Target Range Neighborhood Plan

"Rural by Design"



Prepared by Neighbors in Target Range

June 30, 2010

RESOLUTION NUMBER 2010 - 088

A RESOLUTION TO ADOPT THE TARGET RANGE NEIGHBORHOOD PLAN AS AMENDED AS AN AMENDMENT TO THE MISSOULA COUNTY GROWTH POLICY

WHEREAS, §76-1-601, M.C.A., et.seq., authorizes Missoula County to adopt or revise a growth policy, or any of its parts; and

WHEREAS, the Board of County Commissioners did adopt a comprehensive plan for the County in 1975; and,

WHEREAS, the Board of County Commissioners updated and amended this comprehensive plan in 1990, and 1998 and has amended parts of it by adopting sub-area and neighborhood plans; and,

WHEREAS, the 1999 State legislature amended state law to replace the terms "Comprehensive Plan" and "Master Plan" with "Growth Policy"; and

WHEREAS, Missoula County adopted and updated the Missoula County Growth Policy and its associated amendments in 2002; and

WHEREAS, Missoula County adopted the Missoula County Growth Policy 2005 Update in 2006, and

WHEREAS, Missoula County and the City of Missoula can coordinate work plans for approval by the City and County in accordance with the priorities set by the County and City for the best orderly planning purposes and development of Missoula County as a whole; and

WHEREAS, the Target Range Neighborhood Planning Area is situated within the Urban Services Area where Missoula County has planning oversight; and

WHEREAS, the Target Range Neighborhood Plan was drafted through a public planning process that included over twenty-five committee meetings and presentations to county and city agencies, private organizations, and Planning Board informational meetings and public hearings; and

WHEREAS, the Target Range Neighborhood Plan includes a list of resources and assets in the neighborhood, strategies to manage resources and assets, and implementation measures to manage change and growth within the neighborhood; and

WHEREAS, the Target Range Neighborhood Plan is based on consideration of existing Growth Policy goals, public comments, and agency input; addresses all elements of planning; and focuses on zoning/land use; water quality; agricultural, economic, and parks and open space; and

WHEREAS, the Target Range Neighborhood Plan is consistent with the Missoula County Growth Policy; and

WHEREAS, after public notices in the Missoulian, a newspaper of general circulation, on January 24, 2010, and January 28, 2010, and in the Missoula Independent on January 21, 2010, and January 28, 2010, the Missoula Consolidated Planning Board held a public hearing on February 16, 2010; and

WHEREAS, on February 16, 2010, the Missoula Consolidated Planning Board recommended by a vote of 5-1 that the Missoula Board of County Commissioners adopt the proposed draft of the Target Range Neighborhood Plan, as amended by the Planning Board, with the proposed neighborhood amended Conservation Design language, as an amendment to the Missoula County Growth Policy; and

WHEREAS, after public notice in the Independent on June 3, 2010, and June 10, 2010, the Missoula County Board of County Commissioners held a public hearing on June 21, 2010, to consider the recommendation of the Missoula Consolidated Planning Board; and

WHEREAS, on June 21, 2010, the Board of County Commissioners adopted a resolution of intent to adopt the Target Range Neighborhood Plan, as amended, as an amendment to the Missoula County Growth Policy, as authorized by M.C.A. 76-1-601(3); and

WHEREAS, the Board of County Commissioners held a second public hearing on June 30, 2010, to continue public comment for the consideration of the Target Range Plan, as amended by the Consolidated Planning Board with the proposed Conservation Development amendments proposed by the Target Range Neighborhood Planning Committee, as an amendment to the Missoula County Growth Policy.

NOW, THEREFORE, BE IT RESOLVED that the Board of County Commissioners hereby adopts this resolution to adopt the Target Range Neighborhood Plan and associated land use map, as amended by the Board of County Commissioners, as an amendment to the Missoula County Growth Policy, as authorized by M.C.A. 76-1-601(3); and

ATTEST:

BOARD OF COUNTY COMMISSIONERS
Missoula County, Montana

VICKIE M. ZEIER, Missoula County Clerk

By Deputy
Vicki Zeier, Clerk and Recorder

APPROVED AS TO FORM AND CONTENT:

Board of July 2010

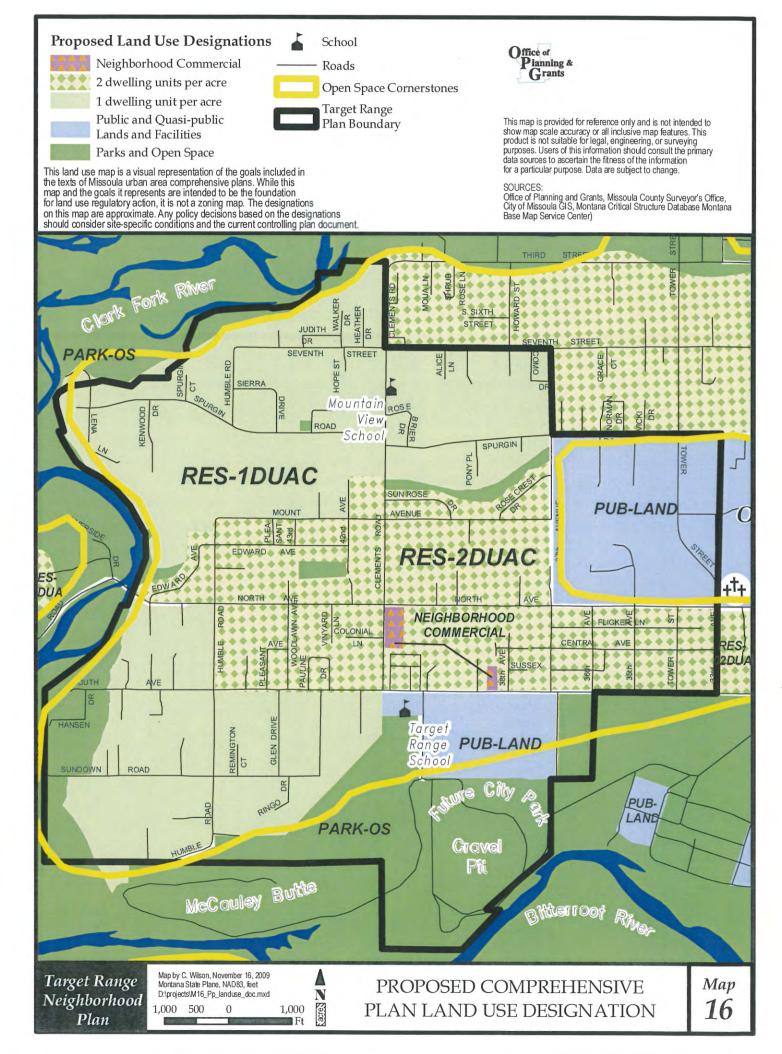
Missoula County, Montana

Missoula County, Montana

Michele Landquist, Chair

Bill Carey, Commissioner

Curtiss, Commissioner



Acknowledgements

Target Range Neighborhood Planning Committee

A three-year resident of Target Range, **ROBERT CARTER** is a software engineer, technical writer, outdoor enthusiast, husband, and father of three, living and working in Target Range.

Coming from a farming background, **MIKE CHANDLER**, a 35-year resident of Target Range, owns property in Target Range and Rock Creek which explains his concern for water quality and water rights. Currently working at the USFS Rocky Mountain Research Station and active in several conservation organizations, he helped facilitate some of the first conservation easements in the Blackfoot River corridor during his days in the real estate field. He is looking forward to retirement and spending more time with his horses, garden, and hunting.

WILLIS CURDY, a retired, 30-year Hellgate High School social studies teacher who spent his summers as a smokejumper, is a 42-year resident of the Missoula area and a 28-year resident of the Target Range/Big Flat area. Besides raising hay and cattle in the Bitterroot, he has been involved in a number of planning issues affecting the Target Range/Big Flat areas.

DAVID DELSORDO worked on two sections of the Target Range Neighborhood Plan prior to being elected to the Target Range School Board. Because of the new demand on his time, David had to step back from the neighborhood planning process.

Another long-time (25-year) resident, **JACK FISHER**, spent some of his "spare" time reviewing the neighborhood plan.

Taught to read by her grandmother at age five, **HEIDI GJEFLE** has been enchanted by, and playing with, words ever since. Currently, wearing a variety of hats—school district secretary, psychology student, freelance writer, and mom—she keeps her days full and wildly interesting. She is working on the biography of a national financial advisor/philanthropist, several editing projects, and her own book of poetry & essays and appreciates having been invited to play a small role in the dedicated work and vision of the community she's called home for 18 years.

GEORGE HIRSCHENBERGER is a land management consultant with 39 years of experience in forest and rangeland management. He and his wife have lived in Target Range for 14 years and greatly enjoy their neighbors and the neighborhood.

DEL KEY is a retired City of Los Angeles Construction Manager with 36 years of experience in all areas of public infrastructure. He worked on many projects where the focus was to benefit local communities. He and his wife, Karren, moved to Target Range six years ago to be close to their daughter and her family.

DON LOFTSGAARDEN, a Target Range resident for 43 years, has a Ph.D. in Mathematics (Statistics). He taught one year at Montana State University, two years at Western Michigan University, and 35 years at the University of Montana. He has done statistical consulting for numerous individuals and organizations on campus, locally, and nationally.

JENNIFER LONG, a stay-at-home mom with two young boys who enjoy "strollering" around Target Range while viewing sheep, goats, cows, horses, and the occasional bald eagle, pileated woodpecker or trout, is the owner of a wildfire research company with 12 years of experience in forestry, fire and fuel research, and technology transfer. She and her husband enjoy living in a part of Target Range history, the Pepper Pot House, a place of cards, women and booze during prohibition.

WILL MCDOWELL is a natural resource specialist with 25 years of consulting experience in flood and erosion control, watershed management, water quality protection, soil conservation and habitat restoration. For nine years he and his family have lived, gardened, fished and hunted in the Target Range/Kelly Island area.

Raised in Missoula and a 32-year Target Range resident, **PEGGIE MORRISON**, a 36-year English teacher recently retired, has grown irrigated hay on her thirteen acres for her horses and those of her neighbors for thirty years. She shares the produce from her garden with her son, the squirrels, and resident deer.

OLLEKE E. RAPPE-DANIELS has 35 years experience in natural resource management with the US Forest Service. Trained as a resource conservationist she has worked in administration, public and legislative affairs, fire management and completed her career in forest supervision. She and her husband have lived in the Target Range area for 28 years.

Twenty-year Target Range resident **JAMES REID** reviewed the Neighborhood Plan for the working group and provided area photographs.

A Target Ranger for 26 years, **ANNE RUPKALVIS** is still raising her family here. Following her very active tenure as a Target Range School parent, she became an employee there. Passionate about trying to make the world a better place for now and the future, she has been a Target Range Homeowners Association member and officer for many years and is currently serving as a member of the Missoula County Park Board.

FRED SAMSON shared his expertise and knowledge in creating some of the natural environment sections.

JENNY SCHILZ spent the first 13 years of her career as a forester working all over Oregon, primarily working in planning, implementation and monitoring, both in timber and recreation. She then moved to Montana and spent the following 15 years raising three boys in the Target Range area and working part time.

A 14-year resident of Target Range, **NORMAN SMYERS** is a licensed professional geologist with a BS and MS in Geology. His 32+ years of experience with the U.S. Forest Service and the Bureau of Land Management included responsibilities for minerals management and surface and ground water resources, and frequent involvement as environmental assessment team leader and team member.

Having lived in Missoula for 35 years, 25 of them in Target Range, **FRED STEWART** put his B.S. in Wildlife Biology and his PhD in Natural Resource Economics to work for the U.S. Forest Service where he wrote the economic section for numerous Environmental Impact Statements. Following his retirement, he carved out a second career for himself as a wealth manager.

Four-year resident **TOM STOCKSTILL** brought two key assets to the planning process: common sense and the belief that Target Range is the best location that ever happened to him. His political experience has been limited to "coffee shop politicking."

