

**WILDLIFE IMPACT REPORT AND
MITIGATION PLAN FOR
RED PEAK VILLAGE,
TOWN OF SILVERTHORNE,
SUMMIT COUNTY, COLORADO**

Prepared for:

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September, 2008

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1.0 INTRODUCTION

Red Peak Village (RPV) is the working name for the western 51 acres of the 71-acre old Smith Ranch, a currently inactive agricultural operation located along the west side of Highway 9 between Willow Brook Subdivision (to the north), Ruby Ranch (to the west), and commercial/multifamily residential development (to the south). Approximately 19 acres of Smith Ranch is currently within the municipal boundaries of the Town of Silverthorne (Town) with the balance in Summit County. That portion of the parcel within County jurisdiction is proposed for annexation to the Town as part of the Planned Unit Development (PUD) process.

Compass Homes Development, L.L.C (the proponent) propose to develop RPV in a way that addresses Town concerns, including affordable housing, residential support facilities (e.g., daycare, civic uses, playground), and open space/ recreation. The current PUD Guide proposes up to 180 clustered single-family or duplex dwelling units, 40 accessory apartments, a 6,000 square foot day-care facility, and the remainder of the property retained as open space (18.3 ac., approx. 35% of the total property; Fig. 1). Additional development proposal detail is contained in the PUD Guide.

The RPV parcel was part of the 71-acre parcel also known as Silver Mountain Village, the working name for a former, non-consummated development proposal associated with the larger Buffalo Mountain Ranch (aka the Clark Ranch) development proposal. At the request of the former developers associated with that project, Western Ecosystems, Inc. conducted wildlife surveys and analyses of that larger property (which included Smith Ranch) and surrounding areas (e.g., Thompson 2000, 2001b). At the request of the current RPV proponent, Western Ecosystems, Inc. was asked to update the former wildlife impact report (Thompson 2001a) and address issues specific to RPV and the current development proposal. Herein, substantive wildlife issues and impacts associated with the proposed development are identified for consideration in the PUD process. Additional project effects will be minimized and mitigated with the implementation of a Wildlife Mitigation and Enhancement Plan, contained herein in draft form.

2.0 METHODS

Current Natural Diversity Information System (NDIS, successor to Colorado Division of Wildlife [CDOW] Wildlife Resource Information System [WRIS]) maps (site accessed Sep. 11, 2008; site last updated May 4, 2008), associated narratives, and disclaimers were reviewed for the property and surrounding area to identify important wildlife seasonal ranges and features that may be influenced by the project. Field surveys of the property were conducted on May 24, and June 4 and 16, 2000, May 16, 29, and June 12, 2001, and Sep. 16, 2008. Additional year-round field surveys and observations of the property were conducted in conjunction with other overlapping and local projects. Surveys concentrated on habitat mapping, developing an ecological understanding of the property, field verifying NDIS maps, and searching for evidence of specific species presence (as described in species accounts, below). A meeting was held with Mr. Tom Kroening, local CDOW District Wildlife Manager on January 5, 1999, to identify the full range of wildlife issues that might be associated with

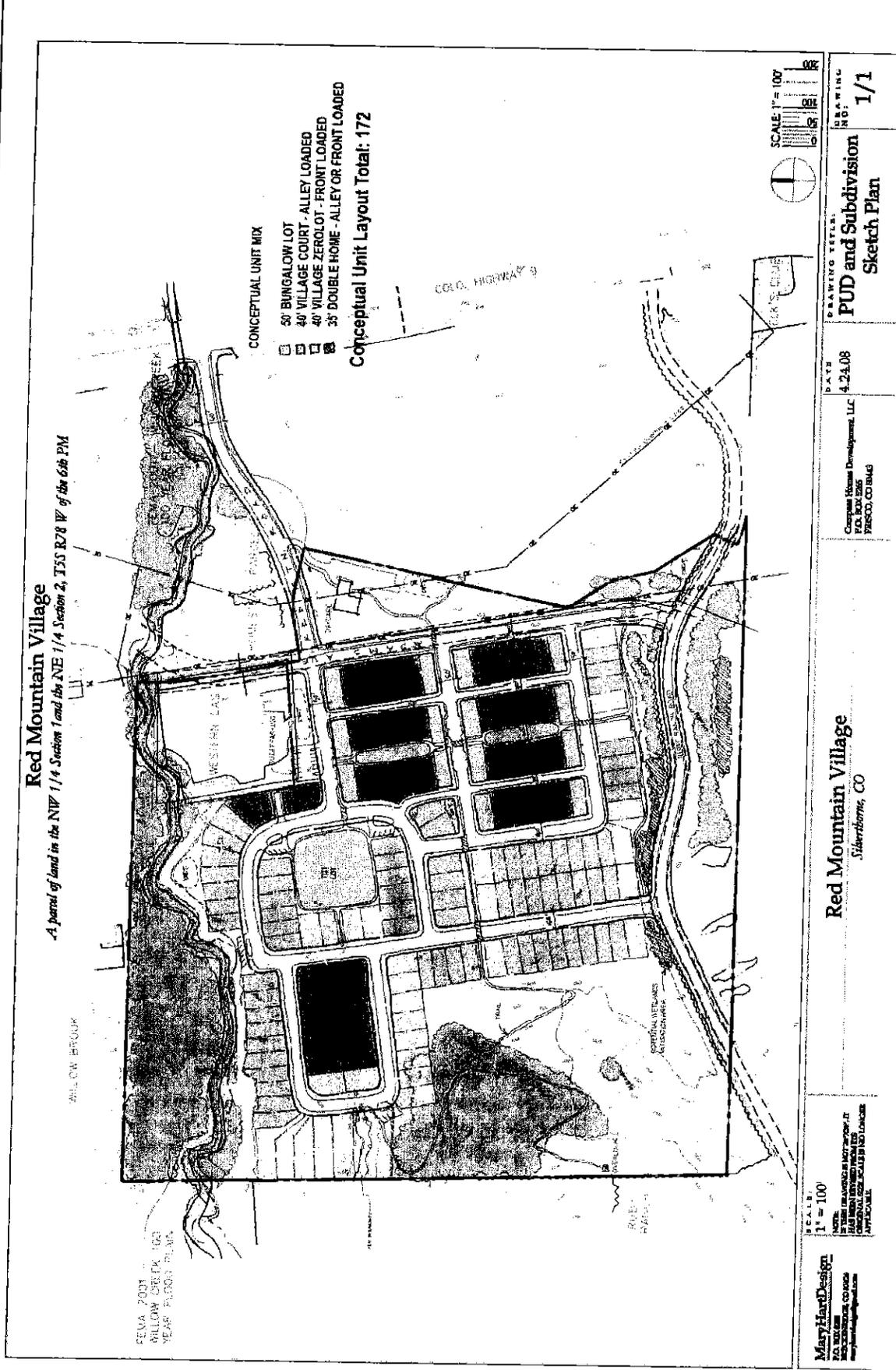


Figure 1. PUD and Subdivision Sketch Plan jpeg.

