of 40 (63 percent) fishes had sufficient inventory data to document their security in Wyoming.

The most significant factor limiting our ability to maintain adequate inventories is funding. The federal State Wildlife Grant (SWG) program provides about \$600,000 annually to support inventories and conservation of SGCN. Beginning in FY 09, the terrestrial nongame program

was funded by the legislature and SGCN inventories and conservation was enhanced with allocations from both the legislature and the Governor's office.

What Has Been Accomplished:

The terrestrial nongame program continued normal efforts for monitoring SGCN such as trumpeter swans, common loon, bald eagles, peregrine falcons, long-billed curlew, upland sandpiper, black-footed ferrets, swift fox, white-tailed prairie dog and black-tailed prairie dog. The program also worked on several wetland and grassland development or enhancement projects and administered the federally funded Landowner Incentive Program and continues efforts to provide input for the 2010 SWAP update. Funding was provided to:

- the University of Wyoming to develop or improve inventory techniques and assess the population status of the Wyoming pocket gopher, Preble's meadow jumping mouse, river otter, pygmy rabbit and sagebrush obligate songbird and small mammal species. Several of these species have been or are in various stages of the Endangered Species Act (ESA) petition process for potential listing. Funding was also provided to conduct an assessment of wildlife vulnerability to energy development;
- the Rocky Mountain Bird Observatory (RMBO) to expand the monitoring of Wyoming birds. This program significantly contributed to the increase and maintenance of adequate data for birds. These funds were in addition to Wyoming's participation in the national breeding bird surveys;
- RMBO to expand efforts for the national northern goshawk inventory in Wyoming;
- Audubon Wyoming to establish grid-based monitoring of birds in important bird areas; and
- the Thunder Basin Prairie Ecosystem Association to establish small mammal baseline inventories.

State funding allowed for additional seasonal technicians and operating expenses to establish new projects and enhance several ongoing studies such as:

- inventories and monitoring for several species of bats identified as SGCN;
- enhanced black-footed ferret monitoring and recovery efforts;
- enhanced swift fox monitoring;
- gaseline monitoring of nesting raptors in established and potential energy development areas; and
- expanded monitoring of colonial nesting water birds identified as SGCN.

Results of these bird and mammal projects through April 2011 are detailed in annual reports, available on the Department's internet site (<http://gf.state.wy.us/wildlife/nongame>).

The Fish Division has also made substantial progress on statewide inventories by utilizing a diverse array of funding sources and partnerships. Although, the most significant and reliable source of funding has been the State Wildlife Grants program, funds from the Governor's office, U.S. Fish and Wildlife Service five-year Cooperative Agreement, and Wyoming Landscape Conservation Initiative (WLCI) have been used to conduct inventories of fishes, reptiles, amphibians, and freshwater gastropods. These multiple sources of funding and grants to partners are also being used to conduct important applied research on SGCN.

Detailed inventories of fishes have been completed in nearly all Wyoming watersheds and detailed administrative reports summarizing the results of all inventories have been completed. Following completion of baseline inventories, numerous projects have been implemented to conserve and restore many fish SGCN. Highlights for the past year include:

- A project was initiated in 2010 to determine the distribution of bluehead sucker in the Snake River drainage and to document movements and habitat use. The project was funded entirely by the Governor's office funds.
- A team of researchers, led by Dr. Kurt Faush at Colorado State University, completed the second year of an ongoing SWG funded project to model the impacts of various climate change scenarios on Colorado River cutthroat trout.
- Fieldwork and data analysis for a SWG funded graduate project to describe the current status of hornyhead chub in Wyoming were completed. The project is being led by Dr. Kevin Bestgen at Colorado State University. The M.S. thesis will be completed by the end of the summer.
- Final reports for two SWG projects in eastern Wyoming were completed. These reports provide a detailed status assessment of all fish species in all Wyoming basins east of the Bighorn and Laramie mountain ranges.
- In 2010, two crews of contract personnel completed the second year of a large scale removal project in southwestern Wyoming. The crews are removing nonnative fishes from the Big Sandy River and Little Sandy and Muddy creeks that seriously threaten the persistence of native flannelmouth sucker, bluehead sucker and roundtail chub. A third year of fish removal was initiated in spring 2011. This project has been funded by Governor's office funds since 2009. A detailed progress report on the 2009-2010 removal efforts will be finalized by October 2011.
- A research project was initiated at the Colorado State Foothills Laboratory to determine how to effectively design in-stream barriers to prevent upstream movement of nonnative white sucker and burbot. This M.S. project is being lead by Dr. Chris Myrick and will be completed in winter 2011. This project has been funded via WGFD, Governor's ESA and U.S. Fish and Wildlife Service (five-year Cooperative Agreement) funds.
- The Department has granted funds from the Governor's office and the U.S. Fish and Wildlife Service (five-year Cooperative Agreement) to the Colorado State Larval Fish Laboratory to answer important questions related to natural reproduction of native suckers in the Big Sandy watershed. Fieldwork was completed in 2010 to determine whether or not it is prudent to construct a fish passage barrier to facilitate chemical treatment to remove non-native fishes that threaten the persistence of SGCN in this stream. The final report will be completed by October 2011.
- A SWG funded project to describe the distribution and status of northern leatherside chub and other fishes in the Upper Bear River watershed is ongoing. Fieldwork was conducted in 2010 and is ongoing in 2011. Department biologists are also working with researchers from Brigham Young University and Idaho State University on projects related to northern leatherside chub in Wyoming. The U.S. Fish and Wildlife Service is currently considering a petition to list this species under the ESA. We are hopeful that these aggressive conservation efforts will result in a not-warranted decision.

The Fish Division has also implemented a number of projects focused on reptiles, amphibians and mollusks and crustaceans. Highlights for the past year include:

- SWG funds were used by the Department to conduct baseline inventories of reptiles and amphibians in priority drainages in southwest Wyoming. A draft report has been completed.
- A combination of WLCI and Governor's office funds were provided to the University of Wyoming to evaluate the impacts of road networks associated with energy development on reptiles in southwest Wyoming. This M.S. project and thesis will be completed by October 2011.
- SWG funds were granted to researchers from Idaho State University and Project Oriante to gather information needed to conserve populations of midget-faded rattlesnake in southwestern Wyoming. This project will also be completed in 2011.
- SWG funds were granted to the University of Wyoming to assess the historic distribution of aquatic gastropods in Wyoming, to describe the current distribution in priority watersheds and to develop sampling protocols for aquatic gastropods. Surveys were completed in 2010 and the M.S. thesis was completed in July 2011.
- SWG funds were used to initiate a Department project in spring 2011 to describe the status of reptiles and amphibians in priority watersheds in southeast Wyoming.
- SWG funds were used to fund a project beginning in spring 2011 to describe the distribution and ecology of freshwater mussels in the Bear and Snake rivers.

The expanded effort has greatly enhanced our ability to assess the status of those species identified as SGCN in 2005 and ensure appropriate classification in the 2010 SWAP. In some cases the species status is secure and has been dropped from the list. For those whose populations and/or habitat are imperiled the Department will implement conservation actions and conduct additional studies. This proactive approach will be Wyoming's most effective strategy for reducing the chance that a species will be listed as threatened or endangered under the ESA.

What we propose to improve performance in next two years:

The Department will continue the annual and periodic SGCN surveys being conducted. Recent additional funding from the Wyoming Legislature and Governor's office will allow the Department to conduct necessary inventories and research on the life history of SGCN, SGCN survey techniques, and the effects of energy development and other impacts on a number of SGCN. Such funding will allow the Department to move more quickly toward removing those species whose status can be confirmed as secure, and begin implementing conservation actions for those whose populations and/or habitat may be imperiled. This proactive approach will be Wyoming's most effective strategy in reducing the chance for a listing.

The revised 2010 SWAP includes a modification of strategies to learn more about SGCN and how to conserve them. The ranking system for identifying SGCN has been enhanced and the status of all species has been updated. All limiting factors were considered in the enhanced system as opposed to only habitat and human disturbance considered in the 2005 system. In addition, a species with a wide distribution was not assumed to have a stable or secure population trend. Data were required to indicate population trends. This process revision and the quantification of new threats to a few species resulted in a change in the number of SGCN. The total number of SGCN was updated from 279 to 180 of which 46 are mammals, 56 are birds, 21 are reptiles, 8 are amphibians, 30 are fishes, 5 are crustaceans, and 14 are mollusks. Species with inadequate data to determine status are now ranked as NSSU (unknown). These NSSU

species include 5 mammals, 17 birds, 12 reptiles, 4 amphibians, 2 fishes, 4 crustaceans, and all 14 mollusks.

