

APPENDIX - A
PAST, PRESENT/ON-GOING, and REASONABLY FORESEEABLE ACTIONS
CLANCY ALLOTMENT

HISTORIC ACTIVITIES

<i>Historic Activities</i>	<i>General Effects</i>	<i>Contribution of AMP Revision to Cumulative Effects</i>
Historic Timber Harvest	Logging in the 19 th & early 20 th centuries removed most large trees from several thousand acres, primarily at low-middle elevation. Today, most of these sites are occupied by 100-125 year-old conifer stands, relatively dense & generally healthy.	AMP revision will not contribute to effects generated by historic timber harvest.
Past Road Construction	Roads built for early mining, settlement, and access to resources have provided the foundation for an extensive road network today. Some are abandoned, but many remain—facilitating widespread motorized access to public & private lands.	Cattle use old roadways—open or closed—as travel corridors. They often graze along the roadsides, especially where favored introduced forage such as Kentucky bluegrass & Dutch whiteclover have become established. AMP revision may shift use of certain roadways as distribution patterns change, but implications for wildlife are minor.
Historic Livestock Grazing	Until mid 20 th century, most ranges were overstocked with cattle & sheep, creating severe competition for native grazers. Biomass & vegetative diversity in grass/forb communities declined. In recent decades lower stocking & rest / rotation grazing have reversed these trends on many sites.	AMP revision will continue the trend toward lower stocking levels, extensive rest periods for some pastures, & protection of key habitat sites from overgrazing. This cumulative trend will continue to generate beneficial effects at a number of sites.
Fire Suppression	Effective fire prevention & suppression (esp. since the 1930s) has allowed mature forest to expand & forest structure to become more complex. Open habitats have declined as conifers encroach. Risk of intense stand-replacing fire is amplified.	AMP revision will not contribute measurably to effects generated by fire suppression.
Extirpation and Recovery of Game Animals and Furbearers	By early 20 th century, populations of most game animals, furbearers, & predators were decimated by subsistence hunting & trapping. Today, most have returned through reintroduction or natural recovery. Species still at sub-optimal levels include: grizzly bear, wolf, wolverine, lynx, fisher, marten, beaver, & bighorn sheep.	Reduced stocking levels & efforts to rejuvenate key habitats, such as aspen & riparian shrub communities, will improve habitat conditions for species already recovered (elk, deer) and for several of those still at risk (grizzly bears, lynx).

Historic Mining Operations	Extensive past mining has altered local topography & stream-flow, generated erosion, & left toxic waste. Large historic mining districts in this part of the landscape include the Helena-Unionville, Frohner, & upper Tenmile complexes (with parts of Tenmile still active). Remains of small surface mines & exploration are ubiquitous throughout the Clancy allotment and surrounding areas.	AMP revision would not add cumulatively to the effects of past mining with regard to wildlife.
Water Impoundments and Irrigation Projects	There are no current water impoundments on the Clancy allotment. But impoundments at Park Lake & Chessman Reservoir to the north have transformed basin-head wetlands into small lakes. Irrigation ditches have altered stream-flow patterns in most major drainages, channeling flow & restricting the influence of riparian zones.	AMP objectives to improve cattle distribution and reduce grazing in riparian zones involves, among other things, developing water sources in upland areas. This continues the trend of altering water dispersion patterns on the landscape. In this case, results will benefit habitats associated with natural water sources.
Local Settlement, Road Construction and Other Human Activities	In late 19 th & early 20 th centuries, human activity associated with mining & general settlement was widespread. Current human presence: heavy settlement in the Helena Valley, rural settlement in the wildland/ urban interface, & increasing dispersed recreation.	Reduction of grazing levels in some key habitats also under pressure from impacts associated with human presence should alleviate some problems for local wildlife dependent on these habitats.

Recent and Ongoing Activities

Recent and Ongoing Activities	General Effects	Contribution of AMP Revision to Cumulative Effects
Lava Mountain Timber Sale (mid 1990s)	Approx. 400 acres of clearcuts & commercial thinning in grass/forb & seedling conifer stages in upper Corral Gulch, Lump Gulch, & Quartz Creek. Evolving ground cover provides forage; no hiding or screening cover.	Monitoring indicates that cattle use of new openings created by the Lava Mtn. timber sale is minimal. Most developing ground cover consists of grasses and forbs unpalatable to cattle, (compared to other local forage sources). Cattle use of clearcuts has not measurably inhibited conifer regeneration. AMP revision will have little effect on use of clearcuts in the Clancy allotment.