Buffalo Mountain Ranch and the Silver Mountain Village properties. Additional discussions with the CDOW regarding wildlife use of the local area occurred during intervening years, the most recent of which on February 9, 2006 as part of the Angler Mountain Ranch proposal (Thompson 2006). There have been no substantive land use changes in the vicinity of RPV altering the natural variation in wildlife use described herein.

3.0 WILDLIFE ISSUES AND PROJECT EFFECTS

This analysis is based on NDIS mapping, field surveys of the RPV property, more extensive surveys in the surrounding valley, the conceptual development proposal, and public and CDOW responses to similar, unimplemented development proposals on this parcel. NDIS disclaimers are incorporated herein by reference. The substantive wildlife issues described below are generally presented in decreasing order of biological significance/ public interest. As previously mentioned, some potential wildlife conflicts would be mitigated via the implementation of Wildlife Mitigation and Enhancement Plan (Plan), developed through consultation with the CDOW. Potential conflicts and other wildlife issues not discussed at length in this report (e.g., building envelopes, clustering development, fencing, dog and trash provisions, educating homeowners, etc.) have been discussed with project planners and are addressed in detail in the Plan. Other issues (e.g., protection of wildlife values associated with jurisdictional wetlands, water depletions issues, etc.) will be adequately resolved by other parties associated with the development proposal.

3.1 HABITATS PRESENT AND PROJECT SETTING

The 51-acre RPV parcel ranges in elevation from approximately 8,720 feet along Willow Creek in the parcel's northeast corner to approximately 8,880 feet on a knoll along the west property line. Approximately 80% of the property is composed of formerly irrigated hay meadows/ pasture associated with the old Smith Ranch. Broad, willow-dominated riparian corridors are associated with Willow Creek along the north property boundary and an unnamed perennial creek generally along the south side of Ruby Ranch Road. A knoll on the upper west end of the parcel supports an aspen (*Populus tremuloides*) and lodgepole pine (*Pinus contorta*) stand; the latter component is being affected by the mountain pine beetle (*Dendroctonus ponderosae*) epidemic. An off-channel, willow-dominated wetland is contiguous with the south end of this forest island.

With respect to the effectiveness of the largely non-native habitats composing the parcel, the property is surrounded by human developments which influence wildlife access. Highway 9, residential development, and lakes to the east, Willow Brook Subdivision (to the north), and commercial/multifamily residential development (to the southeast) block terrestrial wildlife movements on and off the property from those directions. Low density residential development associated with Ruby Ranch allows such wildlife access to/from the property via the west and southwest.

3.2 ELK

Current NDIS maps (Fig. 2, end of document) do not show any seasonal elk (*Cervus elaphus*) ranges occurring on, or in the immediate vicinity of, the RPV parcel, with the exception of summer range overlapping the upper western one-half of the parcel. That overlap is attributed to the relatively coarse

(1:50,000 scale) mapping, rather than actual elk use of the property during the summer months (i.e., when elk are actually at the highest elevations in the valley). This lack of seasonal elk use is attributable to the property's isolation from undisturbed habitats, proximity to human developments, and to the types of habitats present on the property. Willow Brook Subdivision to the north, a commercial/residential complex to the south, and Highway 9 and residential development to the east, effectively block any elk access to the property from those directions. Ruby Ranch to the west is more permeable, but the maze of fencing restricts unfettered movements. Nevertheless, over the last five years (during spring and fall) low to moderate numbers of elk (i.e., 15-40 animals) accessed the property via Ruby Ranch. Most use is associated with nocturnal foraging and bedding and is concentrated in the forested knoll on the western side of the property. However, even if elk could have greater access to Smith Ranch, habitats present have limited value to elk. Most of the property is a formerly irrigated hayfield. Such habitats are highly attractive to elk during spring green-up, but difficult access, small habitat block size, and surrounding human activities limits the use and potential value of this habitat. At other times of the year, elk are either at higher elevations in the valley (summer and fall), or virtually all foraging values associated with such meadows have been removed by haying (fall and winter). With the termination of irrigation, the non-native hay meadows will succeed toward more weedy, upland grasslands that will be less attractive to elk. Native habitats on the Smith Parcel are small and isolated, with the exception of the Willow Creek and Ruby Creek riparian corridors, which overlap the northern and southern property flanks. Finally, cover values on the parcel are largely limited to the small, forested knoll, otherwise surrounded by human developments and relatively broad, open habitats. This requires elk to exploit the limited value habitats on the property only at night and to return to forests to the west by early morning.

Recently, elk have been observed crossing Highway 9 in the vicinity of Smith Ranch and the Raven Golf Course. Some of these crossings occurred during the hunting seasons and were attributed to elk avoiding hunters (T. Kroening, CDOW, pers. comm.). However, the reasons for other movements are unclear. Most movements have been oriented toward the willows along the Blue River. From there, they either cross back to the west side of the valley or move east onto the Heitt Parcel (T. Kroening, CDOW, pers. comm.). The CDOW does not consider this to be a regular movement pattern, a migratory phenomenon, or a pattern that will be long-lived. As development continues along the Highway 9 corridor in the Town (with or without development of Smith Ranch), options available for such movements will continue to decline. Furthermore, while cross valley movement corridors are important for the wildlife community and while such corridors should be identified and preserved in perpetuity, it is not in the best interest of elk to establish such a corridor in the vicinity of the RPV parcel because no viable corridor is possible without removing existing development to the east. The closest opportunity for such a corridor is north of the Town's limits.

