







A WORKING DOCUMENT
APRIL 2012









Fish and Wildlife Recommendations for Subdivision Development in Montana

A Working Document

This working document is intended for use by FWP biologists, local governments and developers to generate an open discussion on the implementation of consistent fish and wildlife conservation recommendations for subdivision development in Montana. The recommendations are designed to help guide fish and wildlife professionals, and to help inform municipal and county leaders and land developers. The working document does not claim to represent or prejudge any formal proposals or applications under consideration by any commission or board.

FWP invites comments and feedback from all users of this working document through October 2013.

The working document and a user feedback survey form are available on the Montana Fish, Wildlife & Parks website at http://fwp.mt.gov.

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Foreword

The mission of Montana Fish, Wildlife & Parks (FWP) is to provide for the stewardship of the fish, wildlife, parks, and recreational resources of Montana while contributing to the quality of life for present and future generations. In fulfilling this mission, FWP's employees and citizen commission work in partnership with many others. We operate under a set of guiding principles, two of which are especially relevant to this project. We strive to (1) maintain the long-term viability of Montana's natural, cultural, and recreational resources; and (2) provide credible and objective information. This working document has been prepared with our mission and guiding principles in mind.

The Montana Subdivision and Platting Act authorizes local governments to solicit public agency review and comment on subdivision applications. FWP is routinely contacted in this regard. Our field biologists take their role in the subdivision process seriously, and they offer important input based on their professional knowledge and expertise.

We recognize that subdivision development can occur in ways that conserve fish and wildlife habitats, or in ways that can cause significantly adverse impacts on fish and wildlife resources. FWP wishes to help Montana communities and counties accommodate subdivisions for people *and* healthy habitats for fish and wildlife.

To achieve this goal, FWP has prepared this package of subdivision process and design recommendations. First and foremost, we have assembled this guidance for our field biologists, to enhance the consistency, reliability, and timeliness of FWP's input as a subdivision review agency. Our field biologists will use this working document to guide their participation in the subdivision process, including their preparation of application review comments. We will provide training to our field staff during the spring of 2012, and expect them to apply the recommendations that are pertinent to FWP's advisory role in the subdivision process.

This working document also contains suggestions for local planners, local government officials, and subdividers and their project teams. We hope these groups will find the subdivision planning approaches and tools offered here useful. During 2012, FWP will offer training opportunities to any interested parties.

The term "working document" reflects FWP's intention to solicit user feedback during an initial 18-month period of implementation, evaluate the effectiveness of the recommendations, and consider potential modifications to them.

Dave Risley, Administrator Fish and Wildlife Division

ACKNOWLEDGEMENTS

These recommendations were compiled in large part by a technical working group consisting of the following biologists, land use planners, and state agency attorneys:

FWP: Gael Bissell, Kristi DuBois, Doris Fischer, Chris Hammond, Jamie Jonkel, Scott Opitz, Bill Schenk, John Vore, and Catherine Wightman. Additional FWP biologists offered input, including Kim Annis, Allison Begley, Dwight Bergeron, Chris Clancy, Mark Deleray, Vickie Edwards, Kevin Frey, Lauri Hanauska-Brown, Jeff Herbert (retired FWP), Tom Lemke (retired FWP), Glenn Phillips (retired FWP), and Alan Wood.

Local land use planners: Anne Cossit (Cossit Consulting), Dave DeGrandpre (Land Solutions), and Nancy Heil (Missoula County Rural Initiatives).

Montana Department of Commerce: Jerry Grebenc (through December 2011) and Kelly Casillas.

Others with biology and/or land use planning expertise: Brent Brock (Craighead Institute), Pete Coppolillo (formerly with Wildlife Conservation Society), Janet Ellis (Montana Audubon), Dennis Glick (Future West), and Jim Richard (retired land use planner). Additional biologists offered input, including John Carlson (U.S. Bureau of Land Management), Steve Gniadek (retired National Park Service), and Brian Martin (The Nature Conservancy).

FWP gratefully acknowledges the technical working group's extraordinary dedication and hard work spanning more than three years. We thank Alan McCormick (attorney with Garlington, Lohn & Robinson), Tara DePuy (attorney under contract with the Montana Association of Counties-Joint Powers Insurance Authority), and Mike Inman (Park County senior planner) for their thoughtful reviews of our March 2011 draft.

