MONTANA FISH, WILDLIFE & PARKS INTRODUCTORY OVERVIEW
IN PREPARATION FOR THE MARCH 2010 MEETING
OF THE
MONTANA ENVIRONMENTAL QUALITY COUNCIL

As background information prior to the March 2010 meeting, Montana Fish, Wildlife & Parks (FWP) provides this introductory overview on some topics of interest EQC members identified in January. Providing this background information in advance will allow all parties to immediately focus on the details of the questions EQC requested that FWP specifically address during the March meeting. FWP will provide detailed written and verbal responses to the bulleted questions during the actual meeting. This document will help pave the way.

Legal Framework

Q. What has been the overall legal framework for wolves in Montana and how has that changed through time?
A. The wolf population and the applicable legal framework in Montana has evolved considerably in the last 25 years, most notably in the last 10 years. Beginning in 1974, the gray wolf was listed under the umbrella of the federal Endangered Species Act (ESA). The U.S. Fish and Wildlife Service (USFWS), as the lead agency, implemented policies and federal regulations to facilitate wolf recovery. The wolf was listed as endangered throughout Montana initially.

In advance of actual reintroduction efforts, USFWS reclassified southern Montana as experimental / non-essential beginning in 1994. This allowed more flexibility to address conflicts caused by wolves that dispersed into Montana from Yellowstone National Park or Idaho after reintroduction and established new packs. Federal regulations in the endangered area were more stringent than in the experimental area.

After approving Montana's wolf management plan, USFWS delegated its authority to FWP in 2005 through a cooperative agreement. This occurred even though the gray wolf was still listed. At that time, all parties hoped that differences between Wyoming and USFWS would be resolved quickly and the wolf would be delisted throughout the northern Rockies in a timely fashion. That outcome did not come to pass and delisting was delayed until 2008 as it turned out. Nonetheless, beginning in 2005, FWP implemented the state's USFWS-approved plan to the extent allowed by federal regulations. Some provisions of Montana's plan (e.g. regulated hunting) were precluded by federal regulations.

Montana obtained full management authority to implement state laws, rules and the state management plan for a few brief months in 2008, when the wolf was first delisted. But a legal challenge to delisting prevailed. The wolf was relisted through a federal court order, and Montana again fell under federal regulations. In May 2009, the wolf was delisted a second time. The federal decision was once again challenged in court, but a preliminary injunction was not granted.

For now, Montana has full management authority to implement the state plan. The USFWS maintains oversight authority for a minimum of five years post-delisting to assure that Montana and Idaho will maintain their wolf populations securely above minimum recovery levels and so that significant changes in management objectives or regulatory framework that jeopardized recovery would not occur. Resolution of the current legal challenge to delisting is pending. The most important points specific to Montana are as follows.

Q. What is the chronology of wolf recovery and federal delisting? What has been FWP's role in recent years?
1974: the wolf is listed under the federal Endangered Species Act as endangered throughout Montana.

1987: the Northern Rockies Gray Wolf Recovery Plan is revised and finalized.

1994: southern half of Montana is designated as an "Experimental Area" enabling more flexible

management than the "endangered" classification; paves the way for the wolf to be reintroduced into Yellowstone National Park (Wyoming) and central Idaho wilderness areas.

1994: USFWS establishes northern Rocky Mountain wolf recovery goal as a minimum of 30 breeding pairs / 300 wolves equitably distributed across the 3-state area for three years in a row with connectivity (e.g. dispersal) between the three areas; this is different from the recovery goals in Midwest states of Minnesota, Wisconsin and Michigan which are based on total number of wolves, not breeding pairs.

1995/1996: wolves reintroduced to Yellowstone National Park and central Idaho wilderness areas.

1999: ability to use agency lethal control to address wolf-livestock conflicts across the northern Montana Endangered Area finalized, but do not allow for kill permits to be issued to livestock owners or for livestock owners to haze / harass or kill wolves caught in livestock; endangered regulations are more restrictive of private citizens and agencies than the experimental regulations.

