

**Wolf Management Plan Implementation**  
**January 12, 2011**

The following tables are re-creations of the tables used to detail implementation of Alternative #2 in the Final EIS (2003). Alternative #2 is the post delisting/updated council alternative chosen as the preferred alternative in the 2004 ROD. It is the management model that we are currently working within. The spectrum of management activities shown below are only for the current situation of >15 breeding pairs. In other words, below are the commitments we agreed to when in a >15 breeding pairs scenario.

*All 2011 numbers in the tables below are draft estimates only for the purposes of this update. Final numbers will be presented in the 2011 annual report.*

Table 22. The spectrum of management activities to manage and conserve wolves in Montana. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment.

	<b>Greater than 15 Breeding Pairs*</b>		
	<b>Public Lands</b> <i>(backcountry areas &amp; near National Parks)</i>	<b>Mixed Land Ownerships</b> <i>(interspersed public and private lands; interspersed agriculture)</i>	<b>Implementation</b>
<b>Plan Implementation By MFWP</b>	Adaptive management	Same	New population estimation techniques such as Patch Occupancy Modeling are being assessed. Hunting seasons have been implemented and are being monitored, and will be modified based on hunter success and lessons learned. Conflict situations are being dealt with in new and creative ways, depredation response is variable and flexible depending on circumstances,
	Integrate with ungulate management	Same	Big game populations and wolf interactions considered in season setting process e.g., Bitterroot, Madison Valley.
	Health and disease surveillance	Same	2007-2010: 72 carcasses necropsied, 507 tissue or blood samples collected, inventoried and either banked or analyzed. During calendar year 2011 we received 7 carcasses and 34 blood samples. The majority of the carcasses were either enforcement related or unknown causes of death. Necropsies were conducted and tissues examined grossly. No lab tests would have been conducted unless something was observed during the necropsy. Serum samples from captured wolves are routinely tested.
	Limited monitoring to determine pack status	Enhanced monitoring in selected areas	Monitoring intensity has lessened in some public land areas as new monitoring approaches are developed that are less labor intensive and rely more on pack size estimators.  Monitoring and collar efforts have intensified in an effort to keep packs collared that are living near livestock. 2010: 20 collars deployed by FWS 11 collars deployed by MFWP 2011: 24 collars deployed by FWS 10 collars deployed by MFWP

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Research to improve ecological understanding of wolf-ungulate interactions	Same	MFWP Bitterroot study - . Last spring 66 newborn elk calves and 30 cows were radio-tagged and an additional 31 calves and 20 cows were tagged the week after the general rifle season ended this past fall. Another 20 cows will be captured in February. The major predation so far is by mountain lions (13), followed by black bears(4), and wolves(2),	
Research to evaluate specific management actions	Same	MSU/MFWP Madison Valley study	
Law enforcement, high priority	Same	U of M study to identify correlations between lethal wolf control and repeat depredations. MFWP peripherally involved with this study.	
Public outreach to inform and address specific needs	Same	Ongoing Pamphlet for Landowners updated in 2011. New pamphlet, 'Living with Wolves', for citizens recreating and living in wolf habitat developed by Region wolf specialists (11/11). Webpage updates are made regularly as information changes or becomes available. Wolf Weekly publication has continued post delisting.	
Interagency, tri-state, tribal coordination	Same	Ongoing as needed. Tri-state coordination comes mainly during the calculation of pack size and home ranges of border packs and during periodic interagency tri-state meeting (2011 spring).	
Summarize annual mortality; track pack numbers using combination USFWS definition and other techniques	Same	Annual summation of population parameters, e.g., pack size, home ranges, productivity, mortality. New techniques such as Patch Occupancy Modeling being used as one method to estimate 2011 wolf numbers. Other methods are being explored. At the beginning of 2011, 31 of 108 packs were radio collared. However, throughout calendar year 2010 as many as 51 packs were radio collared. 2010: 20 collars deployed by MFWP 11 collars deployed by WS 2011: 24 collars deployed bt MFWP 10 collars deployed by WS	
Discourage wolf habituation; more proactive removal of potential problem wolves	Same	New pamphlet, 'Living with Wolves', for citizens recreating and living in wolf habitat developed by Region wolf specialists (11/11). Montana rules (MCA 87-3-130; ARM 12.9.1301-1305) allow a person to kill a wolf that is seen in the act of attacking, killing, or threatening to kill livestock Montana law and administrative rules (MCA 87-3-130; ARM 12.9.1301-1305) allow a person to kill a wolf that is seen in the act of attacking or killing a domestic dog not used for herding or guarding livestock. Legal to haze a wolf at any time.	