Additional individuals and groups were consulted during the process of assembling these recommendations, including the Governor's Task Force on Riparian Protection, Montana Natural Heritage Program, Montana Department of Transportation, more than 30 FWP personnel (mostly biologists, including our regional fisheries and wildlife managers), several additional public and private sector biologists, a land use attorney, and land use planners from the planning departments of Gallatin County, Lincoln County, Missoula City-County, Missoula County Rural Initiatives, and Yellowstone County.

Photo and Design Credits: bull trout photo—Joel Sartore (National Geographic) and Wade Fredenberg (U.S. Fish and Wildlife Service (USFWS)); dispersed and clustered development illustrations—John Vore, (FWP); line drawings—Cindie Brunner, Bob Hines (USFWS), Ron Jenkins, Darrell Pruett (USFWS), and Robert Savannah (USFWS); cover design—Luke Duran (FWP); document design—Janet Ellis (Montana Audubon); water body and grassland illustrations—Geoffrey Wyatt (Wyatt Designs).

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Introduction

Population growth and subdivision development in Montana have occurred at different rates over the decades. While we've seen a major slowdown in the past couple of years, history suggests we will again experience periods of rapid land use change to accommodate more people and shifting demands.

Subdivision development can impact a community, county, and region in a variety of ways. Benefits of subdivision development may include:

- Increased housing opportunities for new and current residents.
- Infrastructure improvements to serve a growing population.
- Jobs for engineering/design/construction workers.
- Additional commercial, industrial, and recreational space.

In some cases subdivision development can conserve, and even enhance or restore, important fish and wildlife habitats.¹

Subdivision development can also adversely affect the social, economic, and natural environment. Of particular concern to FWP is that subdivision development may negatively impact fish, wildlife, and their habitats. For example, a subdivision may:

- Fragment a large block of open space occupied by wildlife.
- Create structural barriers to animal movement between habitat patches or their seasonal ranges.
- Reduce the ability of wildlife to survive or reproduce in an area due to disturbance factors such as buildings, roads, pets, and human activities.
- Remove riparian vegetation or introduce pollutants and sedimentation into water bodies, thereby degrading the water quality, stream stability, and natural stream processes upon which fish and wildlife populations rely.

This working document does not address the full range of adverse impacts that subdivisions can have on Montana's fish and wildlife resources. However, it does address several of FWP's concerns and offers guidance for how to avoid and reasonably minimize the impacts.

This working document is organized into four sections:

- Section I. Recommendations for the subdivision application and review process.
- Section II. Recommendations for subdivision design standards.
- Section III. Acronyms and definitions for technical terms used in this document.

¹ FWP recognizes that the Montana Subdivision and Platting Act requires local governments to review proposed subdivisions for their effects on "wildlife and wildlife habitat" [76-3-608(3)(a), MCA]. This term is widely understood to include both fish and wildlife species and habitats. However, because FWP has a Fisheries Bureau and a Wildlife Bureau, and because this document is primarily directed at FWP, the reader will find regular references to both fish and wildlife.

 Section IV. Appendices, including contact information, a set of subdivision planning tools, and the rationale and pertinent scientific references for the subdivision design recommendations.

Fish and Wildlife Recommendations for Subdivision Development in Montana provides guidance to FWP field biologists, many of whom work hard to provide pertinent and timely input into the local subdivision process. We wish to equip them with recommended approaches and a readily accessible compilation of science-based information to support their efforts. This working document also offers guidance to interested public sector planners, local officials, subdividers and their private sector planners and biologists, and members of the general public. We encourage these folks to consult with FWP field biologists during the subdivision process, to tap their professional expertise and their intimate knowledge of local fish and wildlife populations and habitat conditions. We believe these recommendations can help improve FWP's participation in the subdivision process, the efficiency of the local subdivision process, and the quality of local subdivision decisions. We are convinced that, with careful site planning and development design, subdivisions and healthy habitats can coexist.

These recommendations have been compiled by knowledgeable biologists and planners, who themselves have drawn from the best available science of wildlife biology and land use planning. At the same time, we realize this effort remains a work in progress. FWP operates on the "adaptive management" principle, which compels us to evaluate, modify, apply, and reevaluate our policies and practices on a regular basis. We offer these recommendations in a similar spirit, and look forward to receiving internal and external feedback over the next 18 months on the questions of what works, what doesn't work, what's missing, and why? An evaluation timetable and survey instrument will be made available in the spring of 2012.

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