

## SECTION II. RECOMMENDATIONS FOR SUBDIVISION DESIGN STANDARDS

### ❖ Recommendation #7

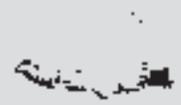
- **Local governments:** Consider the standards recommended below and the information contained in Appendix C: Rationale for Subdivision Design Recommendations, with Pertinent Subdivision References, in updating local subdivision regulations, conducting subdivision application reviews, requiring reasonable mitigation measures, and preparing findings of fact to support subdivision decisions.
- **Subdividers and project teams:** Use the recommended standards and Appendix C as guidance in both siting and designing proposed projects.
- **FWP field biologists:** Use the following recommendations and Appendix C in working with subdividers and providing input to subdivision administrators and local governing bodies on subdivision applications. As necessary based on site-specific conditions, adapt these recommended design standards to suit particular situations.

**Rationale for Recommendation #7:** For FWP biologists, these recommended standards and Appendix C promote timely input into the local subdivision process and foster a consistent application of habitat conservation and fish/wildlife management principles by the department. For local governments, these recommendations offer a “menu” of science-based design standards from which they can select, taking into account local conditions, values, and the habitats and species found in their area. Use of such standards, along with Appendix C, may help local governments consider subdivision impacts on “wildlife and wildlife habitat” more efficiently and effectively. For subdividers and their project teams, the guidance in this section and in Appendix C will help them create developments that coexist in harmony with fish and wildlife.



## A. Water Bodies

(see Appendix C.1 for supporting documentation)



### (1) List of Pertinent Definitions (see Section III for actual definitions)

Associated uplands, braided river, building setback, channel migration zone, cropland, development, floodplain, intermittent stream, migratory game birds, ordinary high-water mark, other water bodies, perennial stream, qualified wetland professional, reservoir, riparian area, river, shorebirds, stream, subdivision design features, surface water, vegetated buffer, water body, water-dependent use, wetland, wetland complex, and wildlife.

### (2) Objectives

- ▶ Protect water quality, stream stability, natural stream processes, aquatic habitat, and fish and wildlife habitat by conserving water bodies, their associated riparian areas, and, in some situations, associated uplands.
- ▶ Retain existing wetland and riparian areas by avoiding or minimizing human disturbances associated with developments such as buildings, roads, docks, and other structures.
- ▶ Maintain the natural hydrological and ecological functions of wetlands and riparian areas by minimizing fragmentation and degradation of these sites.
- ▶ Maximize the ability for wetlands, riparian areas, and, in some situations, associated uplands, to function as fish and wildlife habitat.

### (3) Applicability

These standards pertain to any subdivision development proposed on property that contains or adjoins a water body and/or its associated riparian area.<sup>3</sup>