For over 40 years, 29 of which have been in the Target Range/Orchard Homes neighborhoods, **ED AND LAURA TAYLOR** have been organic food farmers supplying produce for the Missoula Farmers' Market, the University of Montana Farm to College Program, area restaurants, and other local food markets. As active participants of the Missoula Way to Go Club, Envision Missoula, Nature Conservancy, Montana Natural History Center, and Missoula Cultural Society, Ed and Laura enthusiastically contribute their time and energy to maintaining a rural atmosphere in the Target Range area.

Office of Planning and Grants

Roger Millar, Director

Mike Barton, Senior Planner

Lewis M. YellowRobe, Planner

Casey Wilson, GIS Specialist

Tom Zavitz, Planner

Laval Means. Planner

Dave Dewing, GIS Specialist

John Newman, Planner

Target Range Neighborhood Plan

"Rural by Design"

Executive Summary

In the spring of 2008, residents of Target Range completed a survey to identify issues that were important to each resident. Nearly 90% of the respondents reported that preservation of the rural character was very important to them. In addition, 84% of the respondents were in favor of writing a neighborhood plan, while only 7% said they were not in favor. In the fall of 2008, a group of residents from Target Range met to initiate the process of creating a neighborhood plan. This citizen-based planning effort, along with generous help from the Office of Planning and Grants, has defined our community values and identified key goals, objectives and recommendations based upon those values.

This neighborhood plan is intended to:

- Document the neighborhood's values, interests and goals as identified during the spring 2008 neighborhood survey and while drafting this plan;
- Make recommendations to achieve those goals and help guide future development;
- Determine the ability of the area to accommodate the growth of 400 additional homes over the next 20 years as predicted by the Urban Fringe Development Area (UFDA) study;
- Identify, preserve and protect the resources most valued by the neighborhood;
- Set goals and priorities that will shape the future of the Target Range area for generations to come.

Great communities and exceptional neighborhoods are not created without careful planning.

Each neighborhood in the Missoula Valley has its own unique flavor and characteristics. The Target Range area is widely recognized as a rural or semi-rural residential community, mostly consisting of single-family homes on lots between one-half and one acre in size. These residences are interwoven with abundant environmental resources including parks, baseball and soccer fields, an equestrian park, wooded floodplains, river corridors and fishing-access sites.

"Rural by Design" v •

The Target Range community also benefits from large areas of agriculture and other open space—all of which are enjoyed by residents from the entire Missoula Valley.

This plan is comprised of two main elements, a Natural Environment section and a Human Environment section. Each section is broken into subsections which discuss specific resources or topics. These are summarized below:

THE NATURAL ENVIRONMENT

1.1 Water Resources The Target Range area has abundant water resources. The Clark Fork and Bitterroot Rivers and their floodplains form the western and northern boundary of the planning area. The Missoula aquifer lies below the neighborhood and provides a high-quality, reliable source of water for residents. Protecting the quality of both surface and ground water is a major concern of the neighborhood as well as protecting other beneficial uses of these waters.

Recommended actions to protect surface waters: Prohibit stream bank modifications that would damage normal function of flood plains; apply best management practices (BMPs) to reduce sediments and contaminants; improve understanding of water-quality issues through local education/outreach efforts; work with Montana DEQ and others to ensure protection of beneficial uses of water; and ensure that zoning protects floodplains.



Recommendations to protect ground water: Use Missoula County's UFDA plan to protect

ground water in the Missoula Valley by 1) sewering high density residential and commercial areas and 2) requiring effective septic systems in lower density areas such as Target Range. In addition, encourage judicious use of pesticides and herbicides, and initiate local education and outreach efforts.

1.2 Soil, Irrigation and Agriculture Soil in the Target Range neighborhood is one of the largest areas of agricultural soil in Missoula County. Irrigation ditches provide abundant good-quality water to almost all parts of the neighborhood. Agriculture has been an important part of Target Range since the 1890s and food production was the primary use of Target Range land for decades. Many landowners and tracts are still in agricultural production today.

Recommendations to protect soil and agriculture: Agricultural soils, irrigation water and agricultural pursuits should be recognized as an important, sustainable land use. County and state government can help preserve agricultural resources through zoning regulations. Agricultural landowners should work with land trusts, local organizations and government to develop specific strategies to conserve agricultural lands and businesses.

1.3 Air The quality of the air we breathe is directly related to the quality of life in the Target Range neighborhood. Air quality is a regional issue in the Missoula Valley, which has a recognized winter inversion air pollution problem. Target Range lies within the Missoula Air Stagnation Zone. Major efforts have been made at the county level to curb air pollution in this zone.

Recommendations to protect air quality: Support continuing stewardship of high air quality through managing low density residential growth, supporting use of bicycles and public transportation, and encouragement of well-managed agricultural open space and riparian forest conservation.

1.4 Natural Vegetation and Weeds The Target Range neighborhood includes a number of areas with important natural vegetation remnants which are of local and regional value for wildlife habitat, scenic resources, and air and water quality protection. Preservation of the remaining intact native vegetation areas, enhancement of open lands by restoring more native vegetation, and use of native vegetation in existing and future residential landscapes is a high priority.

Recommendations to protect natural vegetation: To protect native vegetation, an inventory to document the status of native plant communities should be completed; a native grassland restoration proposal within Big Sky Park should be developed; better roadside noxious weed control along bike paths and roads is encouraged; and an educational program regarding noxious weed control and native landscaping on private property should be coordinated.

1.5 Wildlife The Target Range neighborhood provides natural and agricultural habitats critical to wildlife. The neighborhood desires to maintain the open and mixed agricultural/residential pattern important to maintaining native wildlife in the neighborhood, and preserve adjacent high-quality riparian habitats and corridors of major importance to Montana's wildlife.

Recommendations to protect wildlife: Protect wildlife by protecting its habitat through consolidation of protected public and private land wildlife habitat along the Bitterroot and Clark Fork River corridors and encourage the Missoula Parks Board to plan and implement native wildlife habitat enhancement projects in park units. In addition, maintain low density residential zoning and incorporate specific protections of key wildlife habitats into zoning regulations, and educate the locals on how to better live with wildlife.

"Rural by Design" vii •

THE HUMAN ENVIRONMENT

- **2.1 Population Growth and Housing** The neighborhood has grown slowly but steadily over many years. The number of dwelling units in 2008 was estimated to be 1065 with an estimated population of 2726. In the eight years from 2000 to 2008, dwelling units grew by 8.6% and the population grew by 10.0%. Both grew slightly more than 1% per year. Each section of this neighborhood plan considers the implications of the predicted housing growth on different aspects of the natural and human environment of the neighborhood.
- **2.2 Economy** The Target Range neighborhood is primarily a residential area with only two areas zoned commercial, Target Range Market (a.k.a. Dale's Dairy) and the mini storage units on South Avenue West. The largest employer is Target Range School with approximately 60 employees. In addition, there are home and agricultural-based businesses.



Recommendations to protect the economy: Support existing and potential small-scale commercial activity in the Target Range area; discourage large commercial operations. Locations along major neighborhood arterials could be considered for scale-appropriate commercial development on a case-by-case basis.

2.3 Transportation Infrastructure Streets and

roads within the Target Range neighborhood are heavily used by commuters, school aged children, horse riders, bicyclists, and walkers. Future construction of homes, additional recreational opportunities on city and county parkland and city and county and federal lands adjacent to the Bitterroot and Clark Fork Rivers will result in increased traffic/congestion, more vehicle and vehicle-pedestrian accidents, increased noise, and additional air pollution on roads and trails.

Recommendations to improve transportation infrastructure: Every effort should be taken to mitigate growth in motorized traffic while enhancing the traditional lifestyle and safety of citizens living within the Target Range area. Transportation alternatives must be undertaken to offset potential negative impacts associated with future development, including expansion of the walking and biking paths to reduce the number of miles traveled to improve air quality.

2.4 Water Infrastructure Target Range homes primarily use private wells developed in the shallow Missoula aquifer for drinking water. Wastewater is generally treated using individual, residential, on-site wastewater treatment systems (septic systems). In general, the neighborhood's septic drain fields meet all current state and local environmental regulations, with the exception of an unknown number of older, sub-standard systems. In addition, the

Missoula Irrigation District has delivered water to the Target Range area for agricultural irrigation for many decades.

Recommendations to improve water infrastructure: The neighborhood desires to maintain local groundwater quality, protect public health, and gradually improve the isolated examples of sub-standard wastewater infrastructure to protect the Missoula aquifer. Future groundwater monitoring and management should be the joint responsibility of the Target Range Water and Sewer District and the City/County Health Department's Water Quality District. In addition, residents should be educated about proper disposal of medication and hazardous/toxic chemicals that can contaminate groundwater.

2.5 Community Facilities The abundance of parkland and open space, including the joint, large regional parks and complexes (500+ acres), contributes to the rural character of the neighborhood. However, Target Range is experiencing decreasing open space, viewsheds, and dark night skies because of housing development on agricultural lands and new uses of lands formerly open to the public.

Recommendations for community facility improvements: Develop a strategy and procedures to protect open space, agricultural soils, and viewsheds; follow guidelines to limit the impact on the night sky when installing new lighting; plan new developments to protect identified viewsheds and the night sky; propose new trails and extensions to access recreational opportunities; and secure the entire Big Sky Park as a dedicated park in perpetuity.

- **2.6 Local Services** During the past 50+ years, the community has been served by a variety of local government services. As the area has grown, local services have expanded to meet educational, fire and law enforcement needs. The Target Range neighborhood has seen significant growth in the number and variety of educational institutions. Area citizens have strongly supported these schools and welcomed them as valued assets. The neighborhood plan provides a framework whereby these services can be evaluated to determine if they meet community and local government needs of the entire Missoula community.
- **2.7 Land Use / Zoning** The primary land use of Target Range was, and still is, residential properties on one-half to one or more acres, interspersed with agricultural operations, open space, wildlife habitat and vacant lots. Zoning is an important tool to protect community resources that are critical for maintaining the rural character of the neighborhood and provide opportunities to the greater Missoula community.

Recommendations for zoning: Create rural zoning districts to give local residents greater control over zoning changes; change zoning from two to one home per acre in a limited area; and encourage a variety of land use tools to permanently protect valuable natural resources that will otherwise be negatively affected by future residential development.

"Rural by Design" ix ●

Vision Statement

This neighborhood plan brought together a remarkably diverse group of Target Range residents. We discovered that our shared common values and passions united us around a common vision for the neighborhood.

First and foremost, people who live in the Target Range area enjoy the rural and semi rural nature of the area. Nearly 90% of the respondents to the Target Range Homeowners Association Survey (Appendix A) reported preservation of the rural character was very important to them. More than 92% preferred to remain in Missoula County rather than annex into the city of Missoula. In describing what they found most attractive in the area, the rural feeling, open space and views, low density housing, low noise, proximity to Missoula and its services, and safe, friendly, diverse neighborhoods (in that order) were most important to them. For clarification, the notion of diverse neighborhoods can be illustrated by mentioning the trailer park across the street from the Target Range School, the upscale homes overlooking the Bitterroot River, and everything in between throughout the Target Range area. Residents at all income levels co-exist and welcome diversity and typically continue the legacy of "neighborhood" with newcomers.

Other values important to Target Range residents include: 88% of survey respondents stated a desire for preservation of agricultural spaces, 69% would like to see more public parks and open spaces, and 85% are in favor of more walking/bicycle paths. In order of preference, the types of businesses that are supported include: greenhouses, nurseries and small produce farms; small, local, and "Mom and Pop" stores; small, home-based enterprises with low or no client visits; small grocery stores; and small restaurants or coffee shops.

While most residents fully understand the need for growth, it is fair to say Target Range residents share a concern for the escalated, unchecked growth seen in other areas of Missoula. One of the greatest fears expressed by residents is that the security, safety, rural nature and "neighborhood" atmosphere of the Target Range area could be jeopardized. Rapid growth and expansion can be a hindrance to keeping positive community relations as seen by many examples of Missoula neighborhoods becoming fractured due, at least in part, to rapid development and growth without the chance for people to become acquainted with each other.

It is clear from anecdotal examples and private and public discussions about neighborhood planning, that the residents of the Target Range neighborhood want to have their interests acknowledged and protected in the neighborhood planning efforts. The "Rural by Design" slogan developed by the Target Range Homeowners Association (TRHOA) represents the shared vision of residents in the area.