Proposed development of the RPV parcel will have no appreciable affect on the local elk population. The closest calving habitat, which starts on Ruby Ranch > 0.5 miles to the west (as low as the 9,400 ft. contour), will be unaffected by RPV development because Ruby Ranch will provide an effective buffer zone. A summer concentration area, which occurs further to the west than calving habitat, will be similarly unaffected. No migration corridors cross the RPV parcel, so none would be affected by the proposed development. What limited elk transitional and winter range use of the property that now occurs would be lost. This loss will be additive to the considerable amount of winter range that has been cumulatively lost in this upper portion of the lower Blue River Valley. Proposed development would minimize the loss of elk transitional and winter range values on the property by (1) clustering and

concentrating residential development in non-native habitats, (2) avoiding native habitats that occur around the periphery of the parcel, (3) designating the native habitats as open space, and (4) establishing as broad of a buffer as possible along the south side of the Willow Creek riparian corridor.

Nevertheless, the effectiveness of retained native habitats would be diminished by the proximity of existing and RPV human activity areas to these relatively small, insular habitat patches. Implementation of a Wildlife Mitigation and Enhancement Plan (e.g., dog control measures, fencing, etc.) would benefit any elk use that persists in the area, with greatest value benefiting continued elk use of Ruby Ranch.

3.3 MULE DEER

Summer range is the only CDOW-defined mule deer (*Odocoileus hemionus*) habitat present overlapping the RPV parcel and in this upper portion of the Blue River Valley. Limited summer and spring and fall transitional range use persists on the property. General fall migration patterns are oriented toward down valley winter ranges and these patterns are reversed in spring. NDIS maps (Fig. 3, end of document) show two designated highway crossings across I-70 in the vicinity of RPV, east of the Silverthorne Interchange between Ptarmigan Ranch and Dillon Valley, and west of the Silverthorne Interchange. The eastern crossing is becoming increasingly dysfunctional because of increasing traffic volumes. Proposed development of RPV would likely have no effect on highway crossings, other than (1) the project's incremental traffic contributions further impairing habitat connectivity across the highway and (2) as part of the project's incremental contributions to winter range losses potentially forcing animals to cross highways in search of undeveloped winter range.

Impacts to deer resulting from the proposed RPV development would be similar to those non-winter impacts described for elk, above. However, development would be more compatible with continued deer use of the property because deer will habituate more readily to such developments and they require narrower buffer zones surrounding such human activity areas. As described above for elk, implementation of a Wildlife Mitigation and Enhancement Plan would benefit local deer use that persists in the area.

3.4 BOREAL TOAD

A beaver (*Castor canadensis*) pond complex occurs in the unnamed creek on the south side of Ruby Ranch Road. These ponds fall within the habitat continuum used by boreal toads (*Bufo boreas boreas*) for breeding elsewhere. Surveys of this pond complex were conducted in 2000 (May 24 and June 4 [n=2] and 16, 2000) and 2001 (May 16, 29, and June 12, 2001) following general Goettl and Boreal Toad Recovery Team (1997) and Boreal Toad Conservation Strategy Team (1997) guidelines, as selectively modified by Boreal Toad Recovery Team (1998), Loeffler (1998), and conversations with the CDOW (T. Kroening; Thompson 2000a, 2001b). Recent boreal toad studies in Colorado have indicated that boreal toads may not breed every year. If that is the case, toads may not be present to be detected at breeding sites every year. To provide greater assurance that inactive breeding ponds are not overlooked in non-use years, the second year of surveys was conducted at the recommendation of the CDOW. The 2000 and 2001 survey areas covered all potentially suitable boreal toad breeding habitats on the RPV parcel, limited to the active beaver pond complex south of Ruby Ranch Road. That wetland complex extends over properties other than RPV. The surveys did not cover the entire complex, but only those portions on the RPV property. The survey area erred on the biologically conservative side and covered the entire ponds bisected by the property line, plus one pond above it. Surveys were timed

to coincide with the period when adult toads, eggs, and tadpoles would be present at breeding sites and when evidence of toads would be most detectable.

It is possible that previously unidentified boreal toad populations could persist in suitable habitats on the west side of the Blue River Valley, north of I-70, based on known populations upstream. A large boreal toad breeding complex occurs in North Ten Mile Creek and a population was discovered in Meadow Creek in 1998 (T. Kroening, CDOW, pers. comm.). Until recently a breeding population also occurred in Straight Creek. Other extant populations also occur in upper tributaries of the Snake and Blue Rivers. The Straight Creek population is now largely isolated from the west side of the Blue River Valley by the Blue River, intervening development, and unsuitable habitat. However, toads washed downstream into the Blue River from other populations could conceivably colonize downstream areas. Nevertheless, it would be a circuitous route indeed for a toad to climb out the Blue River, find its way west through residential and commercial developments, cross Highway 9, and cross the Smith Ranch pasture (where the intermittent creek supporting the beaver ponds south of Ruby Ranch Road terminates) to colonize this wetland complex. More likely, toads would now have to colonize this wetland from the Meadow Creek population, which is not impossible. Until the late 1960's, when the first bore of the Eisenhower Tunnel was opened, all these populations were "connected" and the riparian corridor along the Blue River was possibly a local movement corridor.

No evidence of boreal toads or other amphibians was located on RPV during the surveys. Beaver ponds along the unnamed intermittent creek south of Ruby Ranch Road contain potentially suitable breeding habitat, although it is apparently unoccupied. Non-breeding habitats outside of this wetland complex are limited and would be hostile to toads. RPV development would have no adverse effect on any known historic or extant boreal toad breeding complex or potential movement corridor. The apparently suitable, but unoccupied ponds south of Ruby Ranch Road would remain buffered from RPV development effects by the road.

3.5 WATERFOWL

No habitats on the RPV parcel known to be biologically significant to local waterfowl would be impacted by the proposal. The beaver pond complex south of Ruby Ranch Road would continue to be available for dabbling duck use. Most Canada goose (*Branta canadensis*) foraging in the hay meadows would be eliminated. The amount of foraging that may continue in the remaining meadow between the development and Highway 9 would depend upon how that habitat is maintained.