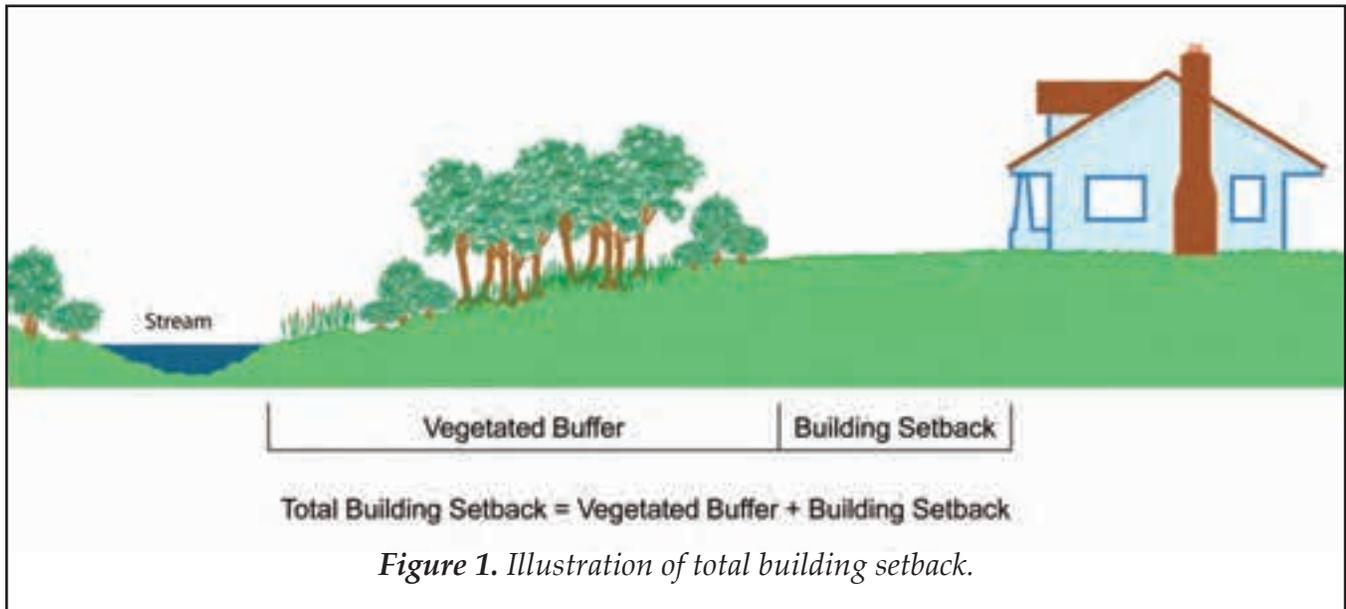
### (4) Recommended Design Standards

- a. Apply the following vegetated buffers and building setbacks (see Figure 1):
  - **Rivers:** A minimum of 250 feet of vegetated buffer plus 50 additional feet of building setback. Total building setback equals at least 300 feet from each side of a river.
  - **Perennial Streams:** A minimum of 150 feet of vegetated buffer plus 50 additional feet of building setback. Total building setback equals at least 200 feet from each side of a perennial stream.

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<sup>3</sup> These water body standards offer guidance beyond that provided by other types of water-related standards often implemented by local governments (e.g., water quality, lakeshore protection, floodplain protection, and stormwater drainage standards). These other standards can also help maintain healthy fish and wildlife habitat (e.g., if, as a result, development does not occur in the 100-year floodplain, and stormwater drainage facilities are designed and installed to minimize impacts on water quality and maintain, as much as possible, pre-development runoff conditions and hydrology).

- **Other Water Bodies:** A minimum of 100 feet of vegetated buffer plus 30 additional feet of building setback. Total building setback equals at least 130 feet from the boundary of a wetland or pond, or the ordinary high-water mark of an intermittent stream, lake, or reservoir.



- b. Measure vegetated buffer and building setback distances from all water bodies on a horizontal plane, as follows:
  - Rivers, streams, lakes, reservoirs: Measure from the ordinary high-water mark. For braided rivers, measure from the ordinary high-water mark of the outermost braid that is nearest to the proposed structure.
  - Wetlands (including ponds): Measure from the wetland's defined boundary. The outer edge of a wetland marks the boundary between the wetland and adjacent upland areas.
- c. If the riparian area associated with a water body extends beyond the pertinent vegetated buffer outlined above, extend the vegetated buffer to encompass all of the riparian area.
- d. If a channel migration zone (CMZ) study is completed for a river or stream for a time frame of 100 years or longer, use the CMZ maps as a guide for recommending that the total building setback be extended in order to locate development outside of the CMZ. Where the CMZ is wide and encompasses cropland, the vegetated buffer may be reduced below the minimum, but the building setback may need to increase in order to maintain an effective total building setback.
- e. For wetlands, the subdivider is advised to follow one of two alternative design approaches, depending on the distance between wetlands and proposed subdivision design features:
  - Recommended Wetlands Approach #1. If any proposed subdivision design features are located 150 feet or less from a wetland, the subdivider retains a qualified wetland professional to determine the wetland's boundary in accordance with the 1987 U.S. Army

Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), or the most current wetlands delineation manual sanctioned by the Army Corps of Engineers–Omaha District. Although the total building setback standard is a minimum of 130 feet for wetlands, this slightly larger area (150 feet) warrants professional evaluation to ensure that wetlands are not impacted by misidentified boundaries. Because wetland boundaries can be difficult to determine accurately, this standard helps ensure that the total building setback for wetlands is not encroached upon. The subdivider then includes the wetland delineation information in the subdivision application.

**OR**

- Recommended Wetlands Approach #2. If all proposed subdivision design features are located 150 feet or more from any wetlands, the subdivider demonstrates in the subdivision application that the subdivision design features will not encroach on the total building setback recommended for wetlands.
- f. For wetlands and wetland complexes that are important for migrating game birds and/or shorebirds, biologists may recommend that the total building setback be extended to encompass specific cropland areas adjacent to the wetlands that are consistently and seasonally used by large numbers or a high diversity of these species.
- g. Within the total building setback:
- Avoid the placement of homesites and other subdivision improvements (except roads and bridge abutments at river or stream crossings, designed and constructed in accordance with Natural Streambed and Land Preservation Act (310) or Stream Protection Act (124) permit requirements).
  - Where disturbance does occur, incorporate effective measures to limit erosion and sedimentation.
- h. Within the vegetated buffer: Avoid disturbing native vegetation, except as needed to control noxious weeds (with herbicides approved for use in riparian environments), reduce accumulated fuels related to fire protection, erect fencing, remove individual trees that pose a threat to public safety, or provide the types of access described in subsections j. and k. below.
- i. Within the building setback: Lawns can be planted, and native vegetation can be removed or otherwise disturbed.
- j. Water-dependent uses may occur within the total building setback, as long as the impacts of design features are minimized to the greatest extent possible. Specifically, this applies to:
- Water-dependent agricultural facilities (e.g., pumps, diversion structures); and
  - Water-dependent recreational facilities (e.g., nonmotorized trails, docks, boat ramps) that do not impact vegetated buffers for sensitive species (see Species of Concern, Subsection F, below).

