



# Montana Fish, Wildlife & Parks

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March 26, 2008

Flathead County Planning Board &  
Flathead County Planning & Zoning  
1035 First Avenue West  
Kalispell, MT 59901

Dear Members and Staff,

Montana Fish, Wildlife & Parks (FWP) staff has reviewed the North Shore Estates preliminary plat application, the recent staff report, Flathead County's Growth Policy and Implementation Plans, and the previous wildlife and wildlife habitat information submitted by agencies and the applicants. FWP has revisited this project in more detail based on need to gather additional information to pursue funding for conservation in the North Shore area and address specific project concerns raised by the community.

We reaffirm the issues outlined in our letter dated November 16, 2007 and herein offer additional information that we respectfully believe provides a solid basis for revising some of the Findings of Fact and Conclusions reached in the most recent staff report. We would specifically like to address Findings #32-36 related to Wildlife and Wildlife Habitat, and Finding #47 related to Public Safety.

***Finding #32. The proposed subdivision will have a negative impact on some species of wildlife on adjacent Federal lands because both the wildlife report submitted by the applicant and agency comments from Montana Fish, Wildlife and Parks state some species that are sensitive to the presence of humans would be displaced by the proposed subdivision and development.***

- We agree that the proposed subdivision will have a negative impact on wildlife. This Finding does not address which species, their significance on a statewide or national scale, or how significant the impacts could be. The finding only mentions displacement that is but only one of several possible effects of the proposal.

*We believe the Findings should also recognize that the impacted species are significant on national and statewide scale. Additionally, the proposed project may have an impact on a high diversity of wildlife species or their habitats.*

- The project will have an impact on at least 3 Tier One species (those species in "Greatest Need of Conservation") as well as another 44 Tier II bird species, 30 of which are documented to occur on an annual basis (Casey, D. see attached bird list) that occur in the project area. Many of these species such as bald eagles, nesting harriers or waterfowl, migratory waterfowl, nesting shorebirds are sensitive to disturbance.
- FWP recently published our "Montana Comprehensive Fish and Wildlife Conservation Strategy". This document is a compilation at the statewide level of the best available science for fish and wildlife and is the key document that we are using to guide to fish and wildlife conservation over the next 5 years. This document identifies what we consider to be Tier I species, those species of Greatest Need of Conservation as well as species in Tier II and Tier III. Based on our knowledge

of this project area, data provided by the U.S. Fish & Wildlife Service (FWS), and information provided by the applicant, we know that that this project area supports or has the potential to support at least 3 Tier One wildlife species: Bald Eagles, Long-billed Curlews, and Black Terns. The impacts to these species and their habitats will be in part through direct loss of habitat associated with development and trails and also through disturbance on and offsite by people, pets, and their associated activities. We also recognize, that as the approval of Mackinaw Estates may have set the stage for this project, the approval of this project will set the stage for more adjoining high-density developments over time in a highly sensitive wildlife area.

- These project area uplands also support thousands of migratory Northern Pintails, a waterfowl species that is in decline in North America. This species is a major migrant through the Lower Valley both resting/feeding in shallow areas along the North Shore and Flathead River sloughs and also feeding and foraging in croplands. This project will reduce foraging opportunities for pintails as well as for many other economically important waterfowl species.

*FWP believes the Findings should include a statement that the North Shore is recognized by the County as a "critical" or "crucial wildlife habitat" area.*

- This designation can be justified by the establishment of the Flathead Lake WPA, previous support for this type of designation by both FWP and FWS, and the fact that the Flathead Lake WPA is listed as a "special designated wildlife area in Flathead County" in Table 8.4 (page 128) as stated in the existing Growth Policy.

*Further, the Findings should reflect that the proposed density is too high for this area when considering the proposed mitigation measures.*

- Flathead County's Growth Policy provides guidance for development in these "critical" fish and wildlife habitats and recommends against high density development in these areas:

Growth Policy Statement 41 states:

"Promote the preservation of critical fish and wildlife habitat and preserve the area's unique outdoor amenities and quality of life".