Strawberry Timber Sale (early 1980s)	Approx. 600 acres of regenerating clearcuts in upper Lump Gulch, Quartz Creek, & Buffalo Creek—dominated by sapling conifers providing partial/complete hiding cover & good lynx foraging habitat; diverse ground cover in understory & openings.	In the past, cattle have impacted ground vegetation in some of the Strawberry T.S. clearcuts—esp. in wetter, more productive sites. Cattle grazing has not altered vegetation composition, but has probably kept elk & deer from using the sites more thoroughly. Dense conifer regeneration has now made much of this area unavailable for grazing. Clancy AMP revision has no implications for this issue.
Buffalo Gulch Timber Sale (early 1970s)	Approx 400 acres of regenerating clearcuts in the Little Buffalo, Whiteman, & Go Devil drainages. Conifer regeneration is patchy, hiding cover fragmentary, grass-forb sites widespread. Some winter browse available.	A majority of these cutting units are now regenerated to a point that they are no longer grazed. But some, on south & west aspects, remain quite open and provide suitable grazing sites for cattle. Implementation of the new Clancy AMP has no implications for this issue
Post and Pole Timber Sales	Small-scale logging operations (typically 1-10 acres) near open roads—commercial and personal use. Dense pole stands are transformed into open forest or small clearings.	AMP revision will not add cumulatively to the effects of post and pole sales.
Personal-Use Firewood Cutting	Firewood cutters remove most medium-large snags from a 200-300 ft corridor along open roads, substantially reducing habitat for wildlife dependent on dead trees in these areas.	AMP revision will not add cumulatively to the effects of firewood cutting.
Logging on Private Lands	A variety of timber harvest has occurred on private lands adjacent to allotments in the southeast Divide landscape. Most is small-scale. Exception: extensive cutting (several sections) east of Lump/Rowe Gulch to the north.	Private Logging has made local forest habitats unsuitable for a variety of dependent wildlife. Cattle grazing on the Forest has likewise lowered suitability of many productive habitats. AMP revision will alleviate some of the grazing pressure on key habitats and improve suitability for some wildlife species.
Rural Settlement on Private Lands	Subdivisions are expanding — mostly to the east, emanating from Clancy and Jefferson City. More dispersed settlement is occurring on inholdings in Grizzly, Orofino, Dry, Nelson, Lump, & Kady Gulches; Travis, Buffalo, S.Quartz, & Clancy Creeks; Park City. Settlement usurps wildlife habitat to various degrees.	Cattle use of productive sites that would otherwise be used more thoroughly by deer, elk & other wildlife species has added cumulatively to usurpation of land for settlement. AMP revision will alleviate some of the pressure on key habitats and upland range generated by livestock.

Private Access Routes	The Forest Service must allow for new roads & maintenance of old routes that provide access to private land, which increases open road density. Some are plowed in winter, allowing access for wildlife that normally wouldn't be present.	AMP revision will not add cumulatively to the effects of private access routes with regard to wildlife.
Forest Road Use and Maintenance	Approx. 165 miles of road are open to vehicles in summer (density = 1.5 mi/mi ²) in the southeast corner of the Divide landscape. Primary Forest roads are bladed or otherwise maintained from spring through fall. Some are plowed in winter (mostly primary County roads or roads to private holdings).	Open roads have created corridors avoided by wildlife species wary of human activity. Cattle use of some key habitats has added to the area avoided by some wildlife species as well. AMP revision may alleviate some of this negative influence by reducing grazing in riparian and aspen habitats.
Clancy-Unionville Travel Plan	Implementation of the travel mgmt. portion of the Clancy-Unionville project has been ongoing since 2003. Approx. 28 mi of open road are being decommissioned (reducing open roads from 193 mi to 165 mi). Some routes have been blocked, others are being signed. Routes in several key sites have been removed, improving habitat for many species. Elk security areas have expanded & habitat effectiveness has increased.	Implications for livestock travel routes along roadways are minimal since cattle will travel along roads whether they are open or not. Cumulatively, cattle use of productive habitat sites has reduced their utility to wildlife. Reduction of cattle presence in key habitats under the new AMP will add to the cumulative expansion of suitable habitat produced by the travel plan vehicle restrictions.
Proliferation of ATV/bike trails	Trails pioneered by ATVs and trail bikes have been proliferating on the landscape for more than a decade—generally not sanctioned by the Forest Service but technically legal in areas with no off-road restrictions. A primary source of wildlife disturbance.	Motor trails have created disturbance corridors, making favorable habitat unsuitable for some species. Cattle use of key habitats has increased the area avoided by some wildlife as well. AMP revision will alleviate some of this negative influence by reducing grazing in riparian & aspen habitats.
Statewide OHV Decision (2001)	Since 2001 all motor vehicles on NF & BLM lands are required to stay on existing roads and motor trails: cross-country vehicle travel is prohibited. Exceptions are in designated play areas & a 300-ft strip on either side of the road for dispersed camping. This will substantially lower new disturbance in currently unroaded wildlife habitat.	Pioneering of new vehicle routes and off-route travel have been a primary source of habitat degradation and wildlife disturbance that has accelerated in recent decades. Reducing livestock presence in key habitat areas under the new AMP will add to the positive effects generated by new prohibition of cross-country motorized travel.

