



COLORADO

Parks and Wildlife

Department of Natural Resources

Area 14, Southeast Region
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June 05, 2017

El Paso County: Development Services Department
ATTN: Kari Parsons, Project Manager
2880 International Circle Suite 110
Colorado Springs, CO
Re: SP-17-002 - Meadowbrook Crossing Preliminary Plan

Dear Ms. Parsons:

Thank you for the opportunity to comment on the Meadowbrook Crossing - Preliminary Plan. Colorado Parks and Wildlife (CPW) has reviewed the project materials and visited the site and offers the following comments on this residential development.

The vegetation is comprised of short grass prairie species. This habitat type will sustain numerous wildlife species including antelope, deer, coyote, fox, raptors, songbirds and numerous small mammals.

Construction even near riparian habitats can have downstream effects, such as increased sedimentation and erosion. If bank stabilization is not completely necessary in an area, we recommend leaving it in its natural state. Disturbance to soil can lead to introduction of invasive plant species and CPW recommends the development and implementation of a noxious weed control plan for the site. Care should be taken to avoid the spread of noxious weeds, and all construction equipment should be cleaned prior to leaving the site. CPW recommends that in places where vegetation is removed, a native seed blend is used that matches the surrounding vegetation types as accurately as possible. All disturbed soils should be monitored for noxious weeds and noxious weeds should be actively controlled until native plant re-vegetation and reclamation is achieved. All landscaping in the developed area should be comprised of native species, and CPW recommends against using non-native plants or noxious weeds.

Some care should be taken with species choice to prevent the attraction of unwanted wildlife into the development area. Information on plant species consumption by specific wildlife species is available through CPW. Regarding the open space in the plan, using native species with high food and cover values in an open space area large enough to maintain a viable movement corridor, and native plants with little food and cover value in the developed area, wildlife will be concentrated in areas that minimize conflict and optimize wildlife watching



opportunities. Native species provide an aesthetically pleasing landscape that requires little maintenance and are frequently more drought-tolerant than non-native species.

There is suitable habitat for nesting raptors and migratory birds within the project area. CPW recommends the use of preconstruction surveys, as well as continuation of those surveys during construction, to identify raptor nests within the project area and implement appropriate restrictions. CPW recommends adherence to the recommended buffer distances and timing stipulations identified in the attached document “Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors”. Removal or relocation of any active raptor nests or migratory bird nests will require consultation with CPW and US Fish and Wildlife Service prior to any disturbance. For raptors, an active nest is any nest that is frequented or occupied by a raptor during the breeding season or which has been active in any of the five previous breeding seasons. Many raptors use alternate nests in various years; therefore, a nest may be active even if it is not occupied in a given year. Both active and potential nest sites, winter night roosts should be considered when evaluating disturbance during construction.

Prairie dog colony locations may be present within the project area and CPW recommends surveys to determine the presence/absence of burrowing owls (*Athene cunicularia*), a state threatened bird. If development or construction in prairie dog towns occurs from February 1 to October 31, the presence of burrowing owls and whether they are actively nesting should be determined. If nesting burrowing owls are present, no human encroachment should occur within 150 ft of nesting burrows from March 15 to October 31. If burrowing owls merely occupy the site, it is recommended that earthmoving and other disturbance activities be delayed until late fall after they have migrated.

CPW does have some concerns about the continued channelization of Sand Creek in this area. The reports mentions the preservation of Sand Creek within the project area but also states the creek will undergo channel alignment to route it through the property and contain the 100 year flow to open additional land currently within the floodplan to development. The LOMR submitted for the project includes significant changes to stream banks, rerouting of the stream bed, drop locations and grouted boulders. The applicant also identifies areas of vegetation and existing trees on the northeast of the site but acknowledges that channelization project will be prioritized over retaining those trees.

Reduction in sinuosity (the way a stream channel bends) can cause negative impacts to the riparian wildlife habitat associated with this stream. As streams are straightened, the slope of the channel tends to steepen, thus increasing water flows and sedimentation. Riparian areas and flood plains slow flood waters, provide habitat for wildlife, and decreases potential damage to any structures that end up being built near the creek channel. A stream with higher sinuosity allows for willows and other plants to establish along the banks and create a complex root system, thus strengthening the integrity of the stream channel. Along the East Fork of Sand Creek the channel has undergone significant changes and much of that sinuosity has been lost. The channel is perfectly “U” shaped which further increases water velocity during high flow/flood events. In addition, large acreages of short grass prairie have been

developed creating a large amount of impervious surface. This increase in impervious surface combined with the new straightened and channelized nature of the creek will increase erosion, siltation and water velocity during heavy rain events which could have a negative impact on the surrounding environment as well as manmade structures. A flow pattern dominated by flood pulse events that is sharply amplified by the already constructed developments both up stream and down from the development's future location. CPW is concerned about the possible addition to the amplitude of flows that could result from the impacts listed above.