2000: Montana Wolf Advisory Council makes recommendations to FWP for wolf management after delisting

2004: Montana's wolf conservation and management plan approved by USFWS; lack of a federally-approved plan in Wyoming delays delisting in Montana / Idaho for an unknown period of time.

2005: FWP receives federal funding and becomes the lead agency; FWP – USFWS Cooperative Agreement grants authority to FWP to implement as much of Montana's plan as allowed by federal regulations since the wolf is still federally-listed (i.e. no ability to manage the population through hunting); USFWS finalizes more flexible regulations for the experimental area where state management plans are USFWS-approved (i.e. Montana and Idaho, but not Wyoming).

2008: wolves delisted for the first time but only for a few months; USFWS decision challenged and the wolf is relisted through federal court order because of problems with Wyoming's plan and apparent lack of connectivity across the tri-state area; wolves in Montana revert back to a dual status of endangered across northern Montana and experimental across southern Montana; federal regulations reinstated; Montana hunting season is canceled; USFWS rejects the Wyoming management plan a second time and 1994 federal regulations reinstated in Wyoming.

2009, May: wolves delisted for the second time in Montana and Idaho based on prior USFWS-approval of state plans / laws; wolves remain ESA-listed in Wyoming and USFWS is the lead agency there; Montana's laws, rules, and plan can now be fully implemented; wolves now classified under state law as a species in need of management statewide; USFWS mandatory 5-year post-delisting oversight period begins.

2009, September: delisting decision challenged in federal court for second time; injunction denied.

2009, September: first wolf hunting season in Montana goes smoothly; biologically conservative quota filled easily.

2010, January: FWP filed last legal brief in support of federal delisting; case still pending in federal court as of mid-February.

In sum, wolves have been listed as federally endangered / experimental for the vast majority of the last 25 years, most notably since 2005 when FWP first took over for USFWS under the federal regulations that existed at the time. With delisting taking effect in May 2009, FWP is now in its 10th month of implementing Montana's laws and the state plan as they were originally envisioned by the Wolf Advisory Council and as they are aimed at balancing very diverse public interests about wolves and their management. However, with a court ruling pending on the second legal challenge to delisting, ESA protection and federal regulations could be reinstated. If the wolf is not relisted, Montana continues with full state management.

Q. What is the role of Montana's Tribes when it comes to wolves?
A. Indian Tribes have always been in charge of wolf conservation and management on their respective

reservations. Wolf packs occur on the Flathead and Blackfeet reservations and have for many years. The Confederated Salish and Kootenai Tribes and the Blackfeet Nation implement their own wolf management plans. These two Tribes documented about six packs in 2009 on the two reservations combined, which are included in Montana's total minimum population estimate.

Q. What is the role of the federal government given delisting in May 2009?
A. One a species is delisted, ESA requires a post delisting monitoring period of at least five years, during which Montana must demonstrate that the recovery criteria continue to be met or exceeded. For the gray wolf, USFWS established the minimum of 5-year oversight period, which began in May 2009. If certain wolf population triggers are hit in Montana or Idaho or there are changes in state laws or management objectives that would significantly increase the threat to the wolf population, USFWS will initiate a status review to see if the wolf should be relisted. A status review is an assessment a state's laws and management program and how the wolf population is doing under that state's program.

Additionally, if any of these scenarios occurred during the initial mandatory 5-year post delisting monitoring period, the post-delisting monitoring period would be extended 5 additional years from that point forward for that particular state.

Any of the three following scenarios would trigger USFWS to conduct a mandatory status review:

1. the wolf population falls below 10 breeding pairs and 100 wolves in Montana or Idaho at the end of any calendar year;
2. the wolf population falls below 15 breeding pairs and 150 wolves at the end of the calendar year in either Montana or Idaho for 3 consecutive years; OR
3. a change in state law or management objectives that would significantly increase the threat to the wolf population.

Q. Now that wolves are delisted, can Montana make changes to the wolf program or state laws?
A. It is in Montana's best interest to avoid triggering a USFWS status review. Montana should maintain its ability to manage wolves as resident wildlife through the state's legal framework and not the federal ESA. There are two aspects to avoiding a status review.