Performance Measure #5 has been changed to annual number of SGCN surveyed in the Department's FY 12 - FY 16 Strategic Plan. This was done to address auditor's concerns that the definition of adequate in the current performance measure was not in a quantifiable format to facilitate verification of the performance measure data.

Performance Measure #6 - Number of breeding pairs in Wyoming (Personnel in this program will work to maintain the number of breeding pairs at a level that meets the requirements of Wyoming statutes and complies with the Wyoming Gray Wolf Management Plan).

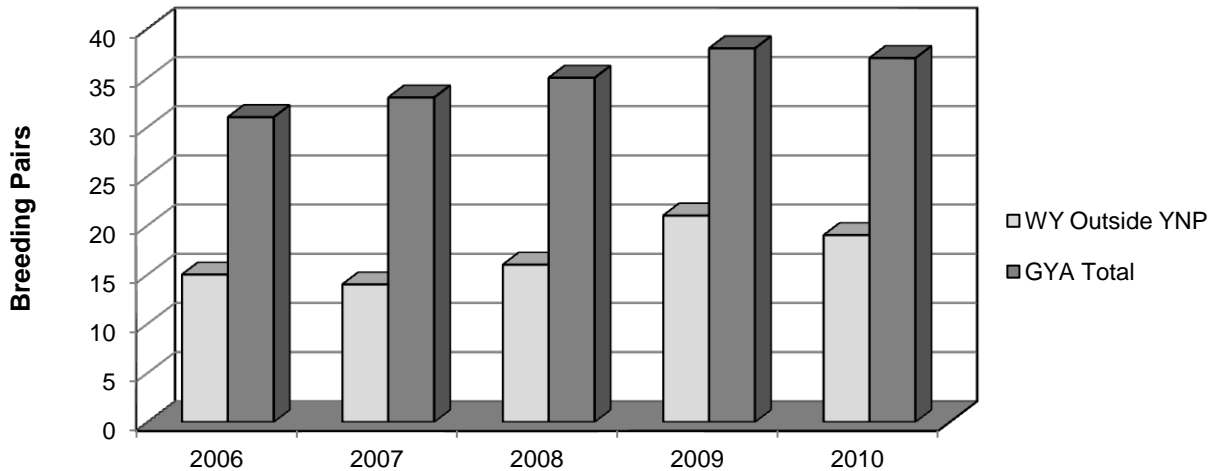


Fig. 1. Number of breeding pairs of wolves in the GYA recovery area and in Wyoming outside Yellowstone National Park since 1995. (“Breeding pair” is defined by W.S. 23-1-304(c) as an adult male and an adult female gray wolf raising at least two (2) pups of the year until December 31).

Story Behind the Last Year of Performance:

Currently, wolves are listed as experimental, non-essential under the federal Endangered Species Act (ESA) within Wyoming. The U.S. Fish and Wildlife Service (Service) is the current management authority responsible for management of wolves in Wyoming.

Wolves were first introduced from Canada into Yellowstone National Park (YNP) in January of 1995 and again in 1996. YNP is part of the Greater Yellowstone Wolf Recovery Area, one of three recovery areas in the U.S. Northern Rocky Mountains (NRM). The other two recovery areas are Central Idaho and Northwest Montana. The Service defined criteria for a recovered wolf population in the NRM in its 1987 Wolf Recovery Plan and again in the 1994 Environmental Impact Statement (EIS) on introducing wolves into YNP and Central Idaho. Those criteria included 10 breeding pairs and approximately 100 wolves in each recovery area, equating more or less to 30 breeding pairs and 300 wolves equitably distributed. The recovery criteria had to be met for three consecutive years before wolves could be removed from the federal list of endangered and threatened wildlife.

The original recovery criteria were first achieved in 2000, and by 2002 had been exceeded for three consecutive years in the Northern Rocky Mountains. On July 13, 2005, Wyoming filed a petition requesting the Service to establish a NRM Distinct Population Segment (DPS) of gray wolves, and to remove wolves in the NRM DPS from the federal list of endangered and threatened species.