3.6 BALD EAGLES

Bald eagle (*Haliaeetus leucocephalus*) winter range includes Dillon Reservoir and extends down the Blue River (Fig. 4, end of document). Bald eagles arrive in the valley in early to mid-November and depart in March. No nests or nocturnal roost sites occur in the vicinity of the RPV parcel that would be affected by the project. Eagle use of Dillon Reservoir usually ends by mid-December with freeze-up. Eagle use of the Blue River continues for as long as open water is present for them to fish and hunt waterfowl. Bald eagles winter foraging that might occur along the Blue River is isolated from the RPV parcel by intervening residential development and Highway 9. There are no habitats on the RPV parcel that are important to bald eagles as winter foraging habitat.

3.7 OTHER RAPTORS

The raptor issue on the RPV parcel is limited to the loss of foraging habitat for several raptor species that now hunt the property as part of a larger territory. No raptor nests were located on or adjacent to the property during systematic nest surveys.

3.8 BLACK BEARS

A black bear (*Ursus americanus*) / human conflict area extends from Dillon, through Silverthorne, and down along the east side of Highway 9. This designation, which applies to areas where, for example, bears get into trashcans, tear down bird feeders, etc., could probably be extended to include Willow Brook Subdivision and Phase 1 of Eagle's Nest. As the residential component of the RPV parcel develops, the human conflict polygon would probably be extended to cover the entire property. Bear / human conflicts would be avoided and minimized by homeowner education, proper garbage disposal, and provisions governing pets and pet feeding, as part of the Wildlife Mitigation and Enhancement Plan.

3.9 CANADA LYNX

Canada lynx (*Lynx canadensis*) impact assessment on private lands generally focuses on the extent that a development proposal would affect potential travel, forage, denning, and security values, whether the development occurs in a key landscape linkage, and whether the development affects an animal's ability to maintain a theoretical home range.

The RPV parcel supports an isolated patch of largely non-native habitat, surrounded by existing developments. Highway 9 and residential development occur to the east, a commercial / residential complex occurs to the southeast, Willow Brook Subdivision occurs to the north, and the relatively low density, Ruby Ranch Subdivision occurs to the west. The riparian corridors associated with Willow Creek and the unnamed, intermittent creek to the south are the only continuous native habitat connections from the property to extensive Gore Range habitats to the west. If these native habitats and the small mixed conifer / aspen stand on the property were not surrounded by existing development, they might be valuable as small patches of potential foraging habitat that could be occasionally used by a resident or transient lynx. However, in their present isolated setting, they are of no value to lynx. The private RPV parcel contains no effective foraging, denning, or travel habitat, is not in a key landscape linkage, and is not connected to native habitats to the extent that it could contribute to a future lynx home range.

Based on the above considerations, proposed RPV development would not individually or collectively degrade any potential lynx habitat components to the extent that it would impair the ability of lynx to maintain a future, theoretical \pm 40 square mile home range in this portion of the Gore Range or the Blue River Lynx Analysis Unit (WRNF LAU #25). The loss of potential lynx habitat components on the RPV parcel would be non-discernable on future lynx habitat use.

RPV development would add a relatively low to moderate amount of year-round traffic volume to Highway 9. RPV traffic would enter Highway 9 via existing Ruby Ranch Road and the new Red Peak Village Road. Bald Eagle Road. On average, RPV would generate approximately 1,308 external daily

vehicle trips (654 entering and 654 existing) per weekday to Highway 9. Based on similar traffic analyses of local proposed residential developments (e.g., Angler Mountain Ranch, LSC Transportation Consultants, Inc. 2005) approximately 90% of the traffic would be oriented to and from the south (i.e., toward Silverthorne) and 10% would be oriented to and from the north (i.e., towards Kremmling). A subset of RPV traffic would also extend along more distant regional highways that cross through lynx habitat. Although RPV is not located in any lynx landscape linkages (USFS 2004), some traffic associated with the project would extend east and west along I-70 and across other more distant lynx linkages where lynx are more likely to be present and occasionally crossing highways. RPV would make small, incremental contributions to the total traffic volumes through such distant landscape linkages over the life of the project. While increased traffic volumes might theoretically increase lynx highway mortality probabilities, those RPV contributions would be insignificant and discountable (USFWS and NMFS 1998) and not rise to a level where incidental take of an individual lynx from a vehicle strike would be anticipated. Furthermore, increased RPV-related traffic volumes through distant landscape linkages would have insignificant and discountable effects on harassment, habitat permeability, habitat fragmentation, and landscape connectivity.

Because of the insignificant and discountable potential effects associated with RPV development, the proposed action “may affect, but is not likely to adversely affect” Canada lynx. Overall RPV effects would not result in incidental take of individual lynx, either by “harm” or “harassment”, because no meaningful habitat loss, modification, or degradation would occur and the relatively small increases in traffic volumes on regional highways running through distant lynx habitat are not anticipated to result in death or injury to lynx, or significantly impair behavioral patterns such as denning, foraging, or travel in those distant habitats. The RPV project is not likely to jeopardize the continued existence of the contiguous United States distinct population segment of the lynx, and would not reduce appreciably the likelihood of both the survival and recovery of lynx by reducing their reproduction, numbers, or distribution. No critical habitat has been designated for this species therefore none would be affected. The proposed designation of critical habitat for lynx (USFWS 2005) does not include any habitat in the Southern Rockies Ecosystem. Assuming critical habitat is designated as proposed, none would be affected by the RPV project. Even if critical habitat were to be designated in the Southern Rockies Ecosystem, it would not include the private lands on the project area to which lynx have no affinities.

From a section 7 (ESA) cumulative effects perspective [50 CFR §402.02], there are no reasonably certain future actions in LAU warranting consideration herein.

3.10 OTHER CDOW NDIS SPECIES

Other wildlife species identified on CDOW NDIS maps, including bighorn sheep (*Ovis canadensis*), mountain goat (*Oreamnos americanus*), wolverine (*Gulo gulo*), moose (*Alces alces*), river otter (*Lutra canadensis*), mottled sculpin (*Cottus bairdi*), Colorado River cutthroat trout (*Oncorhynchus clarki pleuriticus*), and ptarmigan (*Lagopus leucurus*) do not occur on the RPV property and the proposed development would have no discernable adverse affect on these species.