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	Regulated hunting and trapping with FWP Commission oversight; conservative harvest on quota or permit system with mandatory reporting	Same... plus harvest quota more liberal as number of breeding pairs increase	2009: 72 wolves killed during quota based hunting season  2011: 130+ wolves killed during quota based hunting season. Season extended beyond Dec 31, 2011 to Feb. 15, 2012. See 2011 season setting background information as explanation for why some areas were authorized at a higher quota level.
<b>Wildlife Services</b>	<p>Activities directed by Memorandum of Understanding with Montana Fish, Wildlife &amp; Parks and Montana Department of Livestock</p> <p>Incremental approach; lethal removal of problem wolves more liberal</p> <p>WS response; technical assistance from WS, FWP, other</p>	<p>Same</p> <p>Incremental approach; lethal may be 1st, especially on private land</p> <p>Same</p>	<p>MOU in place outlining roles and responsibilities of WS and MFWP. Annual coordination meetings between MFWP and WS.</p> <p>Initial response protocol in place authorizing WS to take any wolves at or near the carcass of confirmed wolf kill by shooting, trapping, calling. In new packs or those with no history of conflict with livestock and in areas with no chronic depredation history, we will first attempt to get a collar in the pack and may remove one or two wolves in response to the first depredation, as always depending on specific circumstances. Subsequent depredation will generally result in removal of half the remaining pack, and additional depredations will call for full pack removal. In areas where chronic depredation occurs we will typically remove half of the wolves in the pack in response to the first depredation and the remainder of the pack in response to subsequent depredations.</p> <p>Process of WS conducting investigations and MFWP providing prescription to collar and/or removal has remained consistent. ~50% of complaints received by WS as suspected wolf damage are confirmed wolf.</p> <p>Blackfoot Challenge Living with Predators project. (MFWP is a cooperator) Big Hole Range Rider project (MFWP is a cooperator)</p>
<b>Private Citizens</b>	<p>Non –lethal harassment</p> <p>Lethal take in defense of life/property</p> <p>Limited number of FWP kill permits for public lands</p>	<p>Same</p> <p>Same</p> <p>FWP kill permits for private or public lands; number issued more liberal</p>	<p>Records not available for incidents of non-lethal harassment. Reporting is not required. Other techniques are being used including fence fladry, guard dogs, RAG (radio activated guard) boxes and range riders.</p> <p>2010: Defense of Life/Property wolf kills by private citizens = 13 2011: Defense of Life/Property by private citizens = 11</p> <p>2011: 12 Shoot on Site permits issued. SOS have demonstrated poor success of targeted wolf removal.</p>

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	Designated trapper or licensed hunter/trapper during open season	Designated trapper or licensed hunter/trapper during open season	2009 and 2011 regulated harvest seasons. Commission regulation to allowing landowners to utilize hunters to take wolves that have been confirmed by Wildlife Services to have killed livestock. USDA Wildlife Services remains the primary entity for removing depredating wolves per FWP prescriptions. This proposal would add hunters as a mechanism to remove livestock-depredating wolves.

#### Individual collars statewide

Maximum # collars monitored at any point during 2010 = 82 (46 + 17 + 19)

Number of # collars monitored at end of 2010 = 35 (20 + 7 + 8)

#### Collared packs statewide

Total packs monitored with radio telemetry at any point during 2010 = 56

Total packs monitored with radio telemetry at year's end = 31

The discrepancy between the end of year estimate and the larger estimate is the fact that some entire packs with radio collars were removed or collared pack members were removed due to livestock conflict or other mortality. Some collars also malfunctioned or came off.

Table 25. Direction and guidelines for compensation of livestock losses due to wolf depredation in Montana. State of Montana intends to find or create an entity to administer a compensation program. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment.

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<b>Livestock Producers</b>  (cattle, calves, hogs, pigs, horses, mules, sheep, lambs, goats, guarding animals)	Incentives to reduce potential for conflict	Same	Blackfoot Challenge Living with Predators project. (MFWP is a cooperator) Big Hole Range Rider project (MFWP is a cooperator) Other techniques are being used including fence fladry, guard dogs, RAG (radio activated guard) boxes and range riders.
	Compensation and/or livestock insurance program for confirmed and probable losses at fair market value	Same	Montana Livestock Loss Board 2010 payments = \$96,000 2011 payments = >\$83,500
	No compensation for pets, alternative livestock	Same	No compensation
<b>Funding</b>	Private donations and/or special state or federal appropriations (no FWP, matching federal or general state funds)	Same	SB348
<b>Adminis- tration</b>	State of Montana intends to find or create an entity to administer a compensation program; details pending final results of Compensation Research Study; Non governmental organization administers independently of FWP	Same	Montana Livestock Loss Board 2010 payments = \$96,000 2011 payments = >\$83,500

Table 26. Spectrum of management and public outreach activities to ensure public safety in Montana. The adaptive management model calls for selection of different management strategies as the number of breeding pairs (according to the federal recovery definition) changes from 10-15 to greater than 15. The model also calls for different strategies, depending on landownership patterns (Public Lands and Mixed Land Ownerships), social factors, land use patterns, biological constraints, and the physical attributes of the environment.

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<b>Citizens</b>	Non-lethal harassment	Same	Records not available for incidents of non-lethal harassment. Reporting is not required.
	Lethal take in defense of life/property	Same	2010: Defense of Life/Property wolf kills by private citizens = 13 2011: Defense of Life/Property by private citizens = 11
<b>Agency Personnel</b>  or  <b>Local Law Enforcement</b>	FWP Guidelines for Nuisance Wolves	Same	Development of guidelines needed. New pamphlet, 'Living with Wolves', for citizens recreating and living in wolf habitat <u>was developed to address wolf habituation and describe normal wolf behavior.</u> (Developed by Region wolf specialists (11/11).
	Non-lethal harassment	Same	Other techniques are being used including fence fladry, guard dogs, RAG (radio activated guard) boxes and range riders.
	Lethal removal if threat to public safety	Same	Montana rules (MCA 87-3-130; ARM 12.9.1301-1305) allow a person to kill a wolf that is seen in the act of attacking, killing, or threatening to kill a person.
<b>Montana Fish, Wildlife &amp; Parks</b>	Public outreach to inform & address specific needs	Same	New pamphlet, 'Living with Wolves', for citizens recreating and living in wolf habitat developed by Region wolf specialists (11/11).
	Discourage wolf habituation	Same	Blackfoot Challenge Living with Predators project. (MFWP is a cooperator). Big Hole Range Rider project (MFWP is a cooperator). Other projects are ongoing to use fladry, guard dogs, RAG (radio activated guard) boxes and range riders.  Suspected habituated, sick or injured wolves (<3) have been hazed and/or removed in years past to reduce potential habituation behavior or conflict. (r3)