On March 28, 2008, wolves in the NRM were delisted and management was transferred from federal authority to state authority. A coalition of 12 conservation and animal rights groups filed suit in federal court to halt the delisting. On July 18, 2008, the U.S. Federal District Court in Missoula, Montana issued a preliminary injunction that resulted in reinstated Endangered Species Act protections for gray wolves in the NRM DPS pending a final court decision. On October 14, 2008, the federal court granted the request by the Service to vacate and remand the NRM DPS wolf delisting rule published on March 28, 2008. This placed wolves in the NRM DPS back onto the federal list of endangered and threatened species until such time as the Service posted a new rule to delist wolves in the NRM DPS.

On October 28, 2008, the Service opened the comment period for the proposed new federal rule to delist wolves in all areas of the NRM DPS except Wyoming because the Service deemed that Wyoming's regulatory framework for managing wolves did not meet the requirements of the ESA. The Service officially delisted wolves in the NRM DPS except Wyoming on May 4, 2009. A coalition of 13 conservation and animal rights groups filed suit in Federal District Court in Missoula, Montana to halt the delisting in June 2009 claiming that under the ESA the NRM DPS must be treated as an entire unit and that the Service could not delist a portion of the DPS while retaining ESA protections in Wyoming. Their request for an injunction was denied in September 2009, allowing regulated wolf harvest to proceed in Idaho and Montana. Arguments were heard in this case on June 15, 2010. Federal District Court issued a final ruling in this case on August 5, 2010 ruling against the Service and restoring ESA protections for wolves in all of the NRM DPS. The State of Wyoming, Park County in Wyoming and the Wyoming Wolf Coalition also filed suit in Federal District Court in Cheyenne, Wyoming challenging the rejection of Wyoming's regulatory framework and the Wyoming Gray Wolf Management Plan by the Service. Federal District Court ruled in favor of the State in this case in November 2010, forcing the Service to reconsider Wyoming's wolf management framework, including the dual predator-trophy game classification status. Following this ruling, negotiations between the Wyoming Governor's Office and the Service were initiated with the goal of developing a mutually agreeable wolf management scheme. An agreement, in principle, between the Service and the Wyoming Governor's Office was announced in July 2011 and steps are being taken toward delisting wolves in late 2011 or early 2012.

Meanwhile, in April 2011, Federal Congress approved a rider attached to a federal budget bill that reinstated the May 2009 delisting rule, and wolves were removed from the ESA in June 2011 in all states in the NRM DPS except Wyoming because Wyoming still lacked a Service-approved wolf management plan. These states are now managing wolves under approved state wolf management plans.

As of July 2011, wolves in Wyoming continue to be managed by the Service. Absent a formal memorandum of agreement (MOA), or final delisting of wolves in Wyoming, the State of Wyoming and the Department will have limited involvement in wolf management except for investigation and compensation of livestock depredations occurring in the Wolf Trophy Game Management Area (WTGMA) pursuant to Wyoming state statutes and Department regulations.

What Has Been Accomplished:

The Service's official annual wolf population estimates are calculated each year based on monitoring efforts ending on December 31. The number of wolves in Wyoming is calculated for the entire State of Wyoming including YNP. Three census techniques are combined to estimate the total number of wolves in Wyoming: 1) direct observations of wolves; 2) winter track counts of wolves traveling in snow; and 3) confirmed reports of wolf sightings from other agencies. The Service defines a pack of wolves as two or more wolves traveling together in a defined home range. A breeding pair is defined as two or more adults producing two or more pups that survive through December 31 of that year. Wolves in packs containing radio-collared wolves are counted using visual observations from the ground and aerial telemetry flights. Wolves are tracked in the snow and different sets of wolf tracks are counted. Observations of wolves are incorporated into population estimates in areas where repeated wolf sightings are confirmed. During the FY 11, the Department was not responsible for wolf monitoring following the rejection of the Wyoming Gray Wolf Management Plan in the Service's Federal Register Notice posted in April 2009. Currently, the Service is the management agency responsible for monitoring the wolf population in Wyoming.

As of December 31, 2010, the total wolf population in Wyoming increased approximately seven percent from ≥ 320 wolves in 2009 to ≥ 343 wolves in 2010. The number of wolves in YNP increased one percent from 96 wolves in 2009 to 97 in 2010. YNP had eight breeding pairs in 2010, two more than in 2009. Wolf numbers in Wyoming outside YNP increased ten percent from ≥ 224 wolves in 2009 to ≥ 246 wolves in 2010. Nineteen packs in Wyoming outside YNP were classified as breeding pairs in 2010, down from 21 breeding pairs in 2009. The wolf population outside YNP increased primarily because of low mortality rates similar to those in 2009. The YNP wolf population has fluctuated following a maximum of 174 wolves in 2003 and appears to have stabilized at just fewer than 100 wolves during the past few years. The primary reason for the population decline in YNP was poor pup recruitment, which was probably the result of a disease outbreak that increased pup mortality, and more recently, increased competition for resources between wolf packs resulting in a reduction in carrying capacity following elk population declines.