On page 24, the County's Growth Policy also states:

"The **density of residential land use** (emphasis added) has a significant impact on wildlife and wildlife habitat if not adequately mitigated. When proper development techniques are combined with a low overall density, humans and wildlife can successfully co-exist. It is unreasonable to stop all development in wildlife habitat, but it is also unreasonable to allow high density development in areas that are critical to the healthy management of wildlife populations".

*FWP believes this statement is appropriate to this project and should be reflected in the Findings of Fact. This overall proposed density (1 residence/0.79 acres) is not consistent with the purposes of protecting "critical" or "crucial" wildlife areas. Additionally, FWP believes the proposed buffer area and covenants are not adequate to mitigate all the probable impacts of development and recreation.*

- The North Shore of Flathead Lake is a nationally significant resting and feeding area for thousands of migratory birds and a nesting and wintering area for hundreds of raptors. The lands both within the Flathead Lake WPA and the adjoining agricultural lands and wetlands on private land are integral to maintaining security and habitat values for these nationally significant wildlife resources. We have provided information to support the importance of this area in our previous comments to Flathead County that this area should be considered "critical" or "crucial wildlife habitat". We believe the historical uses of the proposed project lands have helped maintain the high habitat values for the WPA. As supported below, we believe the construction of 290 homes

that could add anywhere from 600-1200 new residents adjacent to this sensitive area will result in a significant impact and unplanned intrusions to these wildlife and habitat resources. Our experience with development near protected areas is that trespass and pet issues happen, regardless of covenants, best management intentions, and County or other agency animal control.

- The developer has taken many steps that FWP suggested to reduce habitat or wildlife impacts **given the assumption** that 290 homes would be built on this land at some point. Our basic position has been that this development is proposed in and adjacent to a highly important or critical wildlife area, one that is nationally significant. Although design improvements such as the proposed buffers can help reduce some of the impacts, these will not mitigate the overall long-term overall impact of 290 new homes in an area that once supported 3 homesteads and over 300 acres of agricultural production.

**Finding #33. *The conservation open spaces and open space buffers surrounding the proposed subdivision will mitigate some impacts to wildlife and wildlife habitat because buffers will filter noise and potential pollutants, protect wildlife habitat within the proposed subdivision and prevent residential homes from being situated directly adjacent to FWPA land.***

- FWP concurs that setbacks or buffers can be viable tools that reduce the impacts of some types of incompatible land uses. FWP staff worked with the developer to increase the setback distance from the FWS boundary from the original proposal. However, the developer has not been interested in drastically reducing the proposed density or clustering development into a much smaller area. We might suggest that adequate mitigation for development might be along the lines of an overall density of 1:20 acres with the homes clustered into a 40+- acre block on the west side of the property, with the rest in productive agriculture or open space.
- The published wildlife literature has numerous references to the impacts that dogs and cats can have on wildlife and wildlife habitat, particularly birds (these can be provided upon request). The impacts of pets that disturb nesting birds, prey on young or eggs, or chase and harass wildlife can be significant to some species or some populations. We realize that the developer is proposing covenants that could in part reduce improper pet use and trespass during the nesting or other important seasons. If the County is willing to monitor and enforce these covenants, rather than the FWS or FWP, we can then assume these covenants will have a greater measure of reducing dog and cat's negative effects on wildlife and wildlife habitat. If not, the question will remain as to what extent the new residents and the public, that would also be using these trails, will abide by stated rules or covenants. Homeowner association covenants are notorious for being ignored and difficult to enforce.
- As human growth increased around the Kuhns Wildlife Management Area (located northwest of Kalispell) in the 1990s, FWP was able to document an increase in the number of incidents of dogs impacting deer during winter months. Between 1991 and 1997, FWP biologists quantified this relationship while using remotely triggered cameras in a 29-km<sup>2</sup> grid within the Kuhns WMA during winters. FWP used County data on the number of septic permits authorized adjacent to the Kuhn's WMA and compared these data to the numbers of dogs captured on camera. The results were highly and positively correlated. As the number of septic permits increased within 2.5 km of the WMA, the number of photographed dogs similarly increased from 0.21 dog incidents per unit effort (camera-days) to 1.3 incidents per unit effort or about a four-fold increase. Dogs were photographed up to 2.5 km from the nearest home site; more than 80% wore collars (abstract and photos attached).