Table of Contents

Acknov	wledgements	ii
Targ	get Range Neighborhood Planning Committee	ii
Offi	ce of Planning and Grants	iv
Execut	tive Summary	v
Vision	Statement	x
Introdu	uction	1
Plan	າ Overview	1
Neig	ghborhood Character	1
Curr	rent Situation	2
Rece	ent History	5
Issue	es and Resource Impacts	5
Natura	al Environment	7
1.1	Water Resources	7
	Current Situation	7
	Issues and Resource Impacts	9
	Possible Effects of Population Growth and Land Use Change	10
	Types of Protection Needed	11
	Immediate Objectives	11
	Long term Goals	11
	Recommendations and Strategies	12
1.2	Soils, Irrigation and Agriculture	13
	Landscape and Soils	13
	Irrigation Water Supply	14
	History of Agriculture in the Target Range	14
	Current Inventory and Agricultural Activities	14
	Resource Impacts of Population Growth	15
	General Issues	16
	Immediate Objectives	17
	Long term Goals	17

	Recommendations and Strategies	17
1.3	Air	19
	Immediate Objectives	19
	Long term Goals	19
	Recommendations	19
1.4	Natural Vegetation and Weeds	21
	Historical Background and Native Vegetation	21
	Non natives, Invasives, and Noxious Weeds	22
	Impacts of Noxious Weeds	22
	Immediate Objectives	23
	Long term Goals	24
	Recommendations and Strategies	24
1.5	Wildlife	26
	Current Inventory	26
	Historical Background	27
	Issues	28
	Possible Effects of Population Growth or Land Use Change	28
	Immediate Objectives	29
	Long term Goals	29
	Recommendations and Strategies	30
Nati	ural Resource Summary	30
2.	Human Environment	32
2.1	Population Growth and Housing	32
2.2	Economy	34
	Recommendations and Strategies	36
2.3	Transportation Infrastructure (motorized and non motorized)	37
	Current Situation	37
	Objectives and Goals	37
	Recommendations and Strategies	37
2.4	Water Infrastructure -Wells, Irrigation, and Wastewater Treatment	40

	Current Situation	40
	Inventory	41
	Historical Background	41
	Issues/Resource Impacts	42
	Immediate Objectives	43
	Long term Goals	43
	Recommendations and Strategies	43
2.5	Other Utilities: Electricity, Gas, Terrestrial Telephone, Cable/Satellite Television, Trash Services	
2.6	Community Facilities	46
	Current Situation	46
	Immediate Objectives	49
	Long term Goals	49
	Recommendations and Strategies	49
2.7	Local Services (Police, Fire and Schools)	51
	Objectives and Goals	52
	Recommendations and Strategies	52
2.8	Land Use/Zoning	54
	Importance of Zoning	54
	Current Situation	55
	Recommended Zoning Changes	57
Hur	nan Environment Summary	62
Conclu	usion	63
Refere	ences and Credits	64
Appen	dix A	66
Res	ults of Target Range Homeowners Association Survey, June 7, 2008	66
	General Questions	66
	Questions Related to a Possible Neighborhood Plan	67
Appen	dix B	69
Info	ormation about the 83 C PP2 parcels recommended for rezoning to C PP1	60

C-RR1 (8/23/09)	•
Analysis of the potential loss in dwelling units under the proposed rezoning of from C-RR2 to C-RR1	•
Appendix C	72
Zoning Definitions	72
Appendix D	79
List of Maps in Order of Appearance	79
Appendix E	97
Appendix F	98
List of Tables	
Table 1. Recent Population Growth in Target Range	6
Table 2. Dwelling Units, Population, Density of Dwelling Units, & Density of Peo Range	
Table 3. Recent Listing of Licensed Home Businesses in Target Range	34
Table 4. Proportion of jobs by major industry for Missoula County	36
Table 5. Current Target Range zoning types and acreage, by type	56
Table 6. Potential dwelling units in Target Range	56

Introduction

Plan Overview

Plan purpose and need

In the 2008 Target Range survey (Appendix A), 84% of respondents were in favor of writing a neighborhood plan that would influence future growth in the neighborhood while preserving the existing rural and semi-rural character of the community. The Target Range Neighborhood Plan accurately reflects the vision neighborhood residents have for future growth as predicted by the UFDA study.

Plan area boundaries

The boundary of the Target Range Neighborhood is shown in Appendix D on Map 1—Target Range Neighborhood. Map 2—Index and UFDA Growth Policy shows the Target Range area in relation to all the neighborhoods included in the Missoula Urban Services Area.

Planning process

The planning process is outlined in Appendix F.

Neighborhood Character

The Target Range neighborhood is rich in history and resources that provide an outstanding environment for families and community. It provides an opportunity for residents of the area and of the entire Missoula Valley to explore and experience the benefits of the natural world as well as the recent human history of Neo-European settlement of the western landscape.

Our neighborhood gets its name because McCauley Butte, bordering the southern edge of the neighborhood, was the target range for the Fort Missoula Military Reserve, established in 1877. Located directly below the butte is the Little White School House, the original school for the neighborhood, which opened in 1895. Representing a vital part of Target Range history, the school was the social and educational center for



farmers who made their living in Target Range by supplying the food needs of a growing Missoula.

Agricultural and ranch products in Target Range in the early and mid twentieth century included dairy, beef, hay, orchards, berries, and vegetables. This area continues to be well known for the richness of its soil and agricultural activities. A large commercial dairy operated in Target Range until 1988. In addition, numerous smaller farms and garden plots continue to support the immediate area as well as the Missoula community at large.

"Rural by Design" 1 •

In addition to large residential lots, a primary element in creating the rural feel of the area is the close proximity of most residential units to large open spaces of land. Extensive and high quality agricultural land supports livestock, cattle and horse ranching, commercial truck gardens, hay and pasture, and numerous home/back yard garden plots. These open spaces also provide unique viewshed opportunities, recreational areas and moments with wildlife, not always available in more crowded neighborhoods.

The confluence of the Bitterroot and Clark Fork Rivers embraces the Target Range neighborhood on three sides providing rich and varied opportunities for recreation and transportation, and irrigation for agricultural activities. The river corridors provide premier occasions to experience the natural world in a quiet environment broken only by bird songs and water sounds. The river systems remain essentially unchanged from when Lewis and Clark traversed this area and the Salish and Pend d'Orielle frequented the Missoula Valley. It is paramount that these ecosystems remain protected from the consequences of dense development.

We believe every effort should be taken to maintain the rural character and qualities of our neighborhood as well as protect the wide variety of resources found in the area. This neighborhood plan is a means of keeping Target Range "Rural by Design".

Current Situation

The Target Range neighborhood is currently a mixture of open spaces—ranging from a few acres to well over 100 acres—and primarily single family residences on one-half to one acre lots. A few multiple family dwellings have emerged in the last several years as well as a few group homes scattered throughout the area. Few public businesses exist in the Target Range area other than Target Range Market which today functions as a convenience store and gas station, plus a small mini warehouse storage unit. The Target Range area includes significant garden plots that provide subsistence produce for families and income through outlets like farmers' markets and

local grocers. Other businesses that are managed from residences, such as child care or consulting services are less visible.

A source of pride for many of the Target Range residents is the well kept and landscaped residential lots that dominate the area. The neighborhood is generally quiet, peaceful and free from congestion.

Most of the vehicular use in the area is from local residents commuting to and from town/work, delivering school children to Target Range Elementary and



Middle School and/or Big Sky High School, and shopping or other errands. People living in the Blue Mountain and Big Flat areas also travel through the Target Range neighborhood via the Maclay Bridge for the same purposes. Peak traffic occurs between 7:30 through 8:30 AM and 3:30 through 5:30 PM and includes personal vehicles, Missoula's bus service, school buses, bicyclists, skaters, walkers and runners.



Public places where area residents congregate are important in maintaining good neighborhood relationships and Target Range residents share several community meeting areas. Besides being the place where children, teachers, and school administrators gather during the school year, the Target Range School campus is the community's polling place, hosts numerous sports and other after-school activities for students and residents, and provides a meeting place for the local Scout troops, the local homeowners association

and other gatherings that draw community members together. Big Sky High School is another venue where after-school activities often bring neighbors together and has been the site for a variety of community events such as the Relay for Life and model train convention. Target Range Market, the only grocery and gas station in the Target Range, provides a community message board, bulletin board and serves as another hub where neighbors often meet informally and exchange information.

"We have lived in the area for 28 years and cross Maclay Bridge every day. There is something neighborly and comforting in the fact that with few exceptions people are considerate of each other in crossing the one lane bridge. Typically, people wait for each other to cross the bridge in cars, bikes or on foot and as a rule wave to each other when they meet.

There are numerous outdoor venues available to community members for walking, running, cycling and other forms of recreation: Big Sky Park; American Legion and Little League baseball fields; Equestrian Park; Fish Wildlife and Parks' accesses to Kelly Island; and Forest Service access at Maclay Flat all provide opportunities for public land and water use. The Maclay Bridge area, although not managed public lands, provides a swimming, fishing and gathering place as well. The extensive bike paths from Reserve Street to Clements Road along South Avenue West, and from Clements Road to



"Rural by Design" 3 ●

paths on North Avenue, Spurgin Road and Seventh Street make it possible for children and teens to get to school safely by walking and biking. With the low speed limit and low traffic volume on most residential streets, many neighbors walk and greet each other daily along these routes.

In addition to gathering places and places to recreate, the existing low density of development allows for open spaces that provide unique viewshed opportunity and connection with nature. Target Range provides areas to explore and experience wildlife and fish as well scenic vistas throughout. Deer, moose, coyotes, bear, birds and several other species frequent the area and subsist on the landscape we have maintained.

All of these public places and routes serve an important community and neighborhood function of providing for social interactions, recreation and a sense of community. Since we usually care more about people we know than those we don't, opportunities for people to "connect" with each other often facilitates stronger relationships. These stronger relationships have developed into the sense of neighborhood described throughout the Target Range Neighborhood Plan.

Neighborhood organizations, such as the Boy Scouts and Target Range Homeowners Association (TRHOA), also contribute to the character of the neighborhood. For a nominal donation, the Scouts put out American flags at area residences on national and other appropriate holidays. The TRHOA sponsors several meetings each year and encourages all residents and property owners to attend annual fall open house sessions. A weekly farmers' market is set up in the school parking lot during the summer. Activities at Target Range School such as sporting events and seasonal programs attract parents and friends throughout the school year.

A low incidence of crime in Target Range can be attributed to several factors. The results of the April, 2008, survey showed a high level of satisfaction with police protection (93%) and with fire protection (96%) which undoubtedly has significant influence. The fact that people generally know and care about each other and are willing to work together as neighbors lending a helping hand to each other has also made a positive difference.

"It never fails; if we have neglected to stop paper delivery, in our absence our neighbors will collect accumulated issues for us awaiting our return. This seemingly small act reassures us that not only are our neighbors watching out for us from a security standpoint, but they care enough to inconvenience themselves in taking action. We hear of similar acts of kindness all over Target Range."

Recent History

The rich history of Target Range described throughout this plan provides the backdrop for the evolution to today's Target Range neighborhood and community. The Target Range area has seen continuous growth over the past 30 years. Until the early 1970s, most of the open land in the area was used primarily for agricultural production. When the social desire to live in rural areas grew, places like Target Range and other lands surrounding Missoula in all directions began to be developed. Many landowners realized the financial benefits of subdividing their holdings into one to ten acre lots for those people yearning to move away from the urban



lifestyle. In the late 1990s this trend to sell one to ten acre lots prevailed and the very rural nature of Target Range began to change. Despite the waning of outgrowth in the late 1990s and early 2000's due to escalating energy costs, demand continued for development in and around Target Range. Its proximity to the city center and yet rural feeling continue to be an attraction.

In Target Range, as well as in many neighborhoods, landowners who once had large parcels have maintained their homes, a portion of their land base, and their historical relationships with other long time residents. The comparatively (albeit continuous)

slow growth and the persistence of people to stay in Target Range facilitate neighbor relationship development. Many neighbors know each other and tend to watch out for each other. This neighborly atmosphere has set the stage for continued good community relationships and provided the Target Range neighborhood with a solid social structure.