- k. Minimize the extent of subdivision roads needed to provide access to all areas proposed for development.



## **B. Big Game Winter Range** (see Appendix C.2 for supporting documentation)

### **(1) List of Pertinent Definitions** (see Section III for actual definitions)

Big game, development, existing development, habitat fragmentation, habitat patch, habituation, line of sight, linkage, problematic concentrations, professionally trained biologist, subdivision design features, summer range, and winter range.

### **(2) Objectives**

- ▶ Minimize habitat fragmentation and loss of winter range.
- ▶ Maintain the ability of big game animals to travel freely within a winter range habitat patch, and between winter range habitat patches and other seasonal ranges.
- ▶ Maintain FWP's ability to manage wildlife effectively and as non-habituated herds.
- ▶ Minimize the potential for subdivisions to lead to problematic concentrations of big game.
- ▶ Minimize wildlife/human conflicts, including negative impacts on adjacent properties (e.g., game damage on agricultural lands).

### **(3) Recommended Approach to Subdivision Design**

In designing the proposed subdivision, the subdivider is encouraged to follow the four steps outlined below.<sup>4</sup> Local FWP wildlife biologists are encouraged, when contacted by the subdivider or the subdivider's representative, to make time for the consultation described in subsections b. and c. below.

- a. Consult FWP's Crucial Areas Planning System (CAPS)<sup>5</sup> and/or other publicly available sources of wildlife habitat information, for a preliminary indication of whether the property proposed for subdivision may be located in or adjacent to big game winter range.
- b. Consult with the local FWP wildlife biologist, or other professionally trained biologist, to verify the preliminary assessment. If consulted, the FWP biologist should provide the subdivider with a written determination of whether or not the property proposed for subdivision is located in or adjacent to big game winter range.<sup>6</sup>

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<sup>4</sup> It should be noted that the subdivider cannot be required to take any of these recommended steps.

<sup>5</sup> Found at <http://fwp.mt.gov/fishAndWildlife/conservationInAction/crucialAreas.html>. Click on "Explore CAPS," look under Crucial Areas Supporting Data, then Terrestrial Layers, then Terrestrial Game Quality Contributing.

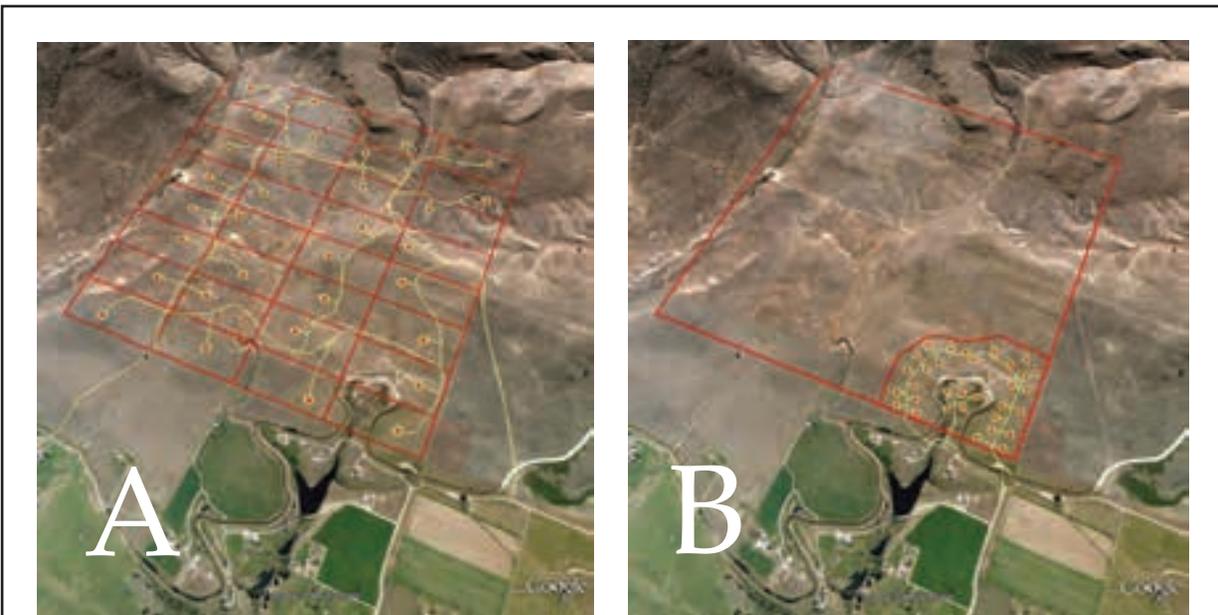
<sup>6</sup> FWP can use the Comments section of the *Fish & Wildlife Information Checklist* (see Appendix B.1) for this purpose.