3.11 OTHER WILDLIFE SPECIES/ HABITAT

In addition to the development impacts presented above, there will be a general loss of hay meadow habitat and a small (< 1 ac.) loss of aspen and lodgepole pine forest along with the wildlife values

associated with them, including, but not limited to forage, cover, security, and nesting/ denning sites for the nongame bird and small mammal communities. Species with large home ranges that require large buffer zones around humans (e.g., elk) will become less common on the property. "Nuisance species" (e.g., striped skunks [*Mephitis mephitis*], raccoons [*Procyon lotor*], red fox [*Vulpes vulpes*], American crows [*Corvus brachyrhynchos*], etc.) attracted to such human developments may also increase. The total effect of the residential development on RPV will appreciably alter the predevelopment wildlife community. Some of these effects now occur on the property, even though it is largely undeveloped, because of the effects of existing and ongoing development in the surrounding area. These off-site influences extend onto, and affect, wildlife use of the RPV property.

4.0 DRAFT WILDLIFE MITIGATION AND ENHANCEMENT PLAN

Many potential wildlife conflicts associated with development and habitation of Red Peak Village (RPV) can be avoided, minimized, and/or mitigated via the implementation of a Wildlife Mitigation and Enhancement Plan (Plan), developed through consultation with the CDOW. Such plans not only identify the responsibilities of the developers and any homeowners association(s) that might form, but also educates homeowners about wildlife-oriented considerations incorporated into the development's design and covenants that residents are required to implement to minimize wildlife conflicts. Resident education and the implementation of recommended measures would be more important because many wildlife values have a good chance of being at least partly retained. In addition to provisions related to issues addressed above in this document, the Plan also includes measures associated with, but not limited to, dogs, pet control/ enforcement, bears and garbage, nuisance wildlife, fencing, landscaping, livestock, road-killed wildlife, Best Management Practices, educating residents about not feeding wildlife, and a host of other issues. This Plan is currently in a draft format, reflecting the conceptual proposal presently under consideration. The Plan will be finalized following Town approval of the refined development proposal and CDOW review.

This Wildlife Mitigation and Enhancement Plan (Plan), developed for Red Peak Village (RPV), proposes commitments of Compass Homes Development, LLC, the Developer, to avoid, minimize, and mitigate impacts resulting from the proposed residential development, as described in previous sections of this report. The standards contained in this plan are consistent with, or exceed, those associated with other Wildlife Mitigation and Enhancement Plans developed for the surrounding area.

Compass Homes Development, LLC (the proponent) would develop up to 180 clustered single-family or duplex dwelling units, 40 accessory apartments, and a 6,000 square foot day-care facility, and retain the remaining 35% of the property as open space, Fig. 1). Virtually all development would be located in non-native hay meadows. Open space would be composed largely of undisturbed, native riparian, wetland, and forest habitats

The wildlife planning process associated with the residential development involved utilizing existing Colorado Division of Wildlife (CDOW) wildlife distribution maps, conducting field surveys to delineate important wildlife areas, providing that information to planners, then conducting a series of feedback loops where the project design was further refined. The specifics contained in the final Plan have evolved from existing wildlife information, results of intensive field surveys, discussions, and meetings with CDOW representatives, input from the Town and the public, and meetings and discussions with

staff and professionals representing the proponent. This Plan not only considers the residential proposal, but also considers how this development can be integrated into surrounding developments to facilitate continued wildlife use. This plan is organized by wildlife issues. Where mitigation measures apply to more than one issue, they are discussed under the most appropriate issue and only mentioned under other issues.

The Developer, its successors or assigns, which might undertake some or all of the Developer's commitments, as delineated below, propose to commit to the following wildlife mitigation and enhancement measures. This Plan, will be effective in its entirety, only upon the Town's approval of the RPV development proposal. In the event that proposed development does not occur, and anticipated wildlife impacts do not result, the Developer shall not be required to implement the respective component(s) of this Plan, as presently contained herein. In that event, this Plan will be revised to address impacts resulting from the subsequent development plan approved by the Town.

4.1 HOME SITING

Residences have been densely clustered into a single development pod to concentrate development and leave greater areas of open space for wildlife to continue using. Furthermore, the development cluster has been located almost entirely in non-native habitat, supporting the lowest wildlife diversity values of any habitat present. Virtually all of the more valuable native wildlife habitats on the property (e.g., all wetlands and riparian areas and most of the aspen/ lodgepole stand) have been avoided by development.

4.2 BUILDING ENVELOPES

A. Building envelopes governing the location and distribution of all structures (e.g., house, garage [if detached], all fencing, dog runs, etc.), surrounding yards, and most disturbance to native vegetation, with the possible exceptions of utilities, and driveways, shall be established on the RPV property to insure that development follows a design minimizing habitat losses and facilitating continued wildlife movements through, and use of, the property.

B. Building envelope size will be limited to a subset of the lot. Homes shall be constructed within the building envelopes and unnecessary disturbance will be avoided or minimized outside of building envelopes. The objective of this measure is to minimize the amount of natural habitat loss, maintain existing vegetation buffering visual and acoustic disturbances from sensitive adjacent habitats, and to limit human disturbances on RPV from extending into adjacent properties. Residential construction shall implement Best Management Practices.

C. The area of fertilized, irrigated landscaping each residence is permitted to have will be restricted to the building envelope and subject to the following additional restrictions: 750 sq. ft. per single family lot, 500 sq. ft. per duplex lot, and 1 ac. for Public Park. Residents will be educated to recognize that they have moved into wildlife habitat, that some wildlife will have strong compulsions to eat what homeowners plant, and that the CDOW will not be liable for wildlife damage to landscaping.

4.3 RECLAMATION/ LANDSCAPING

A. Posted speed limits within the RPV property and along access roads off the highway will be slow enough that road shoulders could be reseeded with plants palatable to big game without increasing the probability of road-kills. Road shoulders may exclude trees and shrubs to maximize vertical and horizontal sight-distances and reduce the probability of road-killed wildlife.

B. Homeowners are strongly encouraged to landscape with native plant species to minimize wildlife damage. Damage to landscaping will still occur, but it will not be as severe. The CDOW will not be liable for wildlife damage to landscaping.