"In the spring of 2004, after 20 years of living in Target Range only during the summer, I was preparing to retire and move back here permanently. My neighbors, in their usual watchful way, noticed my renters had lost interest in caring for my horses. They got together and divvied up the chores—one family fed my horses in the morning and on the way home from work in the evening. Another organized the irrigation pipes and saw to it that they were moved. A third neighbor arranged for my hay crop to be cut, baled, and up in the barn for winter feed. When I arrived in mid summer, the second hay crop was well on its way and the horses were fat and sassy."

Issues and Resource Impacts

Recent growth in housing in Target Range is shown in Table 1 below. The number of dwelling units in 2008 was estimated to be 1065. Assuming 2.56 people per dwelling unit, this yields an estimated population of 2726. In the eight years from 2000 to 2008, dwelling units grew by 8.6% and the population grew by 10.0%. Both grew slightly more than 1% per year.

"Rural by Design" 5 ●

Table 1. Recent population growth in Target Range.

	2000 Census	2008 Estimate
Dwelling units	981	1065^{1}
Population	2511	2726^{2}
Density 1: Dwelling units per actual acre ³	0.9	1.0
Density 2: Persons per actual acre ⁴	2.3	2.5

- ¹ Estimated by Missoula Office of Planning and Grants.
- ² This population came from multiplying the number of dwelling units by 2.56, which is the average number of persons per dwelling unit for Target Range found in the 2000 U.S. Census.
- ³ Density of dwelling units = Dwelling units/Actual Acres.
- ⁴ Density of people = Population/Actual Acres.

NOTE: In calculating densities, only residential acres are used. These are called Actual Acres. Public lands, roads, right-of-ways, etc. are called Constrained Acres and are excluded from Actual Acres.

The UFDA 2009 document forecasts that 400 new residential units will be built in Target Range in the next 20-30 years. There are currently 155 lots with preliminary approval for future dwelling units. While growth has been modest compared to some areas of Missoula, it has begun to affect resources of importance to the residents of Target Range and the greater Missoula area. The natural resources identified in the 2008 Target Range



Neighborhood Survey (Appendix A) as most important are surface waters, irrigation, ground water/aquifer, wildlife habitat, open space, air and agricultural soils.

A driving force behind residents' interest in preparing this neighborhood plan is concern for the potential impacts of unplanned development on our community's social and neighborhood integrity, as well as on the natural resources listed above. In the following sections of this plan we will focus on the natural and human environments of Target Range.

Natural Environment

The natural environment in the Target Range neighborhood includes the air we breathe, the water we drink, the land that supports our homes, yards and agriculture, as well as the many and varied forms of animal and plant communities. In total, the natural world that surrounds us in our neighborhood is fundamental in defining what we find so appealing about living here. We also recognize that our neighborhood, lying at the confluence of two major rivers, includes key natural assets of value to the entire Missoula Valley.

In the sections that follow, we describe several aspects of the natural environment that are most important to the neighborhood. Since the key focus of this neighborhood plan is to plan for growth over the next 20 years, we want to document the current status of these important natural resources and identify how they could be affected, both positively and negatively. When it appears there may be potential negative impact on the natural environment by development in the neighborhood, those impacts are identified in this plan and recommendations are provided to help avoid or mitigate the negative growth impacts and enhance the positive impacts.

1.1 Water Resources

The Target Range neighborhood is located at the confluence of two major Montana rivers, the Bitterroot and the Clark Fork. The neighborhood is also located over a productive shallow aquifer, the Missoula aquifer, which serves as the drinking water supply. This neighborhood plan recognizes the unique and sensitive natural setting adjacent to these outstanding water bodies and seeks to conserve their high quality surface waters and ground waters and associated natural assets.

Current Situation

Streams and Rivers: The Bitterroot River forms the southern and western boundary of the neighborhood. The Bitterroot, a nationally-known trout stream, is one of the most heavily used trout fishing waters in the state of Montana. The Clark Fork River forms the neighborhood's northwest boundary and is the source of irrigation water.

The forested floodplain wetlands of the Clark Fork and Bitterroot, large parts of which are administered by the US Forest Service, Montana Fish, Wildlife and Parks (Kelly Island Fishing Access), and adjacent county lands, are a major feature of the neighborhood, providing abundant wildlife habitat and recreational opportunities, as well as



"Rural by Design" 7 ●

natural flood control and water quality protection benefits. [Map 3—100-Year Floodplain (DFIRM), in Appendix D, shows the floodplain for the Target Range neighborhood.] Recreational access to these surface waters for boating, tubing, fishing and swimming is a significant element of the character and value of the Target Range neighborhood and a valued resource for all of Missoula.

Although the Bitterroot and the Clark Fork are heavily used for recreation, there are some water quality issues. Sources of the water quality problems on these two rivers include mining, grazing, storm water discharge, septic systems, and wastewater treatment plants in the entire Bitterroot Valley and upper Clark Fork watershed areas. The Montana Department of Environmental Quality is in the process of preparing a Total Maximum Daily Load (TMDL) report specifying the pollutant load reductions needed to bring the Bitterroot into compliance with all water quality standards. The Clark Fork nutrient TMDL, known as the Voluntary Nutrient Reduction Program, established goals for nutrient reduction for the time period 1998-2008, most of which have been at least partially met. Other TMDLs for the Clark Fork, for example, for metals contamination, are planned for the future.

While the water quality impairments indicate the need for some improvements, these two rivers support robust trout fisheries and a large recreational fishing and outfitting industry in the Missoula area. The rivers also provide a diversity of wildlife, good irrigation water, and abundant recreational opportunities for the Target Range neighborhood and Missoula as a whole.



Aquifer: The Missoula aquifer is a shallow unconfined aquifer formed by coarse alluvial material (sands and gravels) deposited in the valley during the Quaternary geologic time. The Missoula aquifer stretches from the Clark Fork River at Hellgate Canyon across the valley to the Bitterroot River. The aquifer saturated thickness averages eighty feet, and the depth-to-static water level (depth below the surface to water) varies from ten to forty feet. Most Target Range neighborhood homes have their own private wells, which are drilled into the aquifer. The Missoula aquifer is the sole source of drinking water for the residents of the Missoula Valley. Over 40,000 households depend on it for water every day.

The Missoula aquifer has generally high transmissivity, which means water moves through the coarse gravels and sands relatively quickly. The flow of water in the aquifer is east to west parallel to the Clark Fork River. This flow therefore, passes under the urban center of Missoula, then west under Reserve Street and then west under Target Range to discharge in the Bitterroot River. Springs and upwellings of groundwater are easily found along this reach of the Bitterroot River. [Map 4—Flow Direction of Missoula Aquifer shows the flow pattern across the Missoula Valley.]

Water quality in this aquifer is generally good. Levels of nitrate-nitrogen, coliform bacteria, and other indicators of contamination are monitored by the Missoula Water Quality District using monitoring wells and information from private well owners and the Mountain Water Company. The current density of homes on septic systems has not been associated with a measurable deterioration in the water quality measured in nitrate concentrations or bacteria/virus. In fact, the groundwater nitrate levels in Target Range, typically below 1 mg/L, are similar to values in many rural areas of the USA (e.g. the Bitterroot Valley) with low density residential development and are many times lower than Montana Water Quality standards. [Map 5–Infrastructure and Wastewater Quality Related Info shows some 2009 water quality data.]

Due to the shallow depth to ground water and highly permeable soils and aquifer materials in many areas, the Missoula aquifer is considered sensitive to degradation. Concern about the cumulative effect of large numbers of septic systems in the area around the city of Missoula in the 1980s and 1990s led to a study called "The Unsewered Areas Study", and then to a major regional campaign to connect the higher density residential areas to sewer. This major regional campaign has apparently at least partly controlled the problem, as nitrate levels in the western part of the aquifer and in the Bitterroot River have remained stable or gone down over the 1989-2008 time period according to recent Missoula Water Quality District reports.

Issues and Resource Impacts

The primary issues related to conservation of ground water and surface water resources in the Target Range area can be summarized as follows:

- The entire Missoula aquifer, including that portion under Target Range, is sensitive to contamination due to its shallow depth-to-ground water, permeable overlying soils, and high transmissivity.
- 2) Target Range is located in the extreme down gradient end of the Missoula aquifer, which means it is vulnerable not only to pollution risks caused locally, but to groundwater pollution caused in the Missoula urban area immediately to the east.
- 3) At this time, water quality in the Missoula aquifer is generally good. No groundwater quality standards are at immediate risk of violation on a widespread basis; no particular problems are located in the Target Range neighborhood.
- 4) Risks to the aquifer, however, are numerous and tend to increase as development proceeds. Hazardous wastes, whether they are household products, commercial and industrial products (e.g. petroleum-based fuels, lubricants, solvents, etc.), storm water, or increased septic effluent discharge are all risks to the aquifer. These risks are minimized in areas of lighter development density.
- 5) Target Range's septic system density and its impact on the aquifer needs to be considered in the regional context; certainly increasing the number of new homes on septic systems will increase pollution pressure on the aquifer, especially if this is not off

"Rural by Design" 9 •

- set by removing some homes from septic and putting them on sewer. However, other risks to the aquifer, like storm water and hazardous substances, increase as development density increases even with sewers.
- 6) The groundwater and surface water issues cannot be separated because the shallow groundwater flowing under Target Range discharges into the Bitterroot River; therefore any increased pollution load on the aquifer threatens to increase pollution in the Bitterroot. This includes septic and storm water pollution loads from future development.
- 7) The Bitterroot River and the Clark Fork River in Target Range are remarkably naturally functioning, healthy river systems with functional floodplains and associated wetlands and riparian vegetation. These priceless resources need protection, and maintaining some open space and low density development along their periphery is a logical step in protecting their water quality, floodplain function, and habitat values.

Possible Effects of Population Growth and Land Use Change

The Target Range neighborhood's homes contribute septic effluent to the Missoula aquifer at the same rate as homes on septic in almost any other part of the valley. Target Range soils are generally appropriate for effective septic system performance. The current density of homes on septic systems has not been associated with measurable deterioration in the water quality as measured by nitrate concentrations, bacteria or virus. Future population growth can cause several effects, depending on how wastewater is managed:

- 1) Building new housing on septic systems will increase wastewater loading on the aquifer;
- 2) Even with sewering of future high density developments to reduce wastewater loading, other risks to the aquifer from storm water and hazardous substances would increase.
- 3) Sewering portions of the Orchard Homes area directly west of Reserve Street and concentrating future development in that area can more than offset the effects of current and future wastewater loading farther west in Orchard Homes and Target Range. In fact, recent sewering in urban Missoula has already offset problems detected in the 1990s and reduced nitrate concentrations west of Reserve Street, according to the Water Quality District.

Another effect of population growth in Target Range and the nearby Orchard Homes neighborhood is infringement on the Clark Fork and Bitterroot Rivers' floodplain. These shallow groundwater areas are important riparian forest habitats for wildlife, provide recreational areas for boating, hunting, fishing, and create natural buffers and filters which can improve both surface and groundwater quality. They also provide natural flood control, if left undeveloped. Increasing residential densities near these natural buffers is unwise because it leads to a reduction in the beneficial qualities and protection they provide.

Types of Protection Needed

The Target Range neighborhood is located in a critical area of the Missoula Valley for the protection of water resources. Future development must recognize the sensitivity of the aquifer and the floodplain areas in Target Range and balance the future pollutant loads which are assigned to septic systems and centralized sewer and wastewater treatment valley wide. One approach is to concentrate future development east of Target Range in areas that can be easily sewered, consider other resource impacts (described throughout this plan), and minimize residential density in the most sensitive areas—especially floodplain fringes and their buffer areas. New septic system requirements for high treatment septic systems may be adopted by state or local government in the future. Future zoning should recognize the most sensitive areas for water resources are the northern, western, and southern fringes of Target Range, adjacent to the rivers and their floodplains. However, while this plan specifically addresses the Target Range neighborhood, the septic system issue needs to be managed on a valley wide basis, not solely neighborhood by neighborhood.