One is that Montana's best interests are served by maintaining the wolf population securely above the minimum thresholds established by USFWS so that a status review is not triggered. Further, Montana should maintain the wolf population at a high enough level that allows FWP to use regulated public harvest as a proactive population management tool and to use lethal control to address specific wolf-livestock conflicts. Managing at lower thresholds would severely limit management flexibility and lethal control in particular. However, that population level should not be so high as to result in significant livestock losses, disproportionately impact hunter opportunity, or compromise public safety.

Second, is that Montana's best interests are served by refining and improving the current state management framework rather than making drastic changes that would also trigger a status review by USFWS and risk withdrawal of the state's "approved" status. The principles of adaptive management are embedded throughout Montana's plan and enable changes based on data, public comment, and management experience, to include adjusting harvest regulations and hunting quotas.

Wolf Population Monitoring

Q. How is the wolf population monitored?
A. Montana wolf packs are monitored year round. Common wolf monitoring techniques include direct observational counts, howling and track surveys, and public wolf reports. Individual radio-collared wolves are used to monitor the movements and sizes of individual wolf packs. Wolves in Montana are monitored more intensively than most other wildlife species in Montana, with the possible exception of grizzly bears.

FWP seeks to document pack size and breeding pair status of known packs, to verify wolf activity in new areas that can result in new packs forming, to document dispersal to the extent possible to demonstrate connectivity, to determine pack territories and identify affected private landowners. As importantly, FWP must demonstrate to USFWS that Montana is maintaining a secure, recovered wolf population and ESA-protections are no longer necessary.

Wolf pack territories can be up to 400 square miles. Packs split up and travel separately quite frequently. Therefore, an important aspect of the field work is determining whether, for example, wolf activity in two adjacent drainages is due to one wolf pack using both drainages or there are two packs in the area (one using each drainage). In addition to full time FWP staff, volunteers and seasonal technicians assist with field efforts, as does USDA Wildlife Services.

In recent years, wolf pack territories have developed which straddle state boundaries of Montana / Idaho, Idaho / Wyoming, and occasionally Montana / Wyoming. By far, the greatest number of "border" packs are shared by Montana and Idaho. Each border pack is assigned to one state or the other based on where it denned (if known) or where it spends most of its time if the den location is not known. Thus, every border pack is counted, but no border pack is counted twice. At the end of 2009, Montana and Idaho shared 28 border packs, 16 of which count towards Montana's minimum estimate.

Through public reports, track surveys and direct observations of wolf packs, FWP estimates the minimum size of individual wolf packs and determines whether or not they qualify as a breeding pair according to the federal recovery definition (an adult male / adult female and at least 2 pups alive as of December 31).

The USFWS at first, and now FWP, reports the total minimum number of verified packs of two or more wolves, the minimum observed size of those packs, and whether or not the pack qualified as a breeding pair as of December 31 of each calendar year. These estimates are presented in an annual report, typically finalized and released in mid-March each year.

Q. How is the population size estimated?
A. The statewide minimum wolf population is estimated by adding up the number of observed wolves in verified packs + known lone animals as of December 31 each year. This is a minimum count and has been reported as such since wolf first began recolonizing northwest Montana in the mid 1980s. Suspected wolf packs are those that could not be verified with confidence and often consist of a new pair that has just formed. They are not included in the final minimum estimated count, but are acknowledged and discussed in the annual report narrative. Suspected packs may or may not persist. Subsequent field work and public reports ultimately reveal whether they did or not and minimum population estimates reflect that accordingly.

This approach is conservative and USFWS / FWP both acknowledge that there are likely more wolves and wolf packs on the ground. The current approach is not intended to, nor can it, provide an absolutely accurate count of *all* wolves on the ground (also known as a census). The minimum observed estimate was intended to demonstrate progress towards recovery goals initially, and subsequently that the population is still at or above recovery goals. Thus, the emphasis on conservative minimum counts.