As of July 2011, a minimum of 10 to 12 wolf packs in Wyoming outside of YNP are suspected to have produced pups making them potentially eligible for breeding pair status pending pup survival at the end of December 2011. It is likely that other breeding pairs will be identified as monitoring by the Service continues. In YNP, the number of breeding pairs at the end of the year is expected to be within normal ranges for the past few years (6 to 10 breeding pairs) depending on summer pup survival.

From July 1, 2010 through June 30, 2011, there were 20 verified livestock depredations by wolves (19 cattle and 1 sheep) and two calves injured by wolves in the WTGMA. In total, \$69,221.77 was paid out in compensation from the wolf management program budget for wolf depredation during FY 11 (3 cattle and 1 horse killed in FY 10 were compensated in FY 11; 2 cattle killed in FY 11 will be compensated in FY 12). Fourteen different livestock owners experienced losses to wolves, five of which suffered losses of multiple animals (range of two to three animals each) whereas nine livestock owners experienced a single loss. Additional livestock depredation occurred outside of the WTGMA in Wyoming but Department employees

did not track these occurrences because Wyoming has no compensation program outside of the WTGMA.

What we propose to improve performance in the next two years:

In the spring 2008, the Department initiated a Wolf Management Program. Legislative funding was appropriated to hire a wolf coordinator and three wolf management specialists. Following the decision by the Service to remand the March 28, 2008 delisting rule in October 2008, the State of Wyoming and the Department effectively disbanded the Wolf Management Program. In November 2008 Wyoming's wolf coordinator resigned and returned to the Service. At that time the Wyoming Game and Fish Commission voted to reassign two wolf management specialists to the Trophy Game Section and redefine their duties to include all trophy game management tasks. The remaining wolf management specialist was retained in the Wolf Management Program to monitor developments in federal wolf management and administer the compensation program. In July 2010, the Wolf Management Program was placed under the broader Trophy Game Management Program to allow for more effective coordination and cooperation between both programs.

Originally, the Wolf Management Program was designed to address four key issues concerning wolf management: 1) monitoring, 2) management/control, 3) information and education and 4) research. Following the relisting of wolves in July 2008 and the exclusion of the State of Wyoming in the delisting of wolves in the NRM DPS implemented in May 2009 and May 2011, Wolf Management Program activities are primarily limited to livestock depredation investigation and compensation in the WTGMA. The Department will continue to communicate and coordinate on a regular basis with the Service and U.S. Department of Agriculture Wildlife Services (Wildlife Services) to ensure close collaboration on wolf management and depredation issues. The future of wolf management in Wyoming depends largely on the outcome of current negotiations with the Service, which are expected to be completed in autumn 2011.

Monitoring: The Department's involvement in actively monitoring wolves is limited. Some casual monitoring of wolves in chronic depredation areas will occur to anticipate whether problems are likely to occur or to document wolves near depredation sites. The Department will continue to track wolf sightings in areas of the state not currently occupied by wolves and will actively communicate with the Service to share wolf sightings in order to assist with the Service's monitoring efforts and population estimates.

Management/Control: The Department will investigate potential livestock depredations caused by wolves in the WTGMA with assistance from the Department's game wardens, other Trophy Game Section personnel and Wildlife Services. The Department will continue to record depredations occurring throughout the WTGMA in order to document the effects of wolves on livestock operations and effectively administer the compensation program according to Wyoming state statutes and Commission regulations. The Department will communicate and coordinate regularly with the Service and Wildlife Services on wolf management and depredation issues. Wildlife Services will be the primary agent for control under the direction of the Service, the Department will have no authority over or participation in control actions.

Information and Education: The Department will continue to develop and provide factual information to help the general public and other management agencies understand wolf population status, depredation, ecology and management in Wyoming as requested.

Research: The Department could enter into a MOA with the Service in order to actively engage in and/or support new and ongoing research pertinent to Department management objectives such as the effects of wolf predation on ungulate populations and wolf population monitoring techniques. No agreements or projects are proposed at this time.