- c. If the biologist determines that the property proposed for subdivision is located wholly or partially within big game winter range, consult further with the biologist for site-specific information and recommendations on minimizing the impacts of the subdivision on big game species and big game winter range. FWP recommendations may include suggestions for avoiding or strictly limiting the placement of subdivision design features in winter range. Or, based upon site-specific conditions and the extent of existing development located adjacent to or near the proposed subdivision, FWP may recommend that strict restrictions on the location of subdivision design features are not necessary. In offering recommendations, the FWP biologist should take into account the wildlife and habitat data compiled by the subdivider, any field reviews completed by other professionally trained biologists, FWP’s own wildlife and habitat data, and any other applicable biological information.
- d. Incorporate the biologist’s recommendations into the design of the proposed subdivision.

#### (4) Recommended Design Standards

Whether or not the subdivision design approach recommended above is completed, the following standards pertain to any subdivision development proposed on property that contains or lies adjacent to big game winter range:

- a. Cluster the subdivision design features on as small a footprint as possible, as far from winter range as possible, and as close to existing development as possible (e.g., other



*Figure 2. Examples of dispersed and clustered development on winter range.*

Example ‘A’ depicts development of thirty-two 20-acre lots spread across 640 acres of winter range. Example ‘B’ illustrates a “clustered” design of the same thirty-two houses on 2-acre lots on 10 percent of the property, or 64 acres, situated in a corner near existing development. Clustering homes as shown in example B obviously impacts winter range much less than the dispersed development found in example A.

houses, roads, residential utilities). See Figure 2, p. 11.

- b. Locate areas of proposed open space immediately adjacent to existing winter range or open space on adjacent lands, in order to maintain the functional connection with other open space and winter range on public and private lands.
- c. Provide or maintain linkage within a winter range patch, between isolated patches of winter range, or between summer range (or other seasonal habitat) and winter range. Recommended linkage widths are a minimum of one (1) mile for elk and one-half (½) mile for other species. For white-tailed deer, mule deer, and moose, linkage should be along riparian corridors where present.

The local FWP wildlife biologist may recommend the number of linkages needed to maintain wildlife movement, and whether or not site-specific circumstances justify a reduced linkage width (e.g., topography and/or natural vegetation may limit line of sight distances and sufficiently alleviate noise between linkage habitat and development activity to allow undisturbed movement of wildlife).



## **C. Public Hunting** *(see Appendix C.3 for supporting documentation)*

### **(1) List of Pertinent Definitions** (see Section III for actual definitions)

Building envelope, development, habituation, line of sight, problematic concentrations, and professionally trained biologist.

### **(2) Objectives**

- ▶ Maintain FWP's ability to manage wildlife effectively.
- ▶ Maintain public hunting, including hunting with rifles, as an important tool for wildlife management.
- ▶ Maintain healthy wildlife populations.
- ▶ Minimize safety concerns of future lot owners.
- ▶ Avoid conflicts between different land uses (e.g., game damage on adjacent agricultural lands due to wildlife displacement or habituation; problematic concentrations of big game animals in the proposed subdivision due to landscaping, vegetable gardens, and the creation of a "safe haven" no-hunting zone; annoyances created by hunters and subdivision residents finding themselves in close proximity to one another).

### **(3) Recommended Approach to Subdivision Design<sup>7</sup>**

The subdivision applicant is encouraged to consult with the local FWP wildlife biologist before or during the pre-application process, on the question of whether or not development of the

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<sup>7</sup> This approach specifically recommends the subdivider consult with FWP, since FWP is Montana's designated wildlife management agency.

subject property could affect wildlife management options and public hunting opportunities in the vicinity, and if so, how.<sup>8</sup> If consulted, the FWP biologist has an opportunity to evaluate the potential effect of the proposed subdivision on wildlife management options and public hunting opportunities based on review of the information compiled by the applicant, site assessments by other professionally trained biologists, FWP's own field knowledge and hunting area maps, and any other applicable information. FWP may recommend steps the subdivider can take to avoid or reasonably minimize negative impacts, such as careful building envelope locations, careful road and trail layouts, other ways of addressing line of sight issues, and the continuation of certain types of public hunting.

#### **(4) Recommended Approach to Subdivision Review**

FWP recommends that the governing body consider the effects of the proposed development on wildlife management by hunting, as part of its subdivision application review for impacts on "wildlife and wildlife habitat."<sup>9</sup>



### **D. Human/Bear Conflicts** *(see Appendix C.4 for supporting documentation)*

#### **(1) Objectives**

Minimize the potential for dangerous encounters between humans and bears, and maintain grizzly bear and black bear populations.

#### **(2) Applicability**

This standard pertains to any subdivision located in an area of high or potentially high human/bear conflict.

#### **(3) Recommended Design Standard**

Provide adequate bear-resistant facilities for garbage collection. FWP has recommended specifications for such facilities (see Appendix C.4), and the local FWP bear management specialist is encouraged to work with the subdivider to install an effective facility.