*The Findings should reflect that there is a preponderance of information that indicates that the more people that move in or live close to an important wildlife area or concentration of wildlife, the greater the risks for wildlife from human and pet problems. Adequate buffers seem to be on the scale of at least a mile for dogs.*

**Finding #34. The proposed subdivision will minimally impact an eagle's nest located near the subject property because the nest is located 1,620' away from the nearest proposed lot and according to the applicant's Wildlife Report, the "USFWS Draft National Bald Eagle Management Guidelines" suggests a setback of 660' from eagle nests.**

- Following the recent delisting of bald eagles from the federal Threatened and Endangered Species List, FWP has accepted responsibility for monitoring and maintaining a stable population of breeding bald eagles in Montana. One of the chief tools we are using is the state's adopted Bald Eagle Management Plan (FWP website) that recommends limited development within ½ mile of an existing bald eagle nest site. Our standards are more stringent than the federal standards and have been in effect for many years. This nest site is located in a small stand of trees in a very open area with at least a mile between it and other existing high-density development (Somers) and at least ¼ to ½ mile from 2-3 nearby homesteads along Highway 83.
- Although mitigating factors such as forest, slope, hills, ridges, and existing development could reduce the recommended distances, none of these factors exist between the proposed development and the bald eagle nest site. This nest has been in existence for decades until recently when the nest blew down last July. Bald eagles typically rebuild their nests the following nesting season that is just getting under way now. A change in the landscape within the proposed project area, particularly within the ½ mile radius of this nest could cause nest failure and/or territory abandonment. There are few other suitable nesting sites nearby and most other available areas along the North Shore are already occupied by nesting bald eagle pairs.
- The applicants have also not limited or provided any mitigation with respect to seasonal construction windows to avoid impacting eagles during their most sensitive time of the year as outlined in Montana's Bald Eagle Management Plan.

*The Findings should reflect that the existing bald eagle territory may be threatened by the construction and implementation of that portion of the proposed development (home sites, roads, and trails) that lies within ½ mile of the nest site; the buffers offered in this proposal may not be adequate as there is little vegetation or topography between the project and the historic nest site. This pair is not accustomed to development. The proposal is not consistent with Montana's Bald Eagle Management Plan. The applicant has not included any seasonal restrictions for construction or other development related activities that could negatively affect this nest site within that ½ mile buffer during the nesting season.*

**Finding #35. Pedestrian and equestrian use within the proposed subdivision is likely to have minimal impact on wildlife and wildlife habitat because no access to the FPWA will be developed as a part of the proposed subdivision, many miles of internal trails will be developed as part of the proposed subdivision, and the visible nature of horseback riding combined with the likelihood that other North Shore Ranch residents and public would report such an activity make it unlikely to be a regular occurrence.**

- The proposal includes trails through all of Open Space Area A, the only significant buffer area located between the development and the WPA. Residents as well as the public can use these trails possibly with their pets year-round. The use of trails by people, horses, and pets can disturb or displace birds and other wildlife within these buffers, particularly sensitive species such as raptors, upland nesting birds, and songbirds. The small wetland area along the WPA is one area that does not have a trail right through it. The presence of trails greatly diminishes the values of these buffers for wildlife and as wildlife habitat and reduces the area that is truly being set aside for wildlife and as an effective buffer from disturbance.