Immediate Objectives

- 1) Incorporate aquifer protection as a cross cutting theme in the neighborhood plan.
- 2) Work with the Water Quality District and local city and county governments to protect water resources.
- 3) Explicitly address the issues created by any proposed increase of septic system densities or sewers in the neighborhood. The Target Range Water and Sewer District will play a key role.
- 4) Develop strategies for protecting the floodplains and buffer areas of the Clark Fork and Bitterroot Rivers from the negative effects of increasing residential density.
- 5) Strengthen the Target Range Water and Sewer District to help implement science-based water resource protection.

Long term Goals

- 1) Maintain high quality, uncontaminated ground water as the only drinking water resource in the Missoula Valley.
- 2) Contribute to the long term improvement of the surface water quality of the Bitterroot and Clark Fork Rivers in coordination with local, regional, and state partners.
- 3) Protect the vital floodplains, floodplain-fringe riparian areas and buffer areas along the Bitterroot and Clark Fork Rivers.

"Rural by Design" 11 •

Recommendations and Strategies *Streams and Rivers:*

- Prohibit stream bank modifications, especially levees and bank protection, that would damage the normal functioning of river floodplains.
- 2) Use BMPs in construction, residential and agricultural land management to reduce sediments and contaminants flowing into the aquifer, irrigation canals, or rivers (e.g. no dumping of foreign materials—like fertilizer or animal waste into irrigation canals).



- 3) Through education, improve local understanding of water quality, aquifer-river connection, river-floodplain function.
- 4) Coordinate with the Montana Department of Environmental Quality and other partners in meeting river and stream beneficial uses.
- 5) Use zoning which protects surface water resources, especially floodplains, and use open space buffers along floodplain fringes.

Aquifer:

- 1) Use the new UFDA plan to adopt a density formula which protects the Missoula aquifer and balances the appropriate use of sewer in commercial locations and residential areas east of Target Range with densities greater than one dwelling per acre, with efficient septic systems in low density residential and agricultural buffer areas.
- 2) Encourage cautious and judicious use of hazardous pesticides and herbicides in residential and agricultural areas located over the shallow Missoula aquifer.
- 3) Educate landowners and residents about the threats to the aquifer posed by inadequate disposal of toxic and hazardous materials (fuels, lubricants, solvents, paints, pesticides, herbicides, etc.) through the Target Range Water and Sewer District outreach programs.
- 4) Minimize impermeable surfaces in new developments (i.e. paved streets, driveways, sidewalks, concrete patios), and emphasize natural systems for collection and infiltration of storm water to minimize threats to the aquifer.

For more discussion about the impacts of the Target Range neighborhood on the river systems and the aquifer, and to read about ongoing strategies to mitigate these, please see Section 2.4 Water Infrastructure.

1.2 Soils, Irrigation and Agriculture Landscape and Soils



The Target Range neighborhood is situated on the western end of the Missoula Valley at the confluence of the Clark Fork and Bitterroot Rivers. The neighborhood is built on thick, well developed alluvial soils forming two low terraces above the river floodplains. There is also a small distinctive plug of volcanic bedrock known as McCauley Butte along the south boundary of Target Range. Below the terraces and along the rivers are stringers of cobbly soils, but the majority of the neighborhood is made up of deep, dark colored loams and silt loams (types) ideal for agriculture.

The Target Range neighborhood includes one of the largest areas of "prime, if irrigated" agricultural soils in Missoula County. Only eight percent (8%) of Missoula County is made up of any type of agricultural soil. Of these agricultural soils, "prime, if irrigated" soils are the highest quality because these soils are the most suitable for producing food, forage, fiber and other crops. Prime agricultural soils are recognized as a critical resource for meeting the nation's agricultural needs in the short and, especially, in the long term.

Prime agricultural soils, also categorized as soils of national importance, make up 1,274 acres of the 1,684 acres within the Target Range neighborhood, or a full 75% of the neighborhood. Much of the area with these soils is already developed for residential uses and is no longer available in any practical way for agriculture production. Most of the rest of the Target Range soils are considered "soils of local importance" for agriculture. The only less fertile soils in Target Range are located on McCauley Butte, in the Knife River Gravel Pit, or in regulated floodplain. Map 6—Important Ag Soils, Sizable Parcels Overlapping Ag Soils & Montana D.O.R. Ag Classification shows the location of agricultural soils in the Target Range neighborhood.

For purposes of this neighborhood plan we define "agriculture" consistently with the definition used by the county and city of Missoula. Agriculture is defined as the use of the land for growing, raising, or marketing of plants or animals to produce food, feed, and fiber commodities. Examples of agricultural activities include, but are not limited to, cultivation and tillage of the soil; dairying; growing and harvesting of agricultural or horticultural commodities; and the raising of livestock, bees, fur bearing animals, or poultry. Agriculture does not include gardening for personal use, keeping of house pets, kenneling, or landscaping for aesthetic purposes. Agricultural land includes land used for agriculture or having a soil type defined by the Natural Resources Conservation Service as having agricultural importance, including prime farmland, farmland of statewide importance, and farmland of local importance.

"Rural by Design" 13 •

Irrigation Water Supply

Target Range soils are agriculturally productive because of the availability of abundant irrigation water. The Missoula Irrigation District (MID) maintains a ditch system based on Clark Fork River water diverted near the downtown area. This irrigation water and accompanying infrastructure is an extremely valuable resource that has made fertile lands highly productive. Irrigation water also recharges groundwater in Target Range, and has done so for over 130 years. Map 5–Infrastructure & Water Quality Related Data and Map 7–Missoula Irrigation District Petitioners and Access as Surveyed by Missoula City/County Health Department - 2005 show the MID irrigation ditches in the Target Range neighborhood.



Measurements indicate that the MID main ditch along Spurgin Road a few blocks west of Reserve Street imports about twenty cubic feet per second (cfs) of Clark Fork River water into the Orchard Homes-Target Range area. This water is sufficient to irrigate hundreds of acres in and near the neighborhood. Lateral ditches supply water into almost all parts of Target Range.

Surface water used for irrigation usually is warmer than well water, is soft, and has natural nutrients, all characteristics which enhance crop growth. Soils retain better texture and fertility when irrigated with surface water, as opposed to the typically hard well water in Target Range. For more information about irrigation, please read Section 2.4 Water Infrastructure.

History of Agriculture in the Target Range

Target Range has been an important agricultural area of Missoula since at least 1890. By 1895 enough farm families were located in Target Range to necessitate the opening of Target Range School. The Target Range and Orchard Homes areas were subdivided as small farms and important apple orchard areas at the turn of the twentieth century. These orchards produced for several decades, but eventually declined due to distance from urban markets and competition from the Pacific Northwest. Other agricultural products in Target Range in the early and midtwentieth century included dairy, beef, hay, berries, and vegetables. A large commercial dairy operated in Target Range until 1988, and two commercial beef producers were cutting hay and wintering cattle in Target Range until about 2000. Currently two private producers and one public school sell beef cattle on a small scale. The continuing market-garden agricultural activity in this area is one of the reasons Missoula can legitimately be called the "Garden City."

Current Inventory and Agricultural Activities

Approximately fifteen parcels totaling 153 acres in Target Range are currently assessed by the Montana Department of Revenue as Farmsite, Farmstead Rural, or Agricultural. The parcels range from a minimum size of 0.8 acres to a maximum of 50 acres, with a median size of 4.7 acres. These numbers do not include vacant parcels. Although large areas of Target Range have been converted to low density residential use (usually one to two acre lots), a number of small

scale agricultural activities remain and are important to the character of the neighborhood and are of value to all of Missoula.

Livestock are a prominent feature in Target Range, especially horses. At least 25 properties in Target Range maintain horses. The large population of horses is compatible with and adjacent to the Missoula Equestrian Center in Big Sky Park, which is within the Target Range neighborhood boundary. A small number of beef cattle are raised annually in Target Range, including private producers and the Missoula County Public School's agricultural program herd, and there is at least one private sheep breeding and livestock operation. Sheep, goats, llamas, chickens, turkeys, ducks and other livestock are widespread throughout the neighborhood. The 4-H and FFA animals grown on residential or farm lots or on the Vo-AG land are sold locally as livestock, meat and eggs.



A wide variety of crops are produced commercially in Target Range. Hay is the most widespread crop. Small market-gardens and greenhouses producing vegetables, fruit, flowers, and seedlings are the principal form of commercial agriculture in Target Range, in addition to abundant household gardens. An informal survey in 2009 found that 40% of the food crop sold at the weekly Missoula Farmers' Market is produced in the Target Range-Orchard Homes area. Hmong ethnic producers

are particularly prominent commercial gardeners in this neighborhood, including the five-acre plot in Big Sky Park, the plot at Clements Road and Spurgin Road, and the large garden off Moua Lane.

Agricultural activities in proximity to the city of Missoula enhance Missoula's diversity and character as the "Garden City." Target Range's deep soil and productive market gardens are important locally, regionally, and nationally as a resource for local food production. These productive lands provide a sustainable service that keeps food production and consumption within a small footprint near the urban center. This reduces the need for importing food products to Missoula, and keeps more local food dollars within the local economy.

Resource Impacts of Population Growth

There are numerous backyard and small market gardens being actively cultivated in Target Range. These provide a substantial contribution to the variety and viability of farmers' markets in the Missoula area. As the costs of fuels and transportation increase, as the awareness of the benefits of the "buy local" and "eat local" movements takes hold in this period of economic uncertainty, the perceived value of these lands with important agricultural soils will greatly increase in value to the neighborhood and to the larger community of Missoula as a whole. Any

"Rural by Design" 15 ●

further residential or commercial development on these special lands will undermine the ability of the Missoula community to maintain and enhance its food security now and in the future.

"I love to wander between rows of beautifully prepared and displayed produce at the Saturday Missoula Farmers' Market. After a long winter it is like an annual rite of passage where I get to see so many friends and savor the offerings produced by the many families who depend on its income."

General Issues

- Target Range soils of national importance for agriculture are "at risk" of being permanently lost to development.
- 2) Agricultural businesses and activities need support to continue on a small scale basis in the Target Range area, including horses, beef and sheep, hay production and market gardening.



- 3) Target Range homeowners want to preserve some of the rural, agricultural character and history of the area.
- 4) Target Range needs to preserve open space within the neighborhood, not just on the periphery, and agricultural use is a good open space option.
- 5) Agricultural businesses, such as greenhouses, nurseries and small produce farms are the type of business most favored in the 2008 Target Range homeowner survey.
- 6) The Open Space program did NOT preserve ANY valley bottom working farm agricultural lands from 1995 to 2006—agricultural lands that can be preserved for farming should be considered for that program.
- 7) Target Range is a natural buffer between the expanding urban core of Missoula and the high quality river corridors and forestlands immediately to the south, west and north. Agricultural use and open space are very appropriate in this buffer area.
- 8) Agricultural lands are an important component of wildlife habitat in Target Range.
- 9) Low density development that fences off smaller lots, for example, one-acre parcels with bluegrass lawns, also threatens the loss of soil available for agricultural uses.
- 10) Market-garden production in Big Sky Park needs to be protected, and expanded, if warranted, per the original park plan (1998).

11) The Target Range Neighborhood Planning Group or the TRHOA needs to work with larger agricultural producers to determine their interests, resources, plans, and needs (for information about agricultural land conservation, etc.).

Immediate Objectives

- 1) Provide incentives within zoning regulations for protection of remaining agricultural soils in Target Range.
- 2) Prompt the Missoula County Commissioners, City/County Open Space Advisory Committee, and interested citizen organizations to find opportunities and creative financial and regulatory mechanisms for preserving the agricultural soils closest to Missoula—those in Target Range and Orchard Homes.
- 3) Promote the protection of public agricultural lands in Target Range, including those farmed by Missoula County Public Schools (vocational agriculture program on South Avenue West) and Big Sky Park.

Long term Goals

- 1) Preserve substantial acreage of private and public agricultural open space and agricultural soils in Target Range. Adequate parcel size is an important consideration for commercial viability.
- 2) Preserve opportunities for small scale livestock, nurseries, and agricultural production in the Target Range neighborhood, and match those opportunities with individuals looking for places to commercially grow food crops close to Missoula.
- 3) Designate appropriate areas for agricultural use and agricultural business use in Target Range.