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<sup>8</sup> It should be noted that the subdivider cannot be required to follow this recommended approach.

<sup>9</sup> It should be noted that the governing body cannot be required to follow this recommended approach.



## E. Native Grasslands & Native Shrub Habitats (see Appendix C.5 for supporting documentation)



### (1) List of Pertinent Definitions (see Section III for actual definitions)

Connectivity, development, existing development, habitat fragmentation, habitat patch, native grasslands, native shrub habitats, professionally trained biologist, Species of Concern, and subdivision design features.

### (2) Applicability

The standards in this subsection only apply if a native grassland or native shrub habitat patch size is larger than 25 acres.

### (3) Objectives

- ▶ Minimize the fragmentation and loss of native grassland and native shrub habitat patches.
- ▶ Maintain habitat patches important to wildlife and wildlife connectivity, and minimize the loss of large habitat patches.
- ▶ Maintain native grassland and shrubland bird populations, especially Species of Concern.
- ▶ Reduce the spread of invasive, non-native species.

### (4) Recommended Approach to Subdivision Design

In designing the proposed subdivision, the subdivider is encouraged to follow the four steps outlined below.<sup>10</sup> Local FWP wildlife biologists are encouraged, when contacted by the subdivider or the subdivider's representative, to make time for the consultation described in subsections b. and c. below.

- a. Consult FWP's Crucial Areas Planning System (CAPS)<sup>11</sup> and/or other publicly available sources of wildlife habitat information (e.g., information from the Montana Natural Heritage Program) for a preliminary indication of whether the property proposed for subdivision may be located in one or more native grassland or native shrub habitat patches.
- b. Consult with the local FWP wildlife biologist, or other professionally trained biologist, to verify the preliminary assessment and confirm the approximate boundaries of any native grassland or native shrub habitat patches on or adjacent to the property proposed for development. If consulted, the FWP biologist should provide the subdivider with a written determination of whether or not native grasslands or native shrub habitat patches are present on the property.<sup>12</sup>

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<sup>10</sup> It should be noted that the subdivider cannot be required to take any of these recommended steps.

<sup>11</sup> Found at <http://fwp.mt.gov/fishAndWildlife/conservationInAction/crucialAreas.html>. Click on "Explore CAPS," look under Boundary and Other Layers, then go to Montana Land Cover.

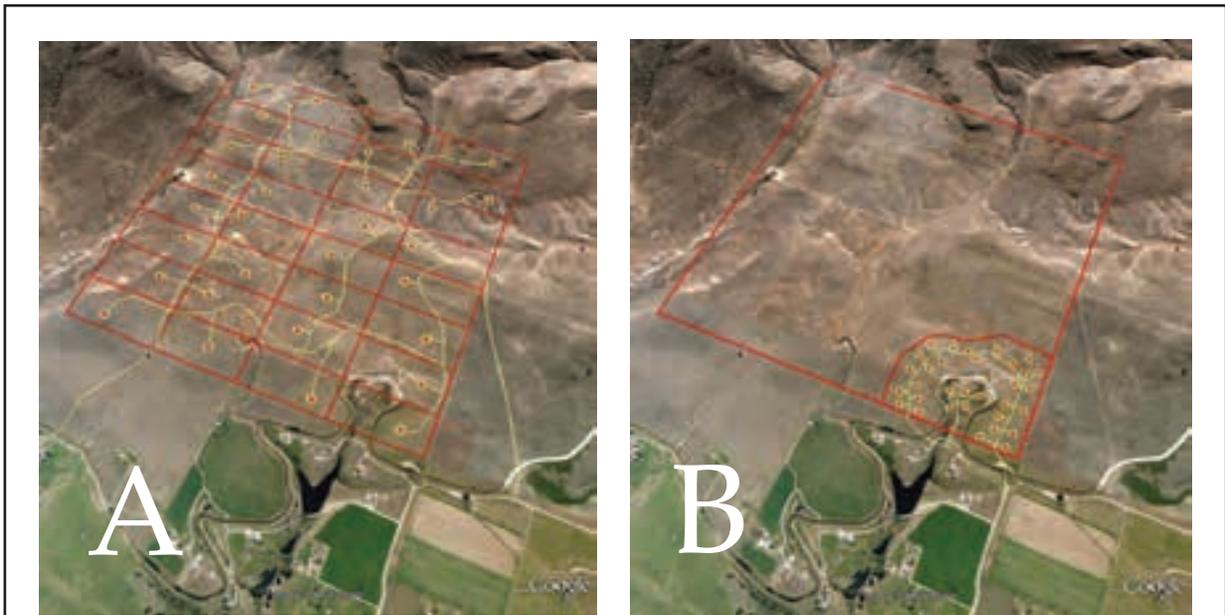
<sup>12</sup> FWP can use the Comments section of the *Fish & Wildlife Information Checklist* (see Appendix B.1) for this purpose.

