
**COLORADO DIVISION OF WILDLIFE
WILDLIFE DEVELOPMENT STANDARDS & GUIDELINES
SOUTHEAST REGIONAL SERVICE CENTER, COLORADO**



The Colorado Division of Wildlife, Southeast Region has developed the following general wildlife development standards and guidelines for use when attempting to mitigate impacts to wildlife from land use development proposals. These guidelines can be used in conjunction with subdivision proposals, planned unit development proposals, general development proposals, proposed changes in use, special use permits, mining applications, and a host of other land use activities requiring either a local or statewide permit.

These guidelines were developed in response to numerous requests over the years by local planners, developers, consultants, and Division personnel asking for a comprehensive list or a recipe of mitigation measures recommended by the Division of Wildlife for various species of interest. Although no such recipe truly exists, these general guidelines serve as a point of departure for more detailed and site specific dialogue between developers and local Division of Wildlife personnel. These guidelines should be viewed as a work-in-progress, one that undergoes continual change as new information, perspectives, and experiences becomes available.

It is recommended, although not necessary, that the Wildlife Development Standards and Guidelines be used in conjunction with the Division of Wildlife's composite map of Significant Wildlife Habitat and Potential Wildlife Impact Worksheet developed for use by interested counties within the Southeast Regional Service Center in their land use planning processes. The use of these materials in an integrated fashion, and in consultation with Division of Wildlife personnel, provides for the most comprehensive and systematic identification and mitigation of potential impacts to the wildlife resource from development proposals.

The Colorado Division of Wildlife desires to work with developers in a proactive fashion. This philosophy has guided the Division's involvement in land use planning activities for over 25 years. It is our belief that the development and use of wildlife distribution maps, composite maps of Significant Wildlife Habitat, and associated interpretive materials including the Potential Wildlife Impact Worksheets, and the Wildlife Development Standards and Guidelines facilitates constructive dialogue between Division of Wildlife personnel and developers early in the planning process when the greatest flexibility and potential for influencing change that will benefit the wildlife resource exists.

**Colorado Division of Wildlife - Southeast Region
Wildlife Development Standards & Guidelines**

Wildlife Activity Area	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Winter Concentration Area					X	X							X	
<u>Elk:</u>														
Overall Range	X	X		X	X									
Production Area	X	X		X	X			X	X	X	X	X		
Winter Range	X	X		X	X		X	X						
Severe Winter Range	X	X		X	X		X	X						
Winter Concentration Area	X	X		X	X		X	X	X	X		X		
Migration Routes	X	X		X	X		X	X	X		X	X		
Migration Corridors	X	X		X	X		X	X	X		X	X		
Summer Range	X	X		X	X									
Summer Concentration Area	X	X		X	X		X	X	X	X				
Resident Population Area	X	X		X	X			X						
<u>Golden Eagle:</u>														
Active Nest											X			
Inactive Nest											X			
<u>Great Blue Heron</u>														
Foraging Area						X					X	X		X
Production Area						X					X	X		X
<u>Least Tern:</u>														
Nest Site		X			X	X				X	X	X		
Production Area		X			X	X				X	X	X	X	X
Foraging Area						X								
<u>Lesser Prairie Chicken:</u>														
Overall Range					X									
Active Lek					X					X	X			
Inactive Lek					X					X	X			
Production Area					X					X				
<u>Merriam's Turkey</u>														
Overall Range					X									
Concentration Area					X			X						
Roost Site					X			X	X		X			
<u>Moose:</u>														
Overall Range		X			X	X								
Winter Range		X			X	X		X						
Summer Range		X			X	X		X						
Concentration Area	X	X		X	X	X	X	X			X			