4.4 DOGS AND PET CONTROL

A. Each residential lot will be permitted to have up to two dogs, two cats, and their offspring up to three months old. Residents will be prohibited from harboring dogs on their property unless they have adequate facilities (i.e., animals kept within homes, a fenced yard, dog run, or kennel) to contain the animals. Enclosed runs must be located immediately adjacent to the home, within the lot's building envelope, and shall not exceed 1,000 square feet. Homeowners are encouraged to completely enclose runs (including tops) to protect dogs from possible mountain lion predation. Cats shall be kept indoors.

B. At no time shall dogs or cats be allowed to run freely. When dogs move beyond their owner's building envelope, the dog must be controlled by a leash of no more than 12 feet in length, under the direct control of its owner or authorized representative, unless the dog is legitimately being trained for hunting. Visitors and guests of residents shall comply with all dog and pet control measures applicable to this property. A brochure entitled "How to make your outdoor cat a happy indoor cat" may assist cat owners and is available on the CDOW's website at:

http://wildlife.state.co.us/Education/CoExisting_with_wildlife/CoExist_index.htm.

C. The Homeowners Association shall be responsible for enforcing dog and pet covenants. The County and CDOW may also control stray dogs. Homeowners Association penalties for first, second, and subsequent violations by a homeowner or guest will be a warning followed by a fine system to be established by the Homeowners Association.

D. Contractors, subcontractors, delivery people, etc. shall be prohibited from bringing dogs onto RPV, even if dogs would be kept inside vehicles. Violation of the dog policy by a person(s) other than a resident, property owner, or permanent member of RPV shall result in the immediate eviction of the dog and the dog's owner or representative from the property, if the two are caught together. If only the pet is caught, it shall be remanded to Town Animal Control. In the event of a second violation by the same dog and/or the same dog's owner, the dog and the dog's owner or representative shall be immediately evicted from the property, and the offending person in question shall be prohibited from RPV for the following seven (7) consecutive calendar days. In the event of a third violation, the offending person in question shall be prohibited from RPV for the following six (6) consecutive calendar months.

E. Residents and employees of RPV will be educated (see Section 4.12, below) regarding the dog and pet policy for this property. Homeowners will be educated that they should not feed dogs and other pets outside their homes, including decks, to avoid attracting nuisance wildlife or predators.

4.5 FENCING

A. Residential fencing will be under the purview of the Design Review Board or Homeowners Association. There shall be no fencing of perimeter lot lines or of the building envelope perimeter.

B. Any existing fences on the property that are not needed to confine domestic livestock on adjacent properties will be removed. Where peripheral fencing is required to exclude livestock, the Developer or the Homeowners Association will work with the adjacent landowner, where that landowner is willing to cooperate, to install or modify fencing to be compatible with wildlife movements.

C. Fencing compatible with wildlife movements includes, but is not limited to, three-strand, smooth-wire (preferred) or barbed-wire fence, with strands located at 18, 30, and 42 inches above mean ground level, with gates in the fence that can be opened to further facilitate wildlife movements outside the period when livestock are present. If wood rail fencing is used, it should not exceed 42 inches in height and 12 inches in width (as viewed from above the fence). There shall be an opening of at least 18 inches between the ground and the bottom rail to allow passage of deer fawns and elk calves. These specifications for wooden rail fencing generally require a two-rail design.

D. Homeowners will be permitted a privacy fence to enclose small areas (e.g., a hot tub, garden, etc.), provided it is immediately adjacent to the house and it is entirely within the designated building envelope, unless specifically approved by the Homeowners Association. Fencing may be subject to more restrictive provisions as stated in the Protective Covenants, Design Guidelines, or other documents related to the property.

4.6 BEARS/ TRASH REMOVAL/ NUISANCE WILDLIFE

RPV is located in black bear habitat. Most bears do not cause damage where residential and other developments have encroached into bear habitat. The key is that if a bear doesn't find food it will move on. Black bears are omnivorous and while they mostly eat vegetation, they will eat almost anything. They will eat human food, garbage, hummingbird nectar, bird seed, pet food, grease off grills, suntan lotion, etc. Garbage generally provides the greatest attraction for bears to residential developments. Once a bear has found an easily accessible, consistent food source, it will often overcome its wariness of people and visit the site regularly. This increases the chance of a bear-human encounter. After repeated use of the food source, the bear may even act aggressively toward residents, their pets, or their unsuspecting neighbors. When this happens and wildlife authorities are notified, the bear is usually killed to protect human safety.

The following measures will be required to reduce potential bear problems at residences:

A. Homeowners will be educated about bears and other local wildlife via the CDOW's brochure entitled "Living with Wildlife in Bear Country" and/or a homeowners' brochure that might be

developed for the property. One copy of either brochure shall be provided to all prospective residents and to all residents at closing. The bear brochure is also available on the CDOW's website:

http://wildlife.state.co.us/Education/CoExisting_with_wildlife/CoExist_index.htm.

B. There shall be no outside storage of any trash or garbage, no matter how briefly (e.g., overnight), anywhere within the development, unless it is contained within bear-resistant containers, which meet North American Bear Society, CDOW, or U.S. National Park Service specifications. Individual containers presently cost around \$400.00 and can contain one 32-gallon trashcan. They are non-mobile and are generally cemented on a stand at the junction of a resident's driveway and the local road. Most homeowners need two containers where trash collection is weekly.

C. The following is a more practical alternative to bear-proof cans. Prior to disposal, any refuse that might attract bears should be kept within the garage in a suitable receptacle with a tight-fitting lid (e.g., a 32-gallon plastic trash can). Refuse should not be kept within detached garages or sheds because these structures are more likely to be broken into by bears. **Trash containers should be taken to the collection points (e.g., the end of driveways) the morning of collection, not the night before.** If they're put out the night before, bears, coyotes, foxes, stray dogs, raccoons, and skunks will have access to them and the remaining trash (i.e., what is not eaten) will be scattered up and down the street. However, following these recommendations may not eliminate bear problems. Bears have broken into attached residential garages in the surrounding area for garbage. Bear-proof containers are the most secure approach to garbage disposal.

D. There shall be no dumps or underground disposal of refuse on residential lots. Buried garbage will attract bears.

E. Residents will be prohibited from using a garden compost pile, unless the compost pile is bear-proof, meeting North American Bear Society, CDOW, or U.S. National Park Service specifications. Residents will also be educated (see Section 4.12, below) that household and garden waste contributions to compost piles compose the very materials that can attract bears and create problems. Composted yard waste consisting of leaves, grass, small branches, etc. does not usually attract bears.