The current approach to wolf monitoring based on estimated size of verified packs is expensive and probably not sustainable without additional funding. It also clearly falls short of an exact, precise number, desired by some segments of the public. Given available federal funding, more cost effective and cheaper ways of monitoring Montana's wolf population are needed. FWP has funded research efforts through the University of Montana Cooperative Wildlife Research Unit to develop alternative methods that also may prove to be more accurate.

Q. How many individual wolves, wolf packs, and breeding pairs are there in Montana?
A. In 1995, the year wolves were first reintroduced in Yellowstone National Park and central Idaho, there was a minimum of 66 wolves in 9 packs, 6 of which qualified as a breeding pair in northwest Montana. Since then, the Montana wolf population has increased steadily and most strongly since 2005. About half of the Montana wolf population occurs in the northern half of the state (Wolf Management Unit 1) and the other half is split roughly equally between Wolf Management Units 2 and 3 across western and southwestern Montana.

Most of the increase in the Montana wolf population since 2005 has occurred in northwest Montana and far western Montana (FWP Regions 1 and 2). This is due to the strong growth of the Idaho wolf population and dispersal of Idaho wolves into Montana. The number of "border" packs shared between Montana and Idaho has steadily increased since 2005 as well.

At the end of 2008, FWP documented a minimum of 497 wolves in 84 packs, 34 of which qualified as a breeding pair in Montana. Preliminary 2009 suggests a minimum of 501 wolves in 99 packs, 34 of which qualify as a breeding pair. Final 2009 estimates published in March will not change significantly. Minor data corrections are still expected, but should not exceed 5-10%.

FWP wolf monitoring data, while not a precise accounting of the number of wolves in Montana, are adequate to make decisions to address wolf-livestock conflicts, to set wolf hunting and trapping regulations, and to set harvest quotas because FWP is confident there are at least the minimum number of wolves observed in the Montana population. These minimum data are also accurate enough to demonstrate maintenance of a recovered population and that relisting is not warranted.

FWP has been exploring the question of how accurate the current "count" is. It is quite accurate as a representation of the minimum number of wolves on the ground. It is a less accurate representation of the *total* number of wolves on the ground, which the minimum observed numbers were never meant to represent though often are mistakenly interpreted as such. Nonetheless, FWP believes the minimum counts are within 8-24% of an estimated total number in the population. FWP will discuss this in much greater detail during the meeting.

Wolf Livestock Depredation Response

Q. What is the role of FWP? What is the role of USDA Wildlife Services?
A. FWP 's wolf management program aims to conserve and actively manage a recovered wolf population in a manner similar to the way Montana manages lions, black bears, or elk. FWP is responsible for wolf population monitoring, public outreach, providing technical assistance to landowners, conducting research, and resolving conflicts. FWP decides how conflicts will be addressed. While wolves were listed under ESA as endangered or experimental, FWP was required to implement the appropriate federal regulations that applied to each area, respectively. Upon delisting in May 2009, FWP is guided by the state plan, administrative rules, and state laws.

USDA Wildlife Services (WS) is a cooperating federal agency that investigates injured and dead livestock to determine the cause and carries out the field response at the direction of FWP. Both agencies work to help reduce depredation risks and address wolf-related conflicts. Whether the wolf was listed or not, the roles of the agencies have remained the same since 2005, when USFWS authority was first delegated to FWP.

Q. How do the agencies cooperate to address wolf-livestock conflicts?
A. Montana citizens call WS to request an investigation of injured or dead livestock. WS conducts a field investigation to determine if the injury or death was due to natural causes or due to a predator. If it was predator-related, WS examines evidence at the scene to determine if a wolf was responsible.

If WS confirms that the damage was wolf-related, FWP seeks input from both WS and the livestock owner to decide on the best course of action that would be consistent with either the federal regulations or Montana's approved plan, depending on whether the wolf was an ESA-listed species or not. Depending on the situation and the decision, WS carries out the response. FWP's role is to assist and resolve the conflict as quickly as possible to prevent further damage.