Snowmobile Use	Extensive system of groomed trails and ungroomed-but-regularly-used trails (often on unplowed roads). Disturbance on big game winter range is generally low, but there is increasing presence on high spring ranges from antler hunters on snowmobiles.	Cattle are not on the allotments in winter (or early-mid spring). The new AMP will not add cumulatively to the effects of snowmobile use.
Other Dispersed Recreation	Proximity to Helena, Montana city, and Clancy generates considerable hiking, picnicking, mountain bike riding, horseback riding, x-country skiing, dispersed camping, fishing, hunting, wildlife viewing, etc. Activity concentrated in summer & fall. Disturbance to wildlife is low-key but widespread.	Cattle use of several areas makes them unpalatable for many recreationists. Reduction in cattle presence in productive habitats may allow a certain amount of increased dispersed recreational use. The upshot for wildlife is a shift in the nature of disturbance and habitat modification—but probably beneficial on balance.
Developed Recreation Sites	Areas of concentrated human activity, mostly in summer: Park Lake campground, Chessman-Lava ATV trail, Mt Helena Nat. Rec. trail, Sheep Mtn trail system. There are no particular attractions in the Clancy Allotment.	AMP revision will do little, if anything, to add to cumulative effects generated by developed recreation sites.
Designation and Maintenance of Roadless Areas	Large blocks of unroaded habitat designated in the 1980s allow natural processes to operate & provide refugia for wildlife wary of humans. The nearest roadless areas are the Lazyman Gulch and electric Peak areas well to the north and west.	Revision of the Clancy AMP has no implications for these roadless areas.
Livestock Grazing on Private Lands	Livestock grazing on ranchland near the HNF and on inholdings within the Forest usually results in heavier impacts to these lands than to equivalent habitat on the HNF. While private grazing lands often encompass productive valley habitats, their heavy use by cattle substantially lowers their suitability for wildlife. As a result, many species are forced to rely more heavily on the less impacted grazing lands on the Forest.	More abundant forage on allotment upland ranges and improved riparian conditions should help compensate to a certain degree for continued overgrazing and degradation of wildlife habitat on private lands.

Weed Management EIS (2002)	The EIS outlines a comprehensive program for treating noxious weeds Forest-wide. Overall, the program will benefit wildlife by gradually reducing the influence of noxious weeds and enhancing native vegetation that provides forage and cover.	Cattle can subvert weed treatment in small ways—trailing seeds into new areas and trampling out ground cover to make it easier for weeds to become established. Reduction in cattle numbers under the new AMP will reduce cattle concentrations in weed-sensitive habitats but any future tactics to improve distribution may expand weed dispersion to an extent.
High Ore Fire and Post-Fire Rehabilitation	The fire burned about 4,000 ac. of BLM & private land not far south of the Clancy allotment in Aug. 2000. It reduced forest cover (but improved forage) on 1,000-1,200 ac. of the Boulder Hill wildlife travel corridor & on about 2,500 ac. of winter range sometimes used by Clancy-Unionville elk. Rehab. focused on roads, fire lines & structures, & had little effect on wildlife habitat components.	The Clancy AMP revision will not contribute to effects generated by the High Ore Fire.
Montana Tunnels Mine	The massive open pit mine complex is located on private land less than ½ mi. east of the Clancy allotment. The operation, active since the early 1980s, now occupies >1000 ac. (with an extended zone of influence) in big game winter range and continues to expand. The mining company owns a large peninsula of private land that extends up into the allotment in Clancy Creek.	The existing mine complex has usurped large expanses of big game winter range on private land adjacent to the Forest. The new AMP will result in more residual forage being left for native grazers following the summer grazing season and will help to compensate for losses on private winter range.
Reclamation of Frohner Mine Complex	Large-scale, multi-stage reclamation of mine wastes in upper Lump Gulch drainage is being undertaken in stages: Local disruption of wildlife over several years, increased truck traffic. But local riparian habitats should be significantly improved over the long term.	Improved riparian functioning under the Clancy AMP revision will add cumulatively to riparian habitat improvement resulting from mine waste clean-up.