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Wildlife Activity Area	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<u>Mountain Goat:</u>														
Overall Range		X		X	X									
Summer Range		X		X	X									
Production Area		X		X	X					X	X			
Mineral Lick		X		X	X						X			
Migration Pattern	X	X		X	X						X			
<u>Mountain Lion:</u>														
Overall Range		X		X										
Wildlife Conflict Area		X		X										
<u>Mule Deer:</u>														
Overall Range	X	X		X	X									
Resident Population Area	X	X		X	X		X	X	X	X				
Winter Range	X	X		X	X		X	X						
Severe Winter Range	X	X		X	X		X	X						
Concentration Area	X	X		X	X		X	X	X	X		X		
Migration Routes	X	X		X	X		X	X	X		X	X		
Migration Corridors	X	X		X	X		X	X	X		X	X		
Summer Range	X	X		X	X									
<u>Osprey:</u>														
Foraging Area					X	X					X	X		X
Nesting Area											X			
<u>Peregrine Falcon</u>														
Nesting Area											X			
Foraging Area					X									
<u>Pheasant:</u>														
Overall Range					X									
Concentration Area					X	X								
<u>Piping Plover:</u>														
Nest Site		X			X	X				X	X	X		
Production Area		X			X	X				X	X	X	X	X
Foraging Area						X								
<u>Pronghorn:</u>														
Overall Range	X	X			X									
Summer Range	X	X			X									
Resident Population Area	X	X			X		X	X	X					

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Wildlife Development Standards & Guidelines**

Wildlife Activity Area	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Winter Range	X	X			X		X	X						
Severe Winter Range	X	X			X		X	X						
Concentration Area	X	X			X		X	X	X		X	X		
Migration Routes	X	X			X		X	X	X		X	X		
Migration Corridors	X	X			X		X	X	X					
<u>Ptarmigan:</u>														
Overall Range					X	X								
Winter Concentration Area					X	X								
<u>Rio Grande Chub:</u>														
Overall Range						X							X	X
<u>Rio Grande Sucker:</u>														
Overall Range						X							X	X
<u>Rio Grande Cutthroat Trout:</u>														
Overall Range						X							X	X
<u>Rio Grande Turkey:</u>														
Overall Range				X	X	X								
Concentration Area				X	X	X		X			X			
Roost Site				X	X	X		X			X			
<u>Sage Grouse:</u>														
Overall Range					X									
Active Lek					X			X		X	X			
Production Area					X			X		X	X	X		
Brood Rearing Area					X			X		X	X			
Winter Range					X									
Severe Winter Range					X			X		X	X	X		
<u>Shorebirds:</u>														
Foraging Area					X	X						X		X
Production Area					X	X					X			
<u>Townsend's Big-Eared Bat:</u>														
Roost Site					X						X			
<u>Western Boreal Toad:</u>														
Overall Range					X									X
Production Area					X	X					X	X		X
Field Sighting						X					X			

**Colorado Division of Wildlife - Southeast Region
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Wildlife Activity Area	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<u>White Pelican:</u>														
Foraging Area						X						X		X
Production Area						X				X	X			
<u>White-Tailed Deer:</u>														
Overall Range		X		X	X									
Winter Range		X		X	X	X								
Concentration Area		X		X	X	X								

- A Fencing Guidelines
- B Pets
- C Nuisance Wildlife Preventive Measures
- D Feeding of Wildlife
- E Maintenance/Enhancement of Natural Vegetation
- F Riparian & Wetland Habitat Protection/Buffer Zone
- G Minimum Lot Size
- H Clustered Development
- I Building Envelope
- J Seasonal Deferment Period
- K Disturbance Buffer Zone
- L Open Space Designation
- M Minimum Stream Flow/Minimum Lake Level Measures
- N Water Quality/Non-Point Discharge

WILDLIFE DEVELOPMENT STANDARDS & GUIDELINES

A. Fencing Guidelines

1. Use of privacy fencing, chain link fencing, and other restrictive access fencing should be restricted to the immediate area surrounding the domicile or within the designated building envelope and should not be used as a method to designate boundaries of larger lot sizes.

2. Fencing outside the immediate building envelope or area surrounding the domicile should be of smooth wire construction with a maximum top height of 42" within known range of elk and mule deer and a bottom wire at least 18" above the ground within the range of pronghorn antelope. Construction of woven wire fences should be prohibited unless a waiver is granted.

B. Pets

1. Dogs should be kept under the direct physical control of their owner and otherwise should be kept within a kennel or fenced yard that effectively restricts their egress. Kennels must be constructed with a top in known mountain lion range.
2. Cats must be restricted to the domicile unless a bell is worn on the collar to alert nesting birds to their presence.
3. Dogs must be leashed or otherwise kept under the direct physical control of their owner when hiking, camping, or otherwise using public lands unless engaged in lawful small game hunting.