*The Findings should reflect that the value of the buffers for wildlife use and habitat would be diminished by the trail system.*

**Finding #36 Domestic animals owned by future residents of the proposed subdivision are likely to have a slight impact on wildlife because although Flathead County Animal Control and USFWS will have the authority to enforce restrictions on free-roaming pets (providing some mitigation of overall impact), proactive efforts to prevent killing, injuring, harassing or molesting of wildlife are unlikely.**

- FWP has already included one example of the significant effect dogs have on wintering white-tailed deer. Many other examples of pet impacts on birds are well documented in the literature and can be provided.
- We agree that proactive enforcement is desirable but often difficult and costly to implement or sustain. Without regular enforcement, we suggest the likely impact on wildlife will be significant and not slight.

**Finding #47 The impact of hunting on FWPA lands adjacent to the proposed subdivision is a minimally increased risk to public health and safety because open space buffers, high visibility of structures, and large acreage of the FWPA all act to partially mitigate the safety hazards associated with hunting.**

- The entire WPA is open to rifle and shotgun hunting during the legal hunting seasons. We do not believe it is the agencies' responsibility to mitigate for development that is placed along public land boundaries. These are public lands paid for and used by the sporting public. Hunters are asked to hunt responsibly. Placing development or trails within approximately 300 feet of the public land boundary puts these people or homes at risk of being impacted by shotgun fire. There are many homes and portions of trails along the southwest project boundary and the northeast project boundary that are well within 300 feet of the WPA.
- None of the buffers are adequate to completely mitigate use of a rifle for hunting. There is little or no forest or other vegetation or topography that would deter bullets if discharged towards the development. This presents a clear risk to public safety within the proposed development or raises the question of whether the area within a mile of the development can continue to be hunted using rifles.

*The Findings should reflect that rifle hunting could occur on the WPA and be a threat to trail users and possibly those living within the development. People living or using trails within about 300 feet of the WPA boundary may also be at risk from hunters using shotguns. If the development is built, hunters' ability to hunt portions of the WPA in a responsible manner will be limited.*

FWP Parks and Wildlife staff is pursuing funding from both Access Montana and Habitat Montana programs and working with partners on many other grants to acquire fee-title or conservation interests in lands along the North Shore. Our process will be initiated in April 2008. We recognize the high wildlife and recreation values of this area and believe we need to be part of the solution. We are concerned that approval of this project could thwart efforts to work with private landowners.

FWP staff appreciates this opportunity to provide additional information for this project. We support many of the initiatives outlined in the County's new Growth Policy Implementation Plan and are eager to work with the County Planning Staff, Planning Board, Commissioners, and local citizens on those affecting resources and recreational opportunities. In particular, we are eager to supply information on these "critical" or "crucial" fish and wildlife areas, corridors, including maps that could be incorporated into the Growth Policy, referenced in the subdivision regulations, and used in the compilation of a Development Predictability Map.

We also support the County's future vision, as stated in its Growth Policy (pp. 137-138), of the subdivision review process. First, the governing body will establish spatial thresholds and criteria to define development impacts on the statutory list of elements, including wildlife and wildlife habitat.

Second, the governing body will place the burden of proof on the subdivision applicant, to demonstrate that a subdivision application has overcome the presumption of impact. FWP is eager to work with Flathead County on the spatial thresholds and criteria needed to move forward with this solid approach to subdivision review.

Again, thank you for the chance to comment on the proposed North Shore Ranch preliminary plat. Please let us know if you need any other information.

Sincerely,

A handwritten signature in black ink, appearing to read "James R. Satterfield, Jr.", written in a cursive style.

James R. Satterfield, Jr., Ph.D.  
Regional Supervisor

C: Keith Simon

Encl:

Attachment A: Species List North Shore

Attachment B: Abstract of Study with photo

**Attachment A.**

Species List from Table 12 in Comprehensive Fish and Wildlife Conservation Strategy for Flathead Valley Tier I Terrestrial Focus Area. Species Associations. Those species in bold are known to occur annually in the North Shore project area (list modified with assistance from Dan Casey, American Bird Conservancy and Dwight Bergeron, FWP).