F. Pets shall not be fed outside. Bowls of pet food left on the back deck will attract bears and other predators (e.g., coyotes) and nuisance species (e.g., skunks) of wildlife. Some of these wildlife species may carry disease that can be transmitted to pets, if the pets aren't eaten.

G. With the exception of bird feeders, the feeding, baiting, salting, or other means of attracting wildlife is prohibited.

4.7 MOUNTAIN LIONS

Mountain lions are occasionally present year-round in the vicinity of RPV. In other areas of Colorado, where subdivisions have encroached upon mountain lion habitat containing concentrations of prey species (e.g., deer and elk), encounters between lions, humans, and their pets and livestock have increased. The following measures will be implemented to minimize lion-human conflicts:

A. All residents and prospective residents will receive a copy of the CDOW's brochure entitled "Living with Wildlife in Mountain Lion Country", and/or a homeowners' brochure that might be developed for the property containing a lengthy section explaining that the property is located in lion country, what residents should be aware of, what to do if a close encounter occurs, and measures they can take to increase their safety and that of their pets. One copy of either brochure shall be provided to all prospective residents and to all residents at closing. The lion brochure is also available on the CDOW's website at:

http://wildlife.state.co.us/Education/CoExisting_with_wildlife/CoExist_index.htm.

B. With the exception of bird feeders, the feeding, baiting, salting, or other means of attracting wildlife is prohibited.

C. If homeowners install an outside dog run, fencing should also cover the top to protect dogs from possible mountain lion predation.

4.8 HORSES

It is prohibited for horses to be boarded, fenced, or grazed on residential lots within RPV.

4.9 SNOWMOBILES

Snowmobile use on the property by residents, guests, and contractors is prohibited, excluding emergencies.

4.10 WILDLIFE MORTALITY ON LOCAL ROADS AND HIGHWAYS

RPV is accessed by I-70 and Highway 9, where vehicles kill dozens of deer and elk each year. Posted speed limits on these highways are not slow enough for motorists to avoid animals crossing the highways in most situations. Obeying posted speed limits helps reduce wildlife mortality and reduces the risks of damage to personal property and injury to motorists. Contractors, employees, and guests should obey posted speed limits to reduce wildlife mortality on roads. Furthermore, it should be recognized that deer crossing signs are established at locations where big game cross roads more frequently. Rather than ignoring these signs, motorists should be more vigilant in these areas to detect crossing wildlife.

In an attempt to reestablish a viable Canada lynx population, the CDOW has been annually releasing lynx in the San Juan Mountains since 1999 (Shenk 2005). To reestablish and maintain a viable population, lynx will have to disperse from the San Juan Mountains release sites to other areas of the state. Lynx are dispersing throughout the state and their movements are oriented through tracts of continuous forest cover, generally in upper elevation lodgepole pine and spruce-fir zones. Where roads and highways cross through these forested landscape corridors, dispersing lynx are forced to cross them, exposing the animals to vehicle mortality. Some of these landscape linkages occur in the vicinity of RPV. Such landscape corridors extend north-south along the west slope of the Williams Fork Mountains and the east slope of the Gore range, on the east and west sides of the Blue River Valley, respectively. Lynx using these routes most likely crossed I-70 east and west of Silverthorne. Other linkages occur from Frisco to East

Vail and from the east side of the Eisenhower Tunnel to Silverplume. Obeying posted speed limits through these corridors and driving during the day vs. night might help reduce road-kills of this federally threatened species.

4.11 CDOW INDEMNIFICATION

Residents of RPV shall indemnify the CDOW from any and all future wildlife damage claims. There will be damage to landscaping planted on big game winter range.

4.12 EDUCATION

RPV residents will have purchased home sites partly because of the development's setting and the wildlife in the surrounding area. Homeowners may be unfamiliar with the wildlife of Colorado's mountains and the responsibility that goes with living in this setting. Homeowners generally don't want to disturb, harass, or impact wildlife, but they often unwittingly do. Homeowners will be educated about local wildlife issues by providing each prospective resident a copy of this Plan with initial contract documents, and providing each resident a copy of the CDOW bear and mountain lion brochures (also available on the CDOW's website) at the time of closing.

4.13 ENFORCEMENT

Enforcement of this Plans' provisions shall be the responsibility of the Homeowners Association or their authorized agent(s). Fines resulting from violations of this Plan shall be collected by the Homeowners Association and shall be used for implementing wildlife mitigation/ enhancement or furthering wildlife education of RPV residents. Furthermore, as a PUD, the Town and CDOW may enforce RPV Plan provisions.

4.14 ADDITIONAL COMMITMENTS

The wildlife provisions, as set forth above in this Plan, shall not be amended without the written consent of the Town and the RPV Homeowners Association. Prior to any amendments, the CDOW shall be notified and offered an opportunity to review and comment. The CDOW and/or Town can enforce this entire Wildlife Mitigation and Enhancement Plan. This Plan, will be effective in its entirety only upon the Town's approval of the RPV development proposal. In the event that proposed residential development does not occur, and anticipated wildlife impacts do not result, the Developer shall not be required to implement the respective component(s) of this Plan, as presently contained herein. In that event, this Plan will be revised to address impacts resulting from the subsequent development plan. It is also the intention of the Developer that with the full proposed residential development on this property, this Wildlife Mitigation and Enhancement Plan shall run with the land.

5.0 EXECUTIVE SUMMARY

Red Peak Village supports a low to high diversity of wildlife even though it is contiguous with the Town of Silverthorne, bounded on three sides by existing residential developments, and relatively isolated from large

tracts of undeveloped native habitat. While the property is dominated by a formerly hay meadow and its relatively low wildlife values, it also contains two riparian corridors and an aspen/ lodgepole pine stand where wildlife diversity is relatively high.