C. Nuisance Wildlife Preventive Measures

1. Pet food should be kept within the domicile, garage, or similar substantive storage facility and should be provided to pets outside for only brief periods to prevent serving as an attractive nuisance to bears, raccoons, skunks, and other wildlife species. Pet food should never be left outside for extended periods of time.
2. Trash should be kept in bear-proof containers, in a garage, or similar storage facility until the day of pick-up/disposal to prevent serving as an attractive nuisance to bears, raccoons, skunks, dogs, and other wildlife and domestic species. New communities should incorporate the use of bear-proof dumpsters and community collection points and should strongly discourage storage and disposal of trash at individual home sites.
3. Barbeques should be stored in a garage or similar substantive storage facility when not in use and should not be kept outside on decks or patios.

D. Feeding of Wildlife

1. Feeding of Big Game species is strictly prohibited and unlawful. This includes putting out salt blocks, hay, grain, and other items for the express purpose of attracting big game. This in no way prohibits the distribution of like materials for the care and feeding of livestock but this should be done in a manner that minimizes the attraction for wildlife.
2. Use of bird feeders, suet feeders, and hummingbird feeders is discouraged. However, if feeders are used, they should be placed so they are inaccessible to bears, raccoons, skunks and other wildlife species that might cause damage or threaten human safety.

E. Maintenance/Enhancement of Natural Vegetation

1. Natural vegetation should not be altered and should be maintained outside of the clear area required adjacent to the domicile for purposes of serving as a fire break.
2. Cutting, thinning, and clearing of trees and shrubs should be done only in accordance with an approved forest management plan in consultation with the Colorado State Forest Service and for purposes of minimizing threats from fire and pests.
3. Native herbaceous vegetation (grasses and forbs) should be maintained and mowing strongly discouraged except as required around the immediate vicinity of the domicile and as necessary to control noxious weeds.
4. Control of noxious weeds is the responsibility of the landowner. Noxious weeds shall be actively controlled using methods approved by the County, Natural Resource Conservation Service, or State Forest Service (mowing, spraying, etc.). Species-specific control measures should be used when pesticides are felt necessary for control of noxious weeds.
5. Planting of trees and shrubs not attractive to native ungulates as forage is strongly encouraged. Planting of trees and shrubs that are attractive to native ungulates should incorporate the use of materials that will prevent access and damage (fencing, tree guards, trunk guards, etc.)
6. Planting of trees and shrubs attractive to upland game species is encouraged. Selection of appropriate species, placement, and proper configuration should be done in consultation with local Division of Wildlife District Wildlife Managers or Natural Resource Conservation Service Staff.
7. Reseeding of herbaceous vegetation over large areas should encourage the use of native warm and cool season species. The appropriate seed mix and method for planting varies by geographic region within Colorado and should be determined in consultation with the local Division of Wildlife District Wildlife Manager and Natural Resource Conservation Service Staff.

F. Riparian & Wetland Habitat Protection/Buffer Zones

1. Wetland areas should be buffered a minimum of 20 meters from the designated outer edge and development, surface disturbance, domicile and out-building placement, and unregulated livestock access strongly discouraged. Additionally, hydrologic flows that support wetlands should

remain undisturbed and not impeded.

2. When not specifically mapped, stream corridors should be buffered in accordance with the following standards to protect associated riparian habitat and development, surface disturbance, placement of domicile and out-buildings, and unregulated livestock access within this zone is strongly discouraged. The intent of these proposed stream corridor buffers is to protect the riparian habitat corridor and these general guidelines attempt to accomplish that objective, however, local conditions may support either a larger or smaller riparian habitat corridor than those outlined below. Site specific information, where available, should be used and appropriate measures taken, as outlined in F.1 above, to ensure protection of these valuable wildlife habitats.
 - a) First Order Streams: 20 meter buffer either side of centerline.
 - b) Second Order Streams: 30 meter buffer either side of centerline.
 - c) Third Order Streams: 40 meter buffer either side of centerline.
 - d) Fourth Order Streams: 50 meter buffer either side of centerline.
 - e) Fifth Order Streams: 60 meter buffer either side of centerline.
 - f) Sixth Order Streams: 80 meter buffer either side of centerline.
 - g) Seventh Order Streams: 100 meter buffer either side of centerline.

G. Minimum Lot Size

1. Minimum lot sizes of 30 - 35 acres within elk, deer, bighorn sheep, and antelope winter range, severe winter range, and winter concentration areas, and black bear spring and fall concentration areas are recommended to maintain viable populations and adequate stands of native habitat and hiding cover, and minimize habitat fragmentation and disturbance.
2. Minimum lot sizes of 15-20 acres within known ranges of Merriam's turkey concentration areas, bobcat, and mountain lion are recommended to maintain viable populations and adequate stands of native habitat, and minimize habitat fragmentation.
3. Minimum lot sizes of 5 acres within known ranges of Abert's squirrel and blue grouse are recommended to maintain viable populations, reduce habitat fragmentation, and ensure proper stands of native vegetation.

H. Clustered Development

1. Clustered development in combination with minimum lot sizes and use of building envelopes is strongly encouraged within known big game production areas, migration corridors, and critical winter range. The

remaining undeveloped lands shall be kept intact with native vegetation to prevent habitat fragmentation and maintain migration corridors, production area security, visual barriers, etc.

I. Building Envelopes

1. Use of building envelopes in combination with minimum lot sizes is strongly recommended within known big game production areas, migration routes, and critical winter range. Building envelopes shall be placed, surveyed, and staked prior to final platting and fully disclosed to prospective buyers.

J. Seasonal Deferment Period

1. Seasonal construction and disturbance deferment periods should be incorporated for the following species and activity areas:
 - a) Elk Calving Areas: May 15 - June 30
 - b) Bald Eagle
 - Roost Sites: November 15 - March 15.
 - Nest Site: November 15 - July 31
 - c) Bighorn Sheep Lambing Area: May 15 - June 30.
 - d) Peregrine Falcon Nest Site: March 15 - July 31
 - e) Golden Eagle Nest Site: February 1 - July 15
 - f) Osprey Nest Site: April 1 - August 31
 - g) Burrowing Owl: April 1 - July 31
 - h) Goshawk: March 15 - August 31

K. Disturbance Buffer Zone

1. The following wildlife activity areas should be buffered from disturbance and construction activities, placement of domicile, and natural vegetation maintained:
 - a) Raptor Nest Sites:
 - Bald Eagle - 800 meters (11/15 - 07/31)
 - Burrowing Owl - 100 meters (04/01 - 07/31)
 - Golden Eagle - 800 meters (02/01 - 07/15)
 - Ferruginous Hawk - 800 meters (02/01 - 07/15)
 - Red-Tailed Hawk - 500 meters (03/01 - 07/15)
 - Swainson's Hawk - 400 meters (04/01 - 07/15)
 - Goshawk - 800 meters (03/01 - 09/15)
 - Osprey - 400 meters (04/01 - 08/31)
 - Peregrine Falcon - 800 meters (03/15 - 07/31)
 - Prairie Falcon - 800 meters
 - b) Merriam's Turkey Roost Sites - 250 meters

- c) Bald Eagle:
 - Winter Concentration Areas - 250 meters
 - Roost Sites - 500 to 800 meters (11/15 – 03/15)
- d) Elk:
 - Production Area - 500 meters
 - Concentration Areas - 500 meters
 - Migration Corridors - 500 meters
- e) Brazilian Free-Tailed Bat Roost Site – 250 meters
- f) Townsend’s Big-Eared Bat Roost Site - 250 meters
- g) White Pelican Nesting Area - 100 meters
- h) Least Tern/Piping Plover Nesting Area - 100 meters
- i) Boreal Toad
 - Field Sighting – 200 meters
 - Production Area – 200 meters

L. Open Space Designation

1. The designated wildlife activity areas should be considered viable candidates for open space designation if such is required of the developer on larger subdivisions and PUD development proposals.
2. The designated wildlife activity areas should be considered viable candidates for open space designation through fee title acquisition using public/private funds, conservation easements, transfer of development rights, and other land protection strategies.

M. Minimum Stream Flows/Minimum Lake Level Protections

1. Designated minimum stream flows are highly desirable, if possible, and should be considered, especially as part of larger development proposals to ensure that aquatic habitats are not de-watered during all or any portion of the year. If developments are proposed that propose use of surface water then consultation with the local Division of Wildlife representative and water district representative should be strongly encouraged or required to ensure protection for aquatic species.
2. Designated minimum conservation pools on reservoirs and lakes that provide important wildlife habitat or wildlife recreation opportunities.

N. Water Quality/Non-Point Discharge

1. Maintenance of water quality standards is highly recommended. Developers should minimize discharge of pollutants and sediments into waterways that might adversely affect species dependent on aquatic habitats. Larger development proposals should strongly consider the use of central water treatment facilities rather than individual septic systems.