- c. If the biologist determines that the property proposed for subdivision is located wholly or partially in one or more native grassland or native shrub habitat patches, consult further with the biologist for site-specific information and recommendations on minimizing the impacts of the subdivision on the native vegetation and species likely to be using the habitat. FWP biologist recommendations may include suggestions for avoiding or strictly limiting the placement of subdivision design features in the native habitat patch. In offering these recommendations, the FWP biologist should take into account the wildlife and habitat data compiled by the subdivider, any field reviews completed by other professionally trained biologists, FWP’s own wildlife and habitat data, and any other applicable biological information.
- d. Incorporate the biologist’s recommendations into the design of the proposed subdivision.

**(5) Recommended Design Standards**

Whether or not the subdivision design approach recommended above is completed, the following standards pertain to any subdivision development proposed on property that contains or lies adjacent to one or more native grassland or native shrub habitat patches:

- a. If subdivision design features (e.g., buildings, roads, utilities) are located inside habitat patches, place them adjacent to, or as close as possible to, existing development located outside of the habitat patches. Cluster the subdivision design features on as small a footprint as possible. See Figure 3 below.



*Figure 3. Examples of dispersed and clustered development on native grasslands.*

Example ‘A’ depicts development of thirty-two 20-acre lots spread across 640 acres of native grasslands. Example ‘B’ illustrates a “clustered” design of the same thirty-two houses on 2-acre lots on 10 percent of the property, or 64 acres, situated in a corner near existing development. Clustering homes as shown in example B obviously impacts native grasslands much less than the dispersed development found in example A.

- b. Locate areas of proposed open space immediately adjacent to existing native vegetation or open space on adjacent lands, in order to maintain the functional connection with other open space and native grassland and native shrub habitat patches on public and private lands.
- c. Minimize the extent of subdivision roads needed to provide access to all areas proposed for development.
- d. Install new utility lines underground.
- e. Revegetate with native seed *after* road construction and utility installation.
- f. Develop a weed control plan, approved by the local weed district, for the entire property proposed for subdivision.

**(6) Additional Guidance for Minimizing Fragmentation and Maintaining Connectivity**

The scientific literature provides additional guidance for addressing the first two design objectives listed under subsection (3) above. Numerical thresholds based on this science are offered and illustrated below as an additional development design option for biologists and subdivision designers to consider.

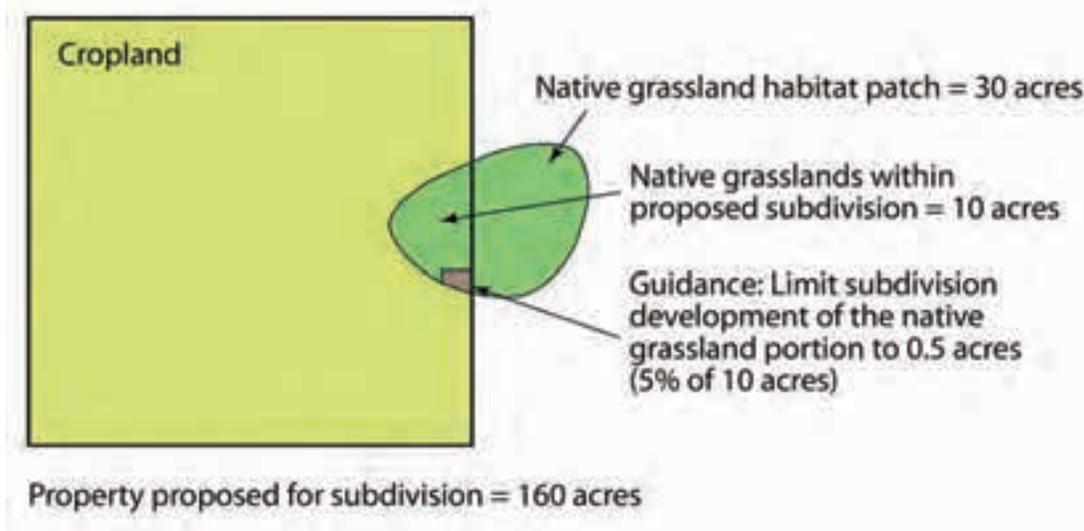
The following table would only apply to native grassland or native shrub habitat patches greater than 25 acres in size. Table 1 identifies how much of a native grassland or native shrub habitat patch could be developed and still minimize habitat fragmentation for wildlife, based upon its existing size and *regardless* of land ownership. Figures 4 and 5 provide two examples of how this guidance would be applied.

**Table 1.** Recommended development limits for native grassland or native shrub habitat patches located within a proposed subdivision.