Q. How does FWP make decisions when wolf-livestock conflicts are confirmed?
A. Up until May 2009 when the wolf was delisted, FWP was required to implement the federal regulations for the endangered or experimental areas, respectively. Upon delisting, FWP implements the state plan and

accompanying administrative rules and state law. FWP decisions are made at the local level by FWP regional staff who are most familiar with the local settings and circumstances, which vary across wolf distribution.

FWP considers a variety of factors, including the status of Montana's wolf population when addressing wolf-livestock conflicts. If the Montana population is greater than or equal to 15 breeding pairs, more liberal tools are available and lethal control can become progressively more liberal (i.e. aggressive). If there are fewer than 15 breeding pairs, management tools are more conservative and lethal control is more conservative (i.e. less aggressive).

FWP makes decisions on a case-by-case basis, taking into account various factors such as pack size, time of year, status and distribution of natural prey, conflict history, livestock class, and the potential for future losses. The goal is to connect the management response, whether non-lethal such as collar/release or lethal, as closely in space and time to the damage as possible. This helps direct lethal control at the offending animals causing the damage. This has the greatest potential to stop the damage from recurring – which is the goal.

Having flexibility is important so that the response can match the situation, whether a conservative or aggressive response is called for. Sometimes a non-lethal effort to collar/release a member of an uncollared pack is the best first response. In fact, presence of a radio collar sometimes makes the difference in whether or not *any* lethal control is successfully implemented. Sometimes a combination of collar/release and lethal control is appropriate. Sometimes full pack removal is appropriate. Sometimes the damage is caused by an unknown wolf or wolves (e.g. a single wolf moving through an area) in that no further livestock losses occur and no further wolf activity is documented. In these situations, both non-lethal or lethal responses may be in vain, despite agency efforts.

FWP and WS have found that Montana landowners vary in their preferences and desires about how wolf-livestock conflicts are addressed. Some do not seek any follow up agency response beyond the initial WS investigation and do not want any wolves killed. Others do. Ultimately, landowner permission is necessary prior to any agency field work on private lands, whether for collar/release purposes or lethal control. This also extends to WS use of aircraft for darting or aerial gunning purposes.

Q. How does FWP approach lethal control?
A. The USFWS and FWP's approach to lethal control is intended to target offenders when damage confirmed and has generally been incremental. This means that the level of wolf removal is commensurate with the level of damage wolves are causing and the size of the wolf population. Early during wolf recovery, USFWS was more conservative with lethal control and even relocated wolves up until 2001, when wolf populations were much smaller than today and suitable vacant habitat was available. At that time, the incremental approach was an effort to lethally remove problem wolves from the population concurrent with facilitating recovery. As the wolf population increased and distribution expanded, levels of lethal control increased and relocation is no longer used. Now that the wolf population is larger, progressively liberal levels of lethal control are appropriate, as called for in Montana's adaptive management framework.

Incremental control also means that the level of wolf removal can be commensurate with the number of wolves involved (i.e. the number of problem wolves), similar to the approach for damage caused by mountain lions, bears, or ungulates. In many situations, wolf tracks at the scene indicate the number of wolves involved in an incident. This in turn, suggests the "increment" of lethal control warranted to "target the offending animals." WS investigators can sometimes assess the number of wolves likely involved based on the amount of a carcass that is consumed. Landowner reports of tracks or wolf sightings also contribute to FWP's decisions about levels of lethal control. Incremental control is an intermediate step between full pack removal and no lethal control whatsoever.

The Montana Wolf Advisory Council and FWP believe that flexibility is important in being able to match the level of lethal control to each situation, as warranted. Incremental control reduces the size of a pack, providing immediate relief when the offending animal/s are removed. It may also provide relief if it becomes more difficult for the remaining wolves to kill livestock, livestock get bigger and become less vulnerable or are

moved out of the area, or when wolves move out of the area. Killing livestock appears to be a learned behavior for wolves, perhaps in the same way that bears learn about human-related food sources. Removing problem wolves that have learned to target livestock as a food source is the purpose of lethal control. Most Montana wolf packs do not injure or kill livestock, livestock losses can and do occur every year and some lethal control will be required every year.