Recommendations and Strategies

- 1) Incorporate agricultural soils into the designation of key natural resources to be protected by various land use tools discussed in the Zoning Section 2.8.
- 2) Change zoning in areas which still have substantial open, undeveloped land, to encourage maintenance of small scale agricultural uses.
- 3) Provide zoning regulations which encourage all future residential developments on agricultural soils to preserve a substantial portion of the land base for future agricultural use.
- 4) Work with Community Food and Agricultural Coalition (CFAC), Five Valleys Land Trust, Missoula County Extension Service, US Department of Agriculture, Target Range Homeowners Association, Montana Department of Agriculture, and other land preservation groups to plan specific agricultural conservation strategies.

"Rural by Design" 17 •

- 5) Create a partnership between CFAC and Target Range to take an inventory of the neighborhood's best farm properties based on existing data and site visits.
- 6) Look for opportunities to protect and plan for expansion of market-garden production.
- 7) The TRHOA will work with the MID to preserve the current irrigation system including the main ditch and laterals.

With the increasing demand for healthy, locally grown food needed to feed the growing population in the Missoula Valley, residents of Target Range feel that use of agricultural lands for intensive residential development is not the correct use of these precious natural resources. These agricultural soils, if preserved for their highest and best use in local food production, can be a benefit to all the residents of Missoula County.



1.3 Air

The quality of the air we breathe is directly related to the quality of life in Target Range. Air quality is a regional issue in the Missoula Valley, which has a recognized winter inversion air pollution problem. Target Range lies within the Missoula Air Stagnation Zone. Major efforts have been made at the county level to curb air pollution in this zone through regulation of major industrial sources, regulation of wood stoves, use of additives to gasoline in winter, encouragement of less driving by supporting bicycle paths, paving of frequently used dirt/gravel roads, and changes in de icing methods and materials.

The Target Range neighborhood has worked with the County Public Works Office to fund and build bicycle paths connecting residential areas to Target Range School, Big Sky High School, Target Range Market, Fort Missoula, and other recreational and commercial sites. These paths allow safe foot and bicycle transportation and cut down on the use of cars for local transportation. Target Range neighborhood residents support all other appropriate county air quality programs.

Immediate Objectives

- 1) Link air quality concerns to all future residential development proposals.
- 2) Address need to manage air quality concerns such as dust control on dirt roads, burning, livestock, and transportation concerns (reducing use of cars as much as possible).

Long term Goals

The Target Range Neighborhood Plan proposes to support continuing stewardship of high air quality through:

- 1) Managing low density residential growth,
- 2) Supporting use of bicycles and public transportation, and
- 3) Encouraging well managed agricultural open space and riparian forest conservation.

Recommendations

- The TRHOA should encourage all residents to obtain a permit to burn from the Missoula Rural Fire District, and follow conditions of the permit.
- 2) TRHOA should encourage residents to comply with Missoula City-County Health Department regulations regarding wood and pellet stoves.
- 3) Support greater use of bicycles by continuing to connect residential, commercial, recreational sites, and schools by bicycle paths as described in Section 2.3 Transportation Infrastructure.



"Rural by Design"

- 4) Integrate support for livestock/agriculture with reasonable dust control and odor control measures.
- 5) Encourage residential growth closer to major retail areas to minimize transportation caused air pollution.

1.4 Natural Vegetation and Weeds

The Target Range neighborhood includes a number of areas with important natural vegetation remnants which are of local and regional value for wildlife habitat, scenic resources, and air and water quality protection. Particular examples include the native dry grasslands and open ponderosa pine forest on McCauley Butte, and the very important riparian deciduous forests and associated wetlands along the Bitterroot River and Clark Fork River. The Target Range neighborhood supports preservation of the remaining intact, native vegetation areas, supports enhancement of open lands by restoration of native or native like vegetation, and encourages the appropriate use of native vegetation in existing and future residential landscapes.

Historical Background and Native Vegetation

The Target Range neighborhood was originally vegetated largely by native grassland known as Palouse Prairie with scattered ponderosa pine and thick riparian deciduous forests along the rivers. The diverse grasses and other herbaceous vegetation of the Palouse Prairie included species such as the bitterroot (*Lewisia rediviva*), which was sought out as a food source by the Salish people in the Target Range area until well into the twentieth century.



Today almost all the native bunchgrass prairie has long been converted to agriculture or residential developments, with the only significant prairie remnant on McCauley Butte. It is difficult to determine the exact species assemblage of grasses and forbs that may have been present in Target Range because of the drastically altered landscape. Most likely, dry prairie species grasses, such as bluebunch wheatgrass (*Pseudoreugnaria*

spicata), prairie junegrass (Koeleria macrantha), Idaho fescue (Festuca idahoensis), and rough fescue (Festuca scabrella), were dominant, along with wildflowers, such as silky lupine (Lupinus sericeus), larkspur (Delphinium bicolor), arrowleaf balsamroot (Balsamorhiza saggittata), penstemon (Penstemon wilcoxii), hairy golden aster (Chrysopsis villosa), blanket flower (Gaillardia aristata), and asters (including Aster pansus and A. falcatus) (University of Montana Vegetation Management Plan 2006).

Scattered pockets of ponderosa pine (*Pinus ponderosa*) still exist around the neighborhood. Some groves have self seeded into these locations, but many have been planted by residents.

The riparian deciduous forests along the Bitterroot and Clark Fork Rivers are part of the regionally important wildlife corridor between the Frenchtown and Bitterroot Valleys. These forests have been spared development, presumably because of frequent flooding, but have been impacted by recent human activities. Most likely, these open black cottonwood (*Populus*

"Rural by Design" 21 •

trichocarpa) forests would have historically included a mid story consisting of mixed deciduous shrubs like chokecherry (Prunus virginiana), river hawthorn (Crataegus douglasii), and red osier dogwood (Cornus stolonifera). Native grasses and sedges (Carex spp.), and snowberry (Symphoricarpos albus) would have dominated the understory. Currently the non native box elder (Acer negundo) has moved into some riparian areas adjacent to the neighborhood. Chokecherry is still found in the mid story along with river



hawthorn, Wood's rose (*Rosa woodsii*), and currants (*Ribes spp.*). Exotic grasses and forbs dominate the understory (University of Montana Vegetation Management Plan 2006).

Non natives, Invasives, and Noxious Weeds

In addition to the extensive loss of native habitat due to land use conversion, there is additional pressure on native vegetation from non native invasive species. These have been introduced through intentional plantings (i.e. in residential landscaping and agriculture applications) or through unintentional introductions (i.e. weeds in hay or from mud on vehicles, creep in from adjacent areas).

Impacts of Noxious Weeds

Noxious weeds are a legal category of invasive plants species where landowners have a legal responsibility to take management action. These weeds are a major threat to agriculture and wildlife habitat in the Target Range area and throughout western Montana. Infestations of noxious weeds negatively affect remnant native prairie, ponderosa pine stands, riparian forests and gravel bars along rivers—nearly every native plant community found in the Missoula Valley—in addition to frustrating neighborhood residents and farmers. Weed species such as spotted knapweed (*Centaurea maculosa*), leafy spurge (*Euphorbia esula*), common tansy (*Tanacetum vulgare*), sulfur cinquefoil (*Potentilla recta*), and Dalmation toadflax (*Linaria dalmatica*) are commonly found in the neighborhood and surrounding areas

The Montana County Weed Control Act SMCA 7-22-2152 requires anyone disturbing vegetation in a public right-of-way to prepare and gain approval for a re vegetation plan from the Missoula County Weed District or an exemption by the Weed District before final approval for final subdivision plat approval. This act also defines *noxious weeds* as "any plant species established or that may be introduced in the state which may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities." The Missoula County Noxious Weed Management Plan (2006) has divided the noxious weed list for Montana into four categories. Category One noxious weeds are species that are currently established and the most widespread. The other three categories (2-4) list species that are more

recently introduced to Missoula or the surrounding area and are rapidly spreading or are capable of rapid spread.



Like much of the Missoula Valley, many types of weeds have spread into the Target Range neighborhood. Currently at least eight different Category One noxious weeds have been identified by the Missoula County Weed District in the Target Range area. The list includes spotted knapweed, leafy spurge, sulfur cinquefoil, oxeye daisy (Leucanthemum vulgare), Canada thistle (Cirsium arvense), field bindweed (Convolvulus arvensis), and tall buttercup

(Ranunculus acris). Several other weed species like orange hawkweed (Hieracium aurantiacum) and whitetop (hoary cress, Cardaria draba) are present and may require future control.

Windshield surveys and Missoula County Weed District inventory maps of the Target Range area, show noxious weed occurrences are most prevalent on road right-of-ways, along the non motorized trail system along Clements Road and South Avenue West, in disused open lots, and in several public parks including, Big Sky Park, the County Equestrian Park, and the Clark Fork River area public access sites (See Maps 8 and 9 in Appendix D). This apparent lack of weed control presents a significant threat to all types of land use in the Target Range area including agricultural lands, native wildlife habitats, parklands, and residential development sites. In some of their present locations the weeds have displaced or threaten to displace most native and other non native desirable plant species.

The Montana County Weed Control Act; MCA, Title 7, Chapter 22, Part 21 requires all Montana counties to create a Weed District Board. The Target Range neighborhood falls under the jurisdiction of the Missoula County Weed District whose duties include administering the district's noxious weed management program and establishing management criteria for noxious weeds on all land within the district.

Immediate Objectives

- 1) Identify locations where noxious weeds have become a problem; continue work with the Missoula County Weed District to inventory new weed infestations.
- 2) Minimize presence of noxious weeds on roadsides and on public and private properties in Target Range.

"Rural by Design" 23 •

Long term Goals

- 1) Document the status of and inventory remnant native plant communities in the neighborhood.
- 2) Protect and enhance the quality of existing native vegetation, especially riparian forests, wetlands, and grasslands on all public properties and conservation easements within and adjacent to the Target Range neighborhood.
- 3) Restore samples of native grassland within Big Sky Park dedicated to wildlife.
- 4) Increase neighborhood participation in use of native species for residential landscapes.
- 5) Use biological controls, spot spraying and hand pulling to manage weeds on smaller lots.
- 6) Reduce weed infestations by 25% on public and private properties by 2020.

Recommendations and Strategies

- Work with Missoula County Weed District to inventory and document the status of native plant communities and associated wildlife in the remaining deciduous riparian forests and native grasslands in and around Target Range.
- 2) Work with Missoula County Weed District and County Parks Board to develop a native grassland restoration proposal within Big Sky Park to fulfill the original intent of the "wildlife area" in the park.
- Develop an educational program component with Missoula County Weed District and Target Range Homeowners Association regarding noxious weed control and native landscaping on private property.
- 4) Work with Missoula County Weed District to explore grant programs to address weed control through biological control, mowing, and other control measures.
- 5) Approach the Missoula County Weed District to develop an active control program for the identified weed problem areas such as the road right-of-ways and non motorized trail right-of-ways.
- 6) Continue to work with the Weed District to inventory new infestations of noxious and other weed species.

- 7) Buy and sell weed-free hay.
- 8) Wash farm and heavy equipment after each use.

"Rural by Design" 25 •

1.5 Wildlife

The open space of the Target Range neighborhood provides natural and agricultural habitats critical to wildlife, including several large tracts of mostly undeveloped land that support natural vegetation remnants and wildlife populations of regional and local importance. Most of the wildlife species present have persisted throughout the development of the area and now, along with newer arrivals like raccoons and ringednecked pheasants, flourish in the agricultural fields, parks, yards, and riverside riparian areas that are found throughout the neighborhood.



As development and the accompanying loss of habitat continue in the Missoula area, these natural features become an increasingly important resource to the community. The neighborhood desires to maintain the open and mixed agricultural/residential pattern important to all residents of the valley—including those with four legs or wings—and preserve the adjacent high quality riparian habitats and corridors important to Montana's wildlife. Furthermore, it is a high priority of the residents to conserve intact agricultural fields and natural areas used by wildlife while planning for future development.