<b>TOTAL:</b>		<b>TIER II: 58</b>		<b>TIER III: 169</b>	
Tier I and II	Long-toed Salamander	Marbled Godwit	Winter Wren	Least Weasel	
Occur or Likely to Occur	Pacific Treefrog	Franklin's Gull	Western Bluebird	American Badger	
Amphibians: 5	Columbia Spotted Frog	Caspian Tern	Veery	Northern River Otter	
Birds: 30/47	Rubber Boa	Common Tern	Loggerhead Shrike		
Mammals: 14/tier I & II	Common Garter Snake	Forster's Tern	American Redstart		
Reptiles: 2	Horned Grebe	Northern Pygmy-owl	Clay-colored Sparrow		
Birds all: 143/212	Red-necked Grebe	Barred Owl			
<b>TIER I: 10</b>	Western Grebe	Great Gray Owl	<b>Bullock's Oriole</b>	Painted Turtle	
Western Toad	American Bittern	Northern Saw-whet Owl	Gray-crowned Rosy-finch	Gopher Snake	
Northern Leopard Frog	Canvasback	Black Swift	White-winged Crossbill	Western Terrestrial Garter Snake	
Common Loon	Redhead	Vaux's Swift		<b>Pied-billed Grebe</b>	
Trumpeter Swan	Hooded Merganser	Black-chinned Hummingbird		<b>Eared Grebe</b>	
Bald Eagle	Turkey Vulture			Clark's Grebe	
	Northern Harrier			American White Pelican	
	Sharp-shinned Hawk			<b>Double-crested Cormorant</b>	
	Cooper's Hawk		Vagrant Shrew	<b>Great Blue Heron</b>	
	Northern Goshawk		Pygmy Shrew	<b>Tundra Swan</b>	
	Golden Eagle		Yuma Myotis	<b>Snow Goose</b>	
	Merlin		Long-eared Myotis	Ross' Goose	
	Peregrine Falcon		Long-legged Myotis	<b>Canada Goose</b>	
	Prairie Falcon		California Myotis	<b>Wood Duck</b>	
			Silver-haired Bat	<b>Green-winged Teal</b>	
			Big Brown Bat	<b>Mallard</b>	
			Hoary Bat	<b>Northern Pintail</b>	
Grizzly Bear		White-breasted Nuthatch		<b>Blue-winged Teal</b>	
		Pygmy Nuthatch	Water Vole	<b>Cinnamon Teal</b>	
		Brown Creeper		<b>Northern Shoveler</b>	
				<b>Gadwall</b>	