Incremental wolf control can and does result in elimination of entire packs. Between 2005 and 2008 as FWP implemented the federal regulations, full pack removal occurred 19 times. This is compared to a total of 11 times from 1989-2004 prior to FWP. In 2009, FWP authorized removal of 8 packs. One additional pack was slated for removal, but the work was not completed before the end of the calendar year. Additionally, one pack was removed based on decisions of Tribal authorities. About 105 wolves were killed in 2009 through agency control actions (44% of all documented wolf mortality). Private citizens killed an additional 14 when the wolf was caught chasing or attacking livestock.

Because of conflicts with livestock, FWP has authorized lethal removal of an increasing percentage of Montana's wolf population each year since 2005, to about 17-18% in 2009. Historically, lethal control has been the leading cause of wolf mortality in Montana. But lethal control to target problem wolves in conflict with livestock while the wolf was a federally listed species is not the same as managing the overall population size and distribution through regulated harvest after delisting. FWP believes that population management through hunting will fine tune wolf numbers and distribution on the landscape, particularly in areas where livestock conflicts have occurred historically, based on results of the 2009 season. FWP expects that the combination of population management and targeted agency control of problem wolves when necessary will result in fewer wolf-livestock conflicts.

Q. When the wolf was listed under ESA, what did federal regulations allow FWP to do?
A. Because USFWS approved Montana's wolf plan, federal regulations in the experimental area of southwest Montana (where most wolf-livestock conflicts occur) allowed greater flexibility for private citizens to non-injuriously harass wolves near their own livestock or to kill a wolf seen actively chasing or attacking their livestock.

When the wolf was listed, the two sets of federal regulations were as follows:

- Northwest Montana Endangered Area: The 1999 Control Plan offers less flexibility to agencies and livestock producers:
    - all harassment and lethal control only done by agency personnel
    - no kill permits allowed
    - FWP can use lethal control, though more conservatively and generally incremental (based on breeding pairs) that can lead to full pack removal
- Southern Montana Experimental Area: the 10j regulations (updated in 2008) offer more flexibility to agencies and livestock producers in states with a federally-approved state plan:
    - citizens can harass or kill wolves seen actively chasing or attacking livestock on their private property or grazing allotment during their active permit
    - only available to Idaho and Montana producers because those state plans were approved; Wyoming producers stuck with the old 1994 rules
    - kill permits allowed after damage is confirmed
    - FWP use lethal control, generally incremental that can lead to full pack removal

Q. Would FWP be required to apply these same federal regulations if the wolf is relisted by court order?
A. Yes. However, FWP would immediately seek creation of more flexible regulations for the endangered area that mimic the experimental regulations. This would require USFWS to take action.

Q. Now that wolves are delisted, what are the state regulations?
A. Montana law allows a private citizen to kill a wolf that is seen attacking, killing, or threatening to kill, chasing, or harassing livestock and livestock herding / guarding animals. No permit is required and FWP should be notified within 72 hours. Wolves should not be intentionally baited, fed, or deliberately attracted. Wolves can also be opportunistically hazed or harassed in a non-injurious manner anytime. Reporting to

FWP within 72 hours is encouraged. About 5-10 wolves are killed each year when caught attacking livestock in Montana. In 2009, a total of 14 were killed "in the act."

If livestock injuries or deaths are confirmed by WS to have been caused by a wolf, FWP can start with an initial non-lethal response to place a radio collar in the pack. This facilitates monitoring, as well as any subsequent lethal control work for previously uncollared packs. FWP can also authorize any level of lethal control for up to 45 days from the date damage is confirmed. FWP can also issue kill permits to the livestock owner, which puts one more tool on the ground to accomplish the lethal control work as soon as possible. Permits can be renewed and lethal control efforts are extended if there are subsequent confirmed incidents.