Current Inventory



High profile wildlife species that frequent the forests and riparian corridors adjacent to Target Range include mule deer, whitetail deer, moose, elk, black bear, mountain lion, and gray wolf. These species may occasionally pass through the riparian corridors in Target Range. Small mammals found in Target Range include coyote, red fox, fox squirrels, raccoons, skunks, beaver, mink, and a variety of rodents. There is also a wide variety of open land wildlife, including geese, ducks, hawks, meadowlarks, and magpies, plus reptiles and amphibians.

Over 100 species of birds have been seen in the Target Range neighborhood, including many species associated with large open lands and low density of human development. Two pairs of bald eagles nest adjacent to Target Range—one behind McCauley Butte and one on Kelly Island—and these magnificent birds are seen frequently soaring over the neighborhood. Other species which nest in and near the Target Range, but are uncommon in more developed areas of Missoula, include ospreys, sandhill cranes, wild turkey, ringed-neck pheasant, a variety of hawks

and owls, pileated and Lewis's woodpeckers, migratory waterfowl, and many neo tropical migratory birds (flycatchers, warblers, vireos, grosbeaks, and orioles).

The State of Montana official "Species of Concern" birds which nest in, or immediately adjacent to Target Range, include the bald eagle and Lewis's woodpecker, while other "Species of Concern" such as Cassin's finch and Northern goshawk, are



common in the neighborhood in winter and spring. These species are present because the Target Range neighborhood, especially the areas bordering the river corridors, provides low density housing, open land, and agricultural lands appropriate for their use.



Important wildlife habitats include all the riparian area along the river corridors, the prairie and woodland on McCauley Butte, agricultural fields, large residential yards, and open lands formerly used for agriculture (e.g. Big Sky Park). All of these areas provide forage, cover, water, prey, continuity of habitat, and movement corridors for wildlife.

The Clark Fork and Bitterroot Rivers riparian areas in Target Range are a key part of the Frenchtown-Bitterroot Valley Conservation Focus Area, one of only four Tier I wildlife habitat conservation areas west of the Continental Divide identified by Montana Fish Wildlife and Parks (FWP) in their statewide Comprehensive Wildlife Conservation Strategy (2005). The Target Range neighborhood sits squarely in the middle of this habitat complex identified for statewide importance for wildlife habitat conservation, providing a crucial corridor linking natural habitats in the Frenchtown and Bitterroot Valleys.

"In the Target Range area, we get to see a diversity of animal species whenever we look. A few years ago, when walking with my son we saw a Pileated Woodpecker, a Downey, a Flicker and a Hairy Woodpecker within the course of an hour. It became so much easier to encourage him to spend time outside and away from his video games after that experience."

Historical Background

The land now occupied by the Target Range neighborhood originally provided riparian deciduous forests along the river corridors and open Palouse Prairie habitat, with some ponderosa pine stands. The prairie grassland habitat has been largely displaced by agriculture over the last 100 years, although the Salish people were still harvesting bitterroot bulbs in native prairie in the area west of the present-day Reserve Street/South Avenue West intersection until almost 1930. Agriculture and development have displaced much of the native prairie, but the riparian forest corridors and nearby conifer forests along the Bitterroot River (much of it in Lolo National Forest) remain mostly intact. As a result, much of the wildlife habitat surrounding Target Range remains similar to its status prior to European settlement.

"Rural by Design" 27 •

Issues

Remaining areas of native vegetation are of critical importance to wildlife. Although many wildlife species adapt to agricultural and low density residential areas and use this as a portion of their habitat, nearby areas of native vegetation are usually of critical importance to maintaining that wildlife on the landscape.

- 1) The Target Range neighborhood borders two high quality riparian habitat corridors, that of the Bitterroot River and that of the Clark Fork River. Riparian deciduous forest habitat is a Tier 1 statewide conservation priority for Montana FWP.
- 2) The Frenchtown-Bitterroot Valley Conservation Focus Area, where the Target Range neighborhood is located, is a Tier I statewide conservation priority area for Montana FWP. The neighborhood is a key corridor between the Frenchtown Valley and Bitterroot Valley portions of this area.
- 3) Target Range continues to provide open land habitat similar to the original prairie vegetation, including McCauley Butte and Big Sky Park, plus public and private agricultural areas. Loss or reduction of these open spaces would reduce the remaining habitat available to open land dependent wildlife in the Missoula Valley.



- 4) Target Range residents wish to preserve the wildlife habitat which remains in their neighborhood, including the agricultural lands used by wildlife.
- 5) Studies by the University of Montana in the Bitterroot Valley have shown that residential development adjacent to riparian areas decreases their value to many riparian nesting birds, particularly neo tropical songbirds. Developing higher density residential development adjacent to these riparian areas will be detrimental to preserving their high quality wildlife habitat.
- 6) Open lands and low density housing areas of Target Range are used as wildlife travel corridors and secondary foraging habitats for many wildlife species, including several birds which are Montana Species of Concern.
- 7) Hunting and fishing are important current uses of fish and wildlife resources along the margins of Target Range. Dense residential development is not compatible with existing waterfowl and archery hunting in the river corridors adjacent to Target Range.

Possible Effects of Population Growth or Land Use Change Random residential density in the Target Range neighborhood, especially in the areas adjacent to the riparian deciduous forest habitats along the Bitterroot River and Kelly Island (Clark Fork), will impact wildlife and habitat quality. Wildlife movements, travel corridors and secondary foraging areas will change as open lands are developed for new residential homes. Conflicts such as wildlife road kills, pet-wildlife conflicts (e.g. migratory songbirds killed by cats, deer chased by dogs, pets killed by wildlife), wildlife damage to fruit trees and gardens, and other problems are expected to increase with more unplanned haphazard development.

The Target Range community must meet its responsibilities to protect wildlife habitat of local and statewide importance and to live compatibly with wildlife.

Immediate Objectives

- Improve documentation of wildlife use of the Target Range neighborhood with technical assistance from wildlife scientists. Make reports available to residents.
- 2) Avoid displacing native wildlife habitat when subdividing land for residential development, especially in wetlands, riparian areas, and floodplain fringes.
- 3) Include native grassland and riparian wildlife habitat on private land in conservation easements or other land use conservation tools discussed in Section 2.8.
- 4) Require lower housing density and buffers near important wildlife travel corridors such as the Bitterroot and Clark Fork Rivers.
- 5) Preserve wildlife travel corridors through open space areas, especially with regard to the Big Sky County Park, Department of Natural Resource Conservation (DNRC) nursery lands, and open lands further south and west (Kelly Island and McCauley Butte-Maclay Flats).



6) Require buffers around recreational use areas (hunting, hiking, fishing, birding, etc.) so that these uses are not impacted by residential development.

Long term Goals

- 1) Protect existing riparian wildlife habitat areas and fish and wildlife recreation along the Bitterroot and Clark Fork Rivers by reducing development pressure in those sensitive areas, perhaps by adopting zoning density restrictions and open space preservation incentives in a buffer area adjacent to the floodplains (Key Wildlife Habitat–Map 12).
- 2) Maintain and enhance habitat quality in open areas such as Big Sky County Park, Missoula Public Schools' agricultural fields, McCauley Butte, and private lands near and adjacent to the Bitterroot and Clark Fork Rivers used by native wildlife for foraging and travel corridors.

"Rural by Design" 29 •

3) Incorporate education about native wildlife, including native landscaping, values of grassland and riparian habitats and their wildlife, and reduction of human-wildlife conflicts, into homeowner education in Target Range Homeowners Association.

Recommendations and Strategies

- 1) Maintain low density residential zoning and incorporate specific protections of key wildlife habitats (especially riparian habitat areas) into the neighborhood plan zoning recommendations so that the Target Range neighborhood meets its responsibility for protection of wildlife habitat of statewide importance.
- 2) Promote or require various land use tools when new development is proposed to protect "at risk" resources.



- 3) Promote or require buffers between dense development projects and native vegetation-wildlife habitat.
- 4) Support the use of Open Space Bond funds and other conservation easement funds to consolidate protection of public and private land wildlife habitat along the Bitterroot and Clark Fork River corridors adjacent to Target Range.
- 5) Encourage the Missoula County Parks Board and staff to plan and implement native wildlife habitat enhancement projects in Big Sky Park and in other planned park units (e.g. the future development of the Knife River gravel pit).
- 6) Encourage TRHOA to work with Montana Fish Wildlife and Parks to further local education for living compatibly with wildlife. This responsibility includes controlling depredations of native wildlife by cats and dogs and other pets, proper storage of garbage, and management of other attractants to wildlife.
- 7) Encourage restoration of native vegetation on undeveloped land and in existing and future residential landscapes to enhance native wildlife habitat, especially for insects, reptiles, birds, rodents, and other small species.

Natural Resource Summary

The natural setting of the Target Range neighborhood includes natural resources that are of unique value to both neighborhood residents and the greater Missoula community. We are located at the confluence of two major Montana rivers, the Bitterroot and the Clark Fork. The

regionally important and sensitive Missoula aquifer serves as our drinking water supply. Productive agricultural soils underlie almost the entire Target Range neighborhood. We still have an intact and functioning surface water irrigation system supporting pastures, hayfields, livestock production and market gardens on these important soils. The Target Range neighborhood includes natural vegetation and agricultural open space of critical importance to wildlife in the Missoula Valley—two pairs of bald eagles nest adjacent to our neighborhood. The riparian deciduous forests and associated wetlands along the Bitterroot River and Clark Fork River floodplains are part of the regionally important wildlife corridor between the Frenchtown Valley and Bitterroot Valley recognized by Montana Fish Wildlife and Parks as one of four Tier I wildlife habitat conservation areas west of the Continental Divide.

These unique and regionally important natural resources need to be protected, and this neighborhood plan proposes measures to secure that protection within the context of appropriate growth planning. Among other recommendations, we propose to use zoning to protect surface and ground water quality by minimizing density and paved surfaces, and maintaining open space buffers along floodplain fringes. We propose to change zoning in areas which still have substantial open, undeveloped agricultural soils, to encourage maintenance of small scale agricultural uses, and encourage all future residential developments on agricultural soils to preserve a substantial portion of the land base for food production use. We also propose to maintain low density residential zoning near our rivers and have incorporated specific protections of key wildlife habitats, especially riparian forest habitat areas, into the neighborhood plan zoning recommendations so that our Target Range neighborhood meets its responsibility for protection of wildlife habitat of statewide importance.



"Rural by Design" 31 •

2. Human Environment

The human environment in the Target Range neighborhood includes all aspects of human activity within the natural environment described in the previous section. As people have built their homes, roads, parks, irrigation ditches and farms in Target Range, they have left a lasting imprint on the landscape. The discussion that follows identifies the impacts of a growing population and their activities on the world around us.

2.1 Population Growth and Housing

The Target Range neighborhood has grown slowly but steadily over many years. Forty years ago it was a very rural area. Old timers point to many large developed areas and remember the time when there were few, if any, houses here. Because U.S. Census areas do not match up with the boundaries of the neighborhood, no accurate numbers are available prior to 2000 for the population and number of dwelling units. In 2000, the population was 2511 and the number of dwelling units was 981. The average number of persons per dwelling unit was 2.56.

The number of dwelling units in 2008 was estimated to be 1065 and assuming 2.56 people per dwelling unit, yields an estimated population of 2726. In the eight years from 2000 to 2008, dwelling units grew by 8.6% and the population grew by 10.0%. Both grew slightly more than 1% per year.

If all of the remaining undeveloped residential land in Target Range was developed with the current zoning, there is the potential for 655 new dwelling units. (See Section 3.8 Land Use/Zoning for more details on this.) When you add the 655 potential new housing units to the existing 1065 housing units, it is projected that the Target Range neighborhood could end up



with 1720 housing units at some point in the future and an estimated population of 4403. (This assumes that everyone would develop their property to the maximum allowed under current zoning and there would be no changes made in current zoning.)

Density is also important in describing the character of the neighborhood. We measure density in terms of both the number of dwelling units and the number of persons per

"Actual Acre". Actual Acres are residential acres in the neighborhood and do not include public lands, right-of-ways, and other "Constrained Acres" that cannot be used for residential dwellings. In Target Range there are 1076 Actual Acres.