Total Native Grassland or Native Shrub Habitat Patch Size	Recommended Limits to Habitat Patch Development within a Proposed Subdivision	Subdivider is Advised to Consult FWP for Recommendations on Extent and Location of Proposed Development.
> 25 to 100 acres	A maximum of 5% of the portion of the habitat patch located within the proposed subdivision site could be developed, and at least 25 acres of the habitat patch should remain undeveloped.	No
> 100 to 1,000 acres	A maximum of 10% of the portion of the habitat patch located within the proposed subdivision site could be developed.	Yes
> 1,000 acres	A maximum of 20% of the portion of the habitat patch located within the proposed subdivision site could be developed.	Yes

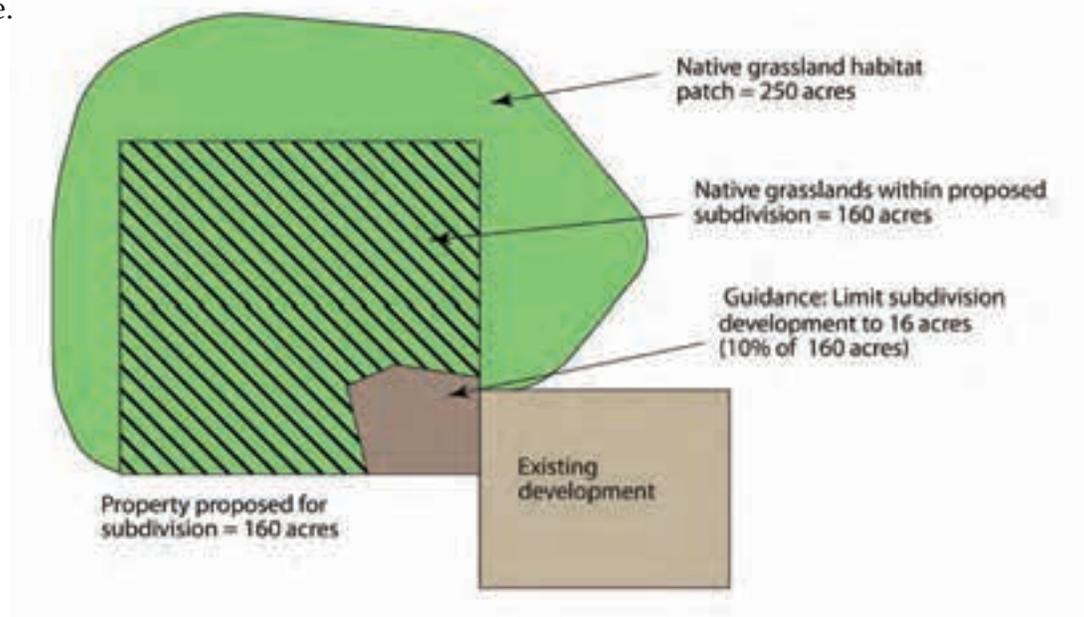
**Figure 4.** Example of Table 1 guidance for a 30-acre native grassland habitat patch.

Landowner proposes to subdivide a 160-acre parcel. The parcel contains 150 acres of cropland. The remaining 10 acres are part of a 30-acre native grassland habitat patch. Table 1 above recommends that subdivision development on the *native grassland portion* of the 160-acre parcel be limited to 0.5 acre (5 percent of 10 acres). Total acreage eligible for development on the 160-acre parcel equals 150.5 acres (150 acres of cropland plus 0.5 acre of native grassland).



**Figure 5.** Example of Table 1 guidance for a 250-acre native grassland habitat patch.

Landowner proposes to subdivide a 160-acre parcel. The parcel is wholly contained within a 250-acre patch of native grassland. Table 1 above recommends that subdivision development on the 160-acre parcel, *all of which is native grassland*, be limited to 16 acres (10 percent of 160 acres). This example also shows how new development should be clustered as close as possible to existing development, as recommended in Subdivision Design Standard 5.a. above.





## F. Selected Species of Concern (see Appendix C.6 for supporting documentation)

### (1) List of Pertinent Definitions (see Section III for actual definitions)

Development, habitat patch, lek, nesting site, Species of Concern, Trumpeter Swan overwintering site, vegetated buffer.

### (2) Objectives

- ▶ **General Objective.** Conserve, and minimize negative impacts upon, habitats that support the survival of particular Species of Concern that are known to be vulnerable to human disturbances associated with subdivision development.
- ▶ **Specific Objectives.**
  - **Common Loon.** Protect all current and traditional Common Loon nesting sites from development and degradation from human disturbances associated with developed facilities such as buildings, roads, trails, and docks.
  - **Great Blue Heron.** Protect colonial Great Blue Heron nesting sites from human disturbances associated with developed facilities such as buildings, roads, trails, and docks.
  - **Trumpeter Swan.** Protect all current and traditional Trumpeter Swan nesting and overwintering sites from development and degradation from human disturbances associated with developed facilities such as buildings, roads, trails, and docks.
  - **Long-billed Curlew.** Maintain large blocks of breeding habitat for Long-billed Curlews by minimizing human disturbances associated with developed facilities such as buildings, roads, towers, and other infrastructure.
  - **Burrowing Owl.** Protect and conserve Burrowing Owl nests from human disturbances associated with developed facilities such as buildings and roads.
  - **Bald Eagle and Golden Eagle.** Protect and conserve Bald and Golden Eagle nests from human disturbances associated with developed facilities such as buildings, roads, and trails. Reduce the potential risk for violations associated with the Bald and Golden Eagle Protection Act.
  - **Ferruginous Hawk.** Protect and conserve Ferruginous Hawk nests from human disturbances associated with developed facilities such as buildings, roads, and trails.
  - **Peregrine Falcon.** Protect and conserve Peregrine Falcon nests from human disturbances associated with developed facilities such as buildings, roads, and trails.
  - **Greater Sage-Grouse and Sharp-tailed Grouse.** Protect Greater Sage-Grouse and Sharp-tailed Grouse lek sites from elimination or disturbances associated with subdivision development. Maintain Greater Sage-Grouse and Sharp-tailed Grouse nesting habitat found in the vicinity of lek sites.