Q. How many livestock are killed by wolves in Montana?
A. While the true number can't be documented for sure, wolves were confirmed to have killed about 90 domestic cattle (mostly calves) and about 190 domestic sheep in 2009. Some of these losses occurred on Indian reservations. This is an increase from the previous year and continues an increasing trend since wolf reintroduction. In most years, the majority of the livestock that are confirmed killed by wolves are lost in western and southwestern Montana. In most years, a handful of packs are responsible for a majority of the livestock damage and these packs are removed in their entirety.

Additional death losses are certain, as some missing livestock are never found. For some carcasses that actually are found, conclusive proof was not available.

Q. What about other losses and costs?
A. Some cattle and sheep are injured by wolves. Other injury or death losses are determined as "probable" wolf losses by WS. This means that the WS investigator suspects that wolves were involved, but the investigator cannot be 100% certain, for example because of evidence of multiple predator are found and because wolves readily scavenge animals that died of other causes.

Some other aspects of wolf-livestock conflicts include the following: concerns about livestock performance (i.e. impaired weight gain, stress, disease, pregnancy); increased labor to check livestock more frequently or to repair fences when livestock run through them; veterinary bills to treat injured animals; loss of breeding capacity in the case of bulls; loss of investments in developing special genetic lines when animals are killed; or loss of well-trained guarding / herding dogs.

The Montana Livestock Loss Reduction and Mitigation Program was created to address both direct losses and these other effects. The reader is referred to the program coordinator.

Q. What lies ahead?
A. FWP and WS have been discussing how best to address increasing livestock losses as the wolf population has increased and distribution has expanded in the last several years. Agency workloads and public demands have clearly increased in recent years. Therefore, the two agencies are developing revised protocols that will allow for a more aggressive and efficient initial response by WS when wolf damage is confirmed. Revisions are meant to increase the odds that problem wolves are removed immediately. The revision would also allow for continuation of lethal control efforts thereafter.

Revisions are important for several reasons. First, WS receives an increasing number of requests for investigations every year, as more livestock are injured / killed and more suspected incidents are reported for potential confirmation and financial reimbursement. The level of lethal control requested by FWP has also increased. Delisting is an important aspect of addressing the increased workload as FWP can now finally implement hunting as a proactive population management tool.

Also, available funding for the Montana Livestock Loss Reduction and Mitigation Program (MLLRMP) been somewhat tenuous to date. The level of loss experienced by some livestock owners has been significant. Fortunately, new federal funding will be available for Montana's program in the near future which should help stabilize funding availability and allow the Board to expand its work. FWP and WS will continue to support the MLLRMP through technical assistance and in pursuit of new funding.

A previous data analysis suggested that new wolves readily recolonize areas left vacant by agency lethal control efforts. On average, new wolves recolonize areas within a year. This is usually related to the proximity of other wolf packs or larger populations from which wolves disperse and fill in "vacant" habitat. This is particularly evident in the Big Hole Valley where new wolves likely from Idaho recolonize the area as rapidly as wolves are killed. Decreasing risk of loss through proactive tools may help. FWP will continue to look for ways to use hunters to more aggressively manage wolves in areas of historical wolf-livestock conflicts, in conjunction with agency lethal control.

Additional analyses conducted jointly by FWP and WS suggested that some livestock owners are at greater risk because they experience recurrent losses through time. A better understanding of the spatial aspect of wolf-livestock losses would help agencies be more effective with their responses and efficient in the long term. It could help inform efforts to proactively decrease risk of wolf-caused livestock losses by livestock owners themselves or through the MLLRMP. It may also result in fewer claims. Decreasing the risk of loss through proactive tools may also decrease agency workloads.

In conclusion, wolves are here to stay in Montana. FWP remains as committed as ever to managing the wolf as resident wildlife according to state laws and the state management plan. One of the plan's particular strength is its the adaptive management framework. Now that FWP can fully implement it given delisting, adaptive management allows FWP to maintain a secure, delisted population and to manage wolves similar to other wildlife species. Yet, it also provides flexibility and even directs FWP to adjust the management program as it gains more experience in balancing the social, economic, and biological aspects of a recovered wolf population.