American Wigeon	Western Sandpiper	Least Flycatcher	Townsend's Solitaire	Savannah Sparrow
Ring-necked Duck	Least Sandpiper	Dusky Flycatcher	Swainson's Thrush	Fox Sparrow
Greater Scaup	Baird's Sandpiper	Cordilleran Flycatcher	Hermit Thrush	Song Sparrow
Lesser Scaup	Pectoral Sandpiper	Say's Phoebe	American Robin	Lincoln's Sparrow
White-winged Scooter	Dunlin	Western Kingbird	Varied Thrush	Swamp Sparrow
Common Goldeneye	Long-billed Dowitcher	Eastern Kingbird	Gray Catbird	White-throated Sparrow
Barrow's Goldeneye	Common Snipe	Horned Lark	American Pipit	White-crowned Sparrow
Bufflehead	Wilson's Phalarope	Tree Swallow	Bohemian Waxwing	Harris' Sparrow
Common Merganser	Red-necked Phalarope	Violet-green Swallow	Cedar Waxwing	Dark-eyed Junco
Red-breasted Merganser	Ring-billed Gull	Northern Rough-winged Swallow	Northern Shrike	
Ruddy Duck	Ring-billed Gull	Bank Swallow	Warbling Vireo	
Osprey	California Gull	Cliff Swallow	Red-eyed Vireo	Snow Bunting
Red-tailed Hawk	Herring Gull	Barn Swallow	Cassin's Vireo	Bobolink
Rough-legged Hawk	Mourning Dove	Gray Jay	Orange-crowned Warbler	Red-winged Blackbird
American Kestrel	Western Screech-owl	Steller's Jay	Nashville Warbler	Western Meadowlark
Gyrfalcon	Great Horned Owl	Blue Jay	Yellow Warbler	Yellow-headed Blackbird
Ruffed Grouse	Snowy Owl	Clark's Nutcracker	Yellow-rumped Warbler	Brewer's Blackbird
Virginia Rail	Long-eared Owl	Black-billed Magpie	Townsend's Warbler	Common Grackle
Sora	Short-eared Owl	American Crow	Northern Waterthrush	Brown-headed Cowbird
American Coot	Common Nighthawk	Common Raven	Macgillivray's Warbler	Pine Grosbeak
Lesser Sandhill Crane		Black-capped Chickadee	Common Yellowthroat	Cassin's Finch
Killdeer	Calliope Hummingbird	Mountain Chickadee	Wilson's Warbler	House Finch
Black-necked Stilt	Rufous Hummingbird	Red-breasted Nuthatch	Western Tanager	Red Crossbill
American Avocet	Belted Kingfisher	Rock Wren	Black-headed Grosbeak	Common Redpoll
Greater Yellowlegs	Red-naped Sapsucker	House Wren	Lazuli Bunting	Pine Siskin
Lesser Yellowlegs	Downy Woodpecker	Marsh Wren	Spotted Towhee	American Goldfinch
Solitary Sandpiper	Hairy Woodpecker	American Dipper	American Tree Sparrow	Evening Grosbeak
Willet	Northern Flicker	Golden-crowned Kinglet	Chipping Sparrow	Masked Shrew
Spotted Sandpiper	Western Wood-pewee	Ruby-crowned Kinglet	Vesper Sparrow	Dusky Or Montane Shrew
Semipalmated Sandpiper	Willow Flycatcher	Mountain Bluebird	Lark Sparrow	Water Shrew

Attachment B

**OFF-SITE IMPACTS OF RURAL SUBDIVISION ON WINTERING WHITETAILED  
DEER IN NORTHWEST MONTANA: COULD MAN'S BEST FRIEND  
BE WILDLIFE'S WORST ADVERSARY?<sup>TWS</sup>**

Carolyn A. Sime and Eric M. Schmidt

Montana Fish, Wildlife and Parks, 490 N. Meridian Rd., Kalispell 59901

Impacts of rural subdivision are often considered at the project scale rather than in the greater context of the landscape. Impacts to wildlife and wildlife habitat extend beyond the boundaries of the actual development site. We demonstrate that off-site impacts to wintering white-tailed deer (*Odocoileus virginianus*) increase as the number of home sites increases. Between 1988-97, white-tailed deer were systematically surveyed on public land using remotely-triggered cameras in a 29 km<sup>2</sup> grid. Incidental photographs of free-ranging domestic dogs (*Canis familiaris*) were obtained, starting in 1991. The number of septic permits, reflecting occupied home sites in a buffer of private land surrounding the survey area, was summarized for the years 1974-1997. The number of permits issued varied annually, but the cumulative total increased significantly through time ( $P < 0.000$ ). The average number issued per year increased from 3.2 in 1989-92 to 9.4 in 1993-97 ( $P = 0.014$ ). Concurrently, the number of unique dogs photographed per unit effort (x100) increased from 0.21 in the period 1989-92 to 1.3 in 1993-97 ( $P = 0.027$ ). Linear regression demonstrated that the total number of unique dogs photographed per year (TDOG) was significantly related to the cumulative number of septic permits in the buffer ( $P < 0.029$ ). Dogs were photographed up to 2.5 km from the nearest home site. Some dogs were explicitly photographed chasing deer. Individual dogs were photographed in multiple years and on multiple occasions within a single year. One in particular was photographed on 6 occasions at 5 different sites in 15 days. Two of those sites were 3 km apart. The majority of dogs wore collars (88.5%) and were photographed during daylight (65.9%). Implications will be discussed.

*THE CHASE. A fawn whitetail deer passes a remote camera during late winter in the Bowser Lake area. A few seconds later, two domestic dogs in close pursuit of the fawn are captured on film.*