### (3) Recommended Design Standards

- a. Table 2 below outlines the recommended vegetated buffers and power line standards for these selected Species of Concern.

*Table 2. Recommended vegetated buffers and power line standards for selected Species of Concern.*

<b>Wildlife Species</b>	<b>Vegetated Buffer – Distance from Development</b>	<b>Power Line Standard</b>
<b>Common Loon</b> ( <i>Gavia immer</i> ) nesting site	500 feet	None
<b>Great Blue Heron</b> ( <i>Ardea herodias</i> ) colonial nesting site	800 feet	Underground standard
<b>Trumpeter Swan</b> ( <i>Cygnus buccinators</i> ) nesting and overwintering sites	1,000 feet	Underground standard
<b>Long-billed Curlew</b> ( <i>Numenius americanus</i> ) nesting site	1,000 feet	None
<b>Burrowing Owl</b> ( <i>Athene cunicularia</i> ) nesting site	1,000 feet	None
<b>Bald Eagle</b> ( <i>Haliaeetus leucocephalus</i> ) nest sites	1/2 mile	Raptor standard
<b>Golden Eagle</b> ( <i>Aquila chrysaetos</i> ) nesting site	1/2 mile	Raptor standard
<b>Ferruginous Hawk</b> ( <i>Buteo regalis</i> ) nesting site	1/2 mile	Raptor standard
<b>Peregrine Falcon</b> ( <i>Falco peregrinus</i> ) nesting site	1/2 mile	None
<b>Sharp-tailed Grouse</b> ( <i>Tympanuchus phasianellus</i> ) lek	Case-by-case basis	Underground standard
<b>Greater Sage-Grouse</b> ( <i>Centrocercus urophasianus</i> ) lek	Case-by-case basis	Underground standard

b. Power Line Standards

- Underground standard. Install power lines underground if they are located within vegetated buffers for Great Blue Heron, Trumpeter Swan, Greater Sage-Grouse, and Sharp-tailed Grouse. If underground power line installation disturbs native vegetation, restore the site using native plants.
- Raptor standard. Install power lines in a manner that protects raptors from power line electrocutions if power lines are located within vegetated buffers for Bald Eagle, Golden Eagle, and Ferruginous Hawk. Raptor power line design standards can be found in *Suggested Practices for Raptor Protection on Power Lines* (APLIC 2006).<sup>13</sup>

In order to ensure that raptors and other birds are not electrocuted from power lines, subdividers are encouraged to install all aboveground power lines according to the standards described in *Suggested Practices for Raptor Protection on Power Lines* (APLIC 2006). This is particularly important in habitats where trees, cliffs, and other natural nesting and perching surfaces are scarce, because many birds use power poles and lines for perching, roosting, or hunting.

c. Vegetated Buffers for Greater Sage-Grouse (*Centrocercus urophasianus*) and Sharp-tailed Grouse (*Tympanuchus phasianellus*)

Greater Sage-Grouse and Sharp-tailed Grouse need a sizeable buffer from human disturbance in order to maintain their populations. If a subdivision is proposed in an area with known leks of either species, the subdivider is encouraged to consult the local FWP field biologist, or other professionally trained biologist, for a recommended vegetated buffer. If consulted, the FWP biologist should consider each situation on a case-by-case basis. Scientific studies recommend vegetated buffers from lek sites be from 1.2 to 5 miles. Recommended Greater Sage-Grouse buffers are generally larger (3 to 5 miles) than recommended Sharp-tailed Grouse buffers.

**(4) Other Species of Concern**

This section covers only a few of the many Species of Concern found in Montana. Where additional Species of Concern are known or predicted to occur on or in the vicinity of a proposed subdivision site, the effects of the proposed development on those other species are also pertinent to consider in the course of subdivision application and review.

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<sup>13</sup> Avian Power Line Interaction Committee (APLIC). 2006. Suggested practices for avian protection on power lines: The state of the art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC, and Sacramento, CA. 207 pp.