The conceptual development plan would avoid virtually all of the higher value native habitats and cluster and concentrate development in the non-native hay meadows to leave greater areas of open space for continued wildlife use. The more important native wildlife habitats on the property have been largely avoided by development and would be preserved largely intact as open space. Such a development approach would maintain the vast majority of wildlife values associated with the native habitats on the property. The relatively low wildlife values associated with the former hay meadow will be virtually eliminated as this habitat is transformed into a higher density residential development, similar to developments contiguous to the north, southeast, and east. While the wildlife values associated with the hayfield will be lost, from a broader land use perspective, it is better for wildlife if development is located in areas, such as Red Peak Village, that are already impacted by development, within existing zones of influence (i.e., developments to the north, southeast, and east), and close to existing communities and infrastructure, rather than locating less clustered developments further from Town, in more isolated, undeveloped patches of native habitat.

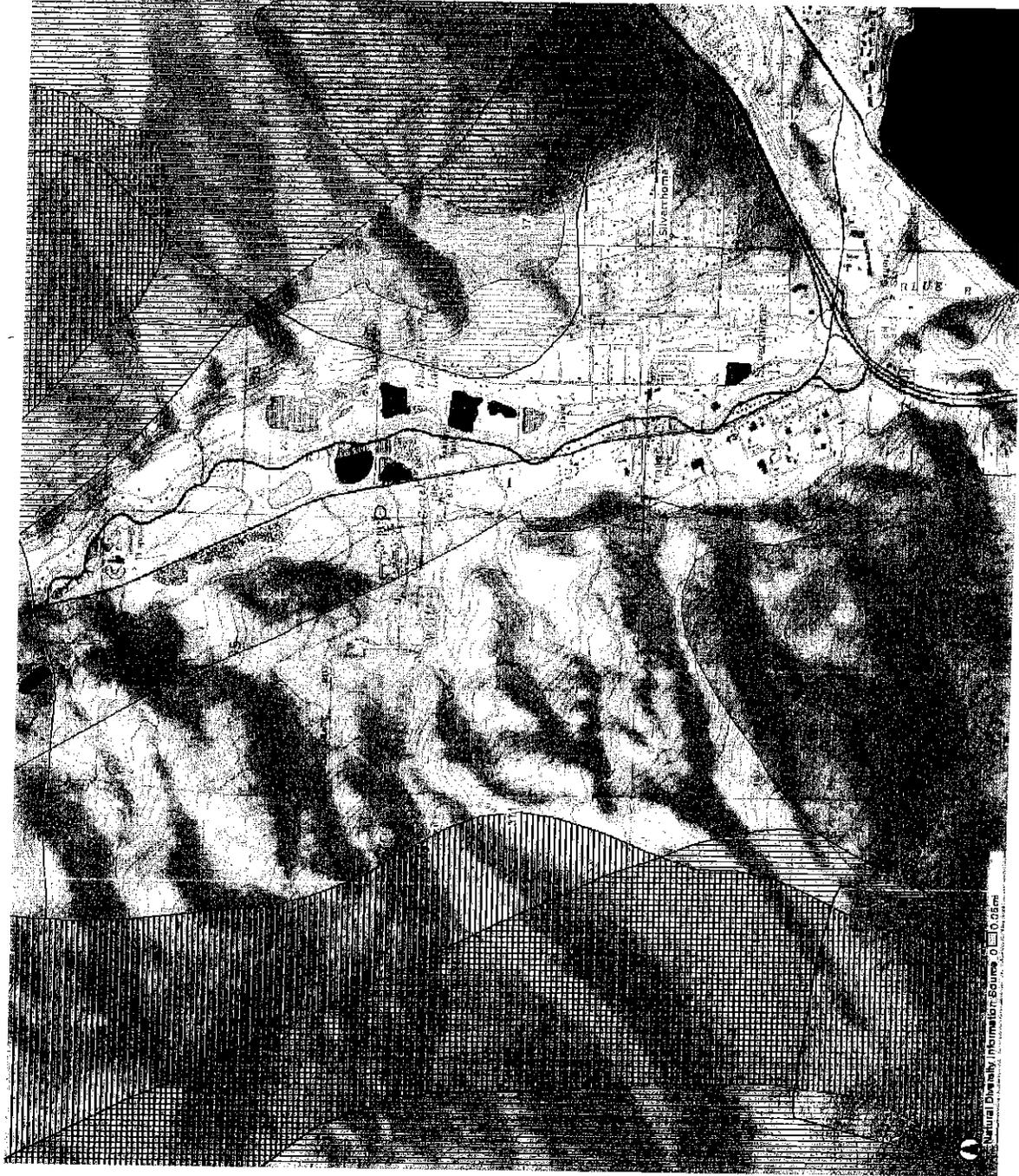
Many potential wildlife conflicts associated with the development and habitation of Red Peak Village can be further avoided and minimized via the implementation of a Wildlife Mitigation and Enhancement Plan, developed through consultation with the Colorado Division of Wildlife. Such a plan, now in draft form, not only identifies responsibilities of the developers and any homeowners association(s) that may form, but it will also educate homeowners about wildlife-oriented considerations incorporated into the development's design and covenants that residents are required to implement to minimize wildlife conflicts. Resident education and the implementation of recommended measures will be important on Red Peak Village because of presently high wildlife values in retained native habitats. In addition to provisions related to issues addressed in this document, the Mitigation Plan also includes measures associated with, but not limited to, dogs, pet control/ enforcement, bears and garbage, nuisance wildlife, fencing, landscaping, road-killed wildlife, Best Management Practices, educating residents about not feeding wildlife, and a host of other issues.

6.0 LITERATURE CITED

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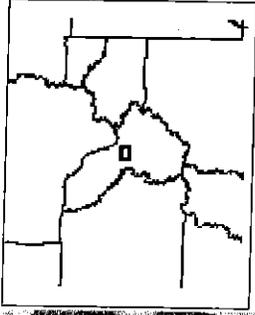


Legend

- American Elk Highway Crossings
- American Elk Migration Corridors
- American Elk Production Areas
- American Elk Severe Winter Range
- American Elk Summer Concentration
- American Elk Summer Range
- American Elk Winter Concentration
- American Elk Winter Range
- Game Management Units
- County Boundary
- Cities
- Cities
- Forest Roads
- Paved
- Gravel
- Bladed
- 4WD
- City Boundaries
- Lakes
- Perennial
- Intermittent
- 1:24K DRG Image

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RPV Bald Eagle



Legend

-  Bald Eagle Winter Concentration
-  Bald Eagle Winter Forage
-  Bald Eagle Winter Range
-  Lakes
-  Perennial
-  Intermittent
-  1:24K DRG Image

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