In 2000 there were 0.9 dwelling units per Actual Acre and 2.3 persons per Actual Acre. The corresponding numbers for 2008 were 1.0 and 2.5. If the Target Range Neighborhood were fully

developed under current zoning, these two measures of density would be 1.6 dwelling units per Actual Acre and 4.1 persons per Actual Acre. If the neighborhood were fully developed under the density envisioned in the Missoula Urban Area Comprehensive Plan (Comprehensive Plan), the total number of dwellings would be 2152, approximately double the current number; the density would be 2.0 dwelling units per Actual Acre and 5.1 persons per Actual Acre.

The table below summarizes the information given above.

Table 2. Dwelling units, population, density of dwelling units, and density of people in Target Range

	2000 Census	2008 Estimate	Fully developed Current Zoning	Fully developed Comprehensive Plan
Dwelling units	981	1065^{1}	1720	2152
Population	2511	2726^{2}	44032	5509^{2}
Density 1: Dwelling units per actual acre ³	0.9	1.0	1.6	2.0
Density 2: Persons per actual acre ⁴	2.3	2.5	4.1	5.1
Percentage increases from 2000 level		8.6%	75.3%	119%

¹Estimated by Missoula Office of Planning and Grants.

Actual Acres for Target Range = 1076 (Excludes constrained acres and right of ways)



The recently completed UFDA update to the Missoula Urban Comprehensive Plan completed in 2008 estimated an additional 1000 new dwellings in the combined Target Range and Orchard Homes neighborhoods over the next 20 years. Target Range's share of the additional 1000 dwellings is 400 dwellings based on the Target Range proportion of the total acreage in both neighborhoods available for future residential development. Each section of this neighborhood plan considers the implications of the predicted housing growth on different aspects of the natural and human environment of the neighborhood.

"Rural by Design" 33 •

²These populations came from multiplying the number of dwelling units by 2.56, which is the average number of persons per dwelling unit for Target Range found in the 2000 U.S. Census.

³Density of dwelling units = Dwelling units/Actual Acres.

⁴Density of people = Population/Actual Acres.

2.2 Economy

The Target Range neighborhood is primarily a residential area with only two areas zoned commercial, Target Range Market and the mini storage units on South Avenue. Just inside the plan boundary near the Target Range School is the Knife River gravel and concrete plant. The plant averages about 20 employees year round. That plant is scheduled to be closed and the land turned over to the city of Missoula to become part of the Fort Missoula Recreation Complex on 12/31/2012. While not thought of as a business, the largest employer in the neighborhood is the Target Range School with approximately 60 employees and 480 students. There is also the Seventh Day Adventist Mountain View Elementary School on Clements Road. Although the neighborhood is almost exclusively a residential area, current zoning allows home based businesses that meet the specific definition of "Home Occupation" in the Missoula County Zoning Resolution. Child day care is also allowed. Even though allowed by zoning, some areas have covenants that do not allow home based businesses. A recent listing of licensed home occupations in the neighborhood is shown in the table below:

Table 3. Licensed home occupations in Target Range

Business Category	Number of Businesses	
Builders & Contractors	26	
Sales	8	
Commercial & Personal Service Delivery	4	
Financial Services & Real Estate	6	
Industrial Services	5	
Professional Services	4	
Medical & Human Services	3	
Home Services	2	
Photography	2	
Automotive Repair	2	
Misc.	3	
Total	65	

In addition to the home based businesses listed above, there are agricultural based businesses that do not show up on this list. The Missoula Farmers' Market has fifteen vendors from the 59804 zip code which includes primarily the Target Range and Orchard Homes areas. The Clark

Fork Market has three to five vendors from Target Range. There are also commercial farming operations such as cattle and hay operations, both full and part time.



The Target Range survey, completed in April 2008, asked residents if there were any types of businesses they felt should be encouraged in Target Range. A slight majority (51%) didn't feel any businesses should be encouraged, showing that many residents consider the primary use of the neighborhood should be for residential housing. The 37% who felt certain types of businesses should be encouraged mentioned green houses, nurseries, small produce farms, small grocery stores and restaurants, small home based businesses. The table above shows

there are currently 65 small home based businesses registered in Target Range. These types of businesses are consistent with the survey emphasis on agriculture and services for local residents.

A strong majority of respondents (86%) felt that businesses such as casinos, bars, large retail stores, auto sales and industrial businesses should be prohibited in Target Range. In fact, 24% of

all respondents wanted all types of new businesses prohibited.

With 86% saying there are businesses they want to prohibit and 51% saying there are no businesses they want to encourage, there is strong evidence that residents want very little commercial activity in the Target Range area. The lists of businesses they want to prohibit and to encourage give a good picture of the type of commercial activity they want to allow in the Target Range area.



Most Target Range residents are employed in or near the city of Missoula. The most recent data for Missoula County (U.S. Dept. of Commerce, Bureau of Economic Analysis, 2009) showed 78,732 full and part time jobs in 2007. The majority of those jobs are within commuting distance of the neighborhood. Table 4 shows the proportion of jobs by major industry for Missoula County.

The neighborhood plan recommends and envisions that the neighborhood will continue to be a residential area adjoining the city of Missoula into the future. Most employment will occur outside the neighborhood. However, the emphasis on protection of resources including agricultural soils, may lead to an increase in agricultural related employment. Protection of water and riparian area resources may lead to an increase in recreation related employment.

"Rural by Design" 35 •

Table 4. Proportion of jobs by major industry for Missoula County

Major Industry	Proportion of Total Employment
Farming	0.9%
Construction	6.7%
Manufacturing	3.8%
Wholesale Trade	3.2%
Retail Trade	13.6%
Transportation	3.2%
Information	1.8%
Finance & Insurance	3.3%
Real Estate, Rental, Leasing	4.7%
Professional & Technical Services	6.5%
Administrative Services	5.5%
Educational Services	1.3%
Health Care	12.3%
Arts & Entertainment	3.5%
Accommodations & Food	8.3%
Other Services	6.1%
Misc.	1.9%
Government	13.4%
Total Employment, Full & Part Time	78,732 Jobs

Recommendations and Strategies

- 1) Support existing and potential small scale commercial activity in the Target Range area such as greenhouses, nurseries, small produce farms, small grocery stores, restaurants, and small home based businesses; discourage large commercial operations.
- 2) The commercially zoned property where Target Range Market is currently located may be suitable for clustered commercial development. Other areas along major arterials could be considered for scale appropriate commercial development on a case-by-case basis.

2.3 Transportation Infrastructure (motorized and non motorized)

Every effort should be taken to mitigate growth in motorized traffic while enhancing the traditional lifestyle and safety of citizens living within the Target Range area. Transportation alternatives must be undertaken to offset potential negative impacts associated with future development, including efforts to reduce the number of motorized vehicle miles traveled to improve air quality.

Current Situation

For years the main street arterials into the Target Range area have been South Avenue West, Spurgin Road, South Seventh West, South Third West, and across the Bitterroot River via Maclay Bridge and North Avenue to Clements Road. Clements Road and Tower Street are the primary north-south connecting roads. These streets can be seen on Map 8—Transportation and Trails.



Objectives and Goals

Without careful planning, future construction of homes and additional recreational opportunities on city/county parkland within the neighborhood and city/county and federal lands adjacent to the Bitterroot and Clark Fork Rivers will result in increased traffic and congestion, more vehicle and vehicle-pedestrian accidents, increased noise, and additional air pollution. In addition to motorized vehicles, the streets and roads within Target Range are heavily used by school aged children, families, horse riders, and bicyclists. These activities can come into conflict with motorized transportation. This plan presents strategies for resolving and/or mitigating potential conflicts between different road users, many of which can be seen on Map 8.

Recommendations and Strategies

1) Speed limits/speed zones: Establish the speed limit within the five major streets within the Target Range area at thirty-five miles per hour. Retain 25 miles per hour as the limit on all streets accessing these arterials.

2) Bike paths:

- a. Establish bike paths on Tower Street and 33rd Avenue from South Avenue West to South Third Street, South Third Street from Reserve Street to Clements Road, and Spurgin Road from Clements Road to Tower Street.
- b. Improve the bike path running from Clements Road east on North Avenue to 37th Street.

"Rural by Design" 37 ●

- c. Locate the bike path that runs the length of Clements Road entirely on the west side of the street. Currently, it is located on the east side between Mount Avenue and North Avenue creating two potentially avoidable street crossings along an often used school and neighborhood route.
- d. Existing paths and proposed paths can be seen on Map 8–Transportation and Trails.
- e. Design new bike paths and improve existing bike paths such that they are appropriate for the rural atmosphere of the neighborhood; safety of people and protection of resources should be of primary importance in the design. (In some situations, the addition of curbs and gutters may be important to protect resources from storm water run off.)
- 3) Traffic calming strategies: Construct traffic circles at 33rd Street and South Avenue West (As per the city and county's Master Parks and Recreation Plan for the Greater Missoula Area (2004)—public will access recreational facilities from city park land, Northern Lights development subdivision and Target Range School.) Establish three-way stop signage at the intersection of Clements Road and South Avenue West. See Map 8.
- 4) Public Transit: Continue to work with Mountain Line Transit to provide service appropriate to development patterns within the area.
- 5) Trail Systems: Explore the feasibility of creating a trail system paralleling the Bitterroot and Clark Fork Rivers from Fort Missoula to Reserve Street. Enhance the trail system on Montana owned land and Big Sky Park land. Continue the North Avenue trail running east and west from Clements Road east to 33rd Street. See Map 8.
- 6) Intersection Improvements: Establish pedestrian crossings at Clements Road and Mount Avenue, Clements Road and Spurgin Road, and Clements Road and South Seventh Street. Include a pedestrian crossing in the proposed traffic circle at South Avenue West and 40th Avenue.
- 7) Bridges: Continue Missoula County Public Works maintenance of the Maclay Bridge. This bridge is critical for Target Range and Missoula Valley residents to access recreation opportunities in the Blue Mountain, O'Brien Creek and Big Flat areas. The Missoula County Transportation Plan proposes a bridge crossing the Bitterroot River at the west end of South Avenue West.



At this time the proposed bridge faces significant financial hurdles. In addition, when the environmental assessment was conducted for the South Avenue West Bridge in 1993, there was significant and nearly unanimous opposition from the Target Range

- community to constructing a new bridge rather than maintaining the Maclay Bridge. This neighborhood plan has not identified a need for a new bridge.
- 8) Redesign intersections where visual barriers such as high fences or vegetation reduce sight distance and create safety issues. Examples are found at the intersections of Third Street and Clements Road, and South Avenue West and Clements Road.

"Rural by Design" 39 •

2.4 Water Infrastructure -Wells, Irrigation, and Wastewater Treatment Target Range citizens, in conjunction with the Target Range Sewer & Water District, desire and intend to do everything that is reasonably necessary to maintain clean and unpolluted groundwater and rivers with the use of appropriate land management and wastewater treatment systems.

Current Situation

Target Range homes primarily use private wells developed in the shallow Missoula aquifer for drinking water. A few public wells exist. Wastewater is generally treated using individual residential on site wastewater treatment systems (septic systems). Ground water sampling in the Target Range neighborhood indicates the aquifer has generally maintained a low level of nitrates (less than 2 mg/L and often less than 1 mg/L) with the use of these standard on site wastewater systems (septic drain field systems). In general, the neighborhood's septic drain fields meet all current state and local environmental regulations, with the exception of an unknown number of older, sub standard systems. (See Map 5–Infrastructure & Water Quality Related Data for the latest water quality information.)

Recent studies by Missoula Valley Water Quality District (MVWQD) indicate that groundwater quality, as measured by nitrate concentration is holding steady or even slightly improving since 1989. The neighborhood generally desires to maintain local groundwater quality, protect public health, and gradually improve the isolated examples of sub standard wastewater infrastructure to protect the Missoula aquifer. Future groundwater monitoring and management should be the joint responsibility of the Target Range Water and Sewer District and the City/County Health Department's Water Quality District.

The Target Range Sewer and Water District is a regional district chartered by the state of Montana. Originally organized in 2000 to protect the water quality of the Missoula aquifer in part of the Target Range area, the district was expanded in 2008 to cover most of the Target Range and Orchard Homes area. See Map 5 which shows the part of the Target Range neighborhood that falls within the Target Range Sewer and Water District. The Target Range Sewer and Water District does not