BLM portion of Clancy-Unionville Project (2003)	Selective timber harvest & fuel reduction (690 ac), forest under-burning (150 ac), grassland burning (97 ac), & travel management—in the Sheep Mtn / Jack Mtn area abutting the National Forest east of Brooklyn Bridge and Skihi Peak. Formerly merged with the HNF Clancy-Unionville Vegetation & Travel Mgmt project; later separated.	The Clancy AMP revision will not add cumulatively to the effects of this project.
Upper Boulder River Landscape Analysis	Analysis of the Boulder River IA (Beaverhead-Deerlodge NF) immediately south of the Clancy allotment is proposing vegetative treatments, watershed projects, and travel management. Restoring fire as an effective ecosystem process is a key element.	Clancy AMP revision would not add cumulatively to the effects of this project.
Bluebird & Salvi Mine Reclamation (2004)	Reclamation of 2 mines north of Wood Chute Gulch: improving local roads, closing roads to public use, hauling mine waste. Wildlife disturbance in high elevation habitats & improved motorized travel routes are concerns.	Allotment revision will not add cumulative to the effects of these projects.
Sky Top Ranch Timber Harvest (2003)	Partial cutting on approx. 2,090 acres of private land in lower Lump Gulch—in a general area east of the Forest boundary that has been subject to extensive timber harvest over the past few decades.	This project opened up substantial forest habitat on private land to the north. Clancy allotment revision would not add to the effects of this project.
Tucker / Dry Gulch and south Helena Fuel Reduction Projects (2003-present)	Several hundred acres of hand-piling and prescribed burning to reduce fuel accumulations in conifer habitats in the region south of Helena.	These projects are well to the north. Allotment revision would not add cumulatively to its effects on wildlife.
Fuel Reduction on Private Lands (2003-present)	Thinning and other fuel reduction projects on private lands near and adjacent to the Forest boundary. Vegetation structure varies widely from mature forest to grassland with colonizing conifers	Allotment revision would not add cumulatively to effects generated by these projects.

REASONABLY FORESEEABLE ACTIONS

Foreseeable Future Activities	General Effects	Contribution of AMP Revision to Cumulative Effects
Clancy-Unionville Allotment Vegetation Manipulation	This project has been in and out of litigation for several years. The proposal is for 2,448 ac of prescribed burning, 166 ac of regen. harvest, 1,322 ac of commercial thinning, 31 ac of aspen treatment, & 853 ac of mech. savannah treatment. Some burning treatments are planned for areas in and around the Clancy allotment—to rejuvenate grassland and eliminate colonizing conifers. Primary effect for wildlife overall is conversion of nearly 1,500 ac of closed forest to open forest habitat. Also key: removal of encroaching conifers from >1,000 acres of grassland.	The creation of substantial new acreages of open forest and of rejuvenated grassland with robust ground vegetation will create new foraging opportunities for cattle on some allotments—including the Clancy allotment. New use will be restricted mostly to the minority of sites that support preferred forage. The allotment revision will not add cumulatively to effects of the Clancy-Unionville vegetation project.
Upper Boulder River Landscape Analysis	Analysis of the Boulder River IA (Beaverhead-Deerlodge NF) immediately south of the Clancy allotment is proposing vegetative treatments, watershed projects, and travel management. Restoring fire as an effective ecosystem process is a key element.	Clancy AMP revision has no implications for this proposal
Expansion of Montana Tunnels Mine Complex	The Montana Tunnels mine is proposing an expansion of operations into the headwaters of Clancy Creek: enlargement of existing mine pit, deposition of new tailings, increased industrial activity near the Forest boundary. Loss of big game winter range, disruption of primary wildlife travel corridor. This will encroach on private land within the bounds of the Clancy allotment.	The Proposed Action will provide more residual forage on the allotment for native grazers following the summer grazing season will help to compensate for losses on private winter range. These benefits may be overwhelmed, however, by mine expansion of this magnitude.