CPW recommends maintaining the stream channel in its natural sinuosity and maintaining connection to the riparian/flood plain. We recommend planting cottonwood trees and other riparian vegetation to offset erosion impacts and to mitigate for habitat loss. CPW recommends not using grouted rip-rap in the straight courses of the stream channel, as this tends to further increase stream flow rates. As mentioned above, this can have impacts to riparian habitats downstream. One alternative is to create random breaks and contoured grooves in the stream bed itself, thereby reducing and deflecting high stream flows. A design that creating a narrow, low water level channel along the bottom is preferable to a large, flat stream bed with rip-rap. If these stream improvements cannot be made in this project area, CPW recommends habitat improvements be made further downstream, in a less disturbed site. CPW recommends that storm water detention ponds be constructed deep enough to hold runoff from a sizable storm event so that flows need not be conveyed to Sand Creek. If that is not possible then we recommend that these flows are controlled and slowly released or are conveyed off-site. Both release into Sand Creek and off-site conveyance are included in the application and clarification of the final plans should be provided by the applicant.

Fences can cause many problems for wildlife, including death, entanglements, and barriers to movements. CPW recommends the developers consult our publication *Hanophy, Wendy* "Fencing with Wildlife in mind." *CPW.state.co.us. 2009* when considering the design of fences within the development. The publication is available on our website at <http://cpw.state.co.us/Documents/LandWater/PrivateLandPrograms/FencingWithWildlifeInMind.pdf> . The use of privacy fencing, chain link fencing, and other exclusionary fencing should be at least 6 feet high and should be restricted to the immediate area surrounding the buildings or within the designated building envelope and should not be used as a method to designate boundaries of larger lot sizes (> 1 acre). Fencing outside the immediate building envelope or area surrounding the buildings on larger lots within the known range of elk, deer and pronghorn should be a maximum top height of 42" with at least 12" spacing between the top two wires or rails and a bottom wire or rail at least 16" above the ground to allow passage of juvenile animals and pronghorn antelope. It is also recommended that the top and bottom wires be a twisted barbless type or smooth wire or rail construction. Construction of ornamental wrought iron fencing with closely spaced vertical bars (<12") and sharp projections extending beyond the top horizontal bar should be strongly discouraged in areas where deer, elk, and black bear are known to occur. This type of fencing typically ensnares deer and elk by the hips when trying to squeeze through and impales animals attempting to

go over the top. It should be noted that it is very distressing to find wildlife in or impaled on fences.

Due to the potential presence of black bears in the Development, CPW recommends several measures to reduce the potential for human bear conflicts. First, we recommend that the owner invests in bear-proof trash containers. Trash containers should be stored in the garage or in a solid locked storage shed until the morning of trash collection during those months when bears are most active (April - November). Another possible alternative would be the use of a centralized and securely fenced trash collection site with the use of bear proof dumpsters what employees, customers, and the trash service provider would have access to. This would eliminate the need for individual trash cans. Second, residents and food vendors should also keep their barbecues and any food locked away in the garage or a secure building. Finally, we would recommend that the use of bird feeders and hummingbird feeders be discouraged, during the months mentioned above, since they also attract black bears. However, if feeders are used, they should be placed so they are inaccessible to black bears, raccoons, skunks, deer and other wildlife species that might cause damage or threaten human safety. A copy of a brochure entitled, "living with wildlife in bear country" is available for reference upon request from CPW.

Conflicts may arise between homeowners and wildlife. The following is a list of general recommendations that CPW would also like to be taken into consideration in order to avoid nuisance conflicts with wildlife. Coyotes, foxes, cottontail rabbits, and raccoons are several species that have adapted well to living within city limits. Open space, as well as developed areas, may become suitable habitat for many wildlife species. Coyote sightings are common within the city and few interactions are negative for the coyote. While coyotes will not usually approach people, in places where they see us often, they become less fearful. Coyotes feed near homes, yards, trails, and roads in order to survive in urban areas. Homeowners can do their part by *not* inviting wildlife into their yard. Many times these conditions can be enforced through the local Homeowner's Association or through covenants.

1. Pets should not be allowed to roam free and fences should be installed to decrease or eliminate this problem. Dogs and cats chase or prey on various wildlife species. One benefit to keeping animals under control is that they are less likely to bother other people, be in roadways or become prey for coyotes, foxes or owls.
2. Trash should be kept indoors until the morning of trash pickup. CPW recommends using bear resistant trash containers. Skunks, raccoons, bears, and neighborhood dogs are attracted to garbage and do become habituated.
3. Feeding of all wildlife should be prohibited, with the exception of songbirds. The use of bird feeders, suet feeders, and hummingbird feeders are discouraged. However, if feeders are used, they should be placed so they are inaccessible to raccoons or skunks and other wildlife species that might cause damage or threaten human safety. It is illegal to feed big game including deer, elk, antelope, moose, bear and lion as well as coyote and fox.

4. Pets should be fed inside or if pets are fed outside, feeding should occur only for a specified period of time and food bowls returned afterwards to a secure site for storage. Pet food left outside attracts various wildlife species which in turn attracts predators.
5. When landscaping lots, it is strongly recommended that native vegetation be used that wildlife is less likely to be attracted to. 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. Fences, other than those around the immediate domicile and serving to protect landscaped trees and shrubs, should be designed so as not to impair wildlife movements. Ornamental fences with sharp vertical points or projections extending beyond the top rail should be strongly discouraged. Wildlife friendly design recommendations can be provided upon request.

CPW appreciates being given the opportunity to comment. Please Feel free to contact District Wildlife Manager Benjamin Meier at 719-227-5231 or benjamin.meier@state.co.us should you have any questions or require additional information.

Sincerely,



Frank McGee
Area Wildlife Manager

Cc: Ben Meier DWM
SE Regional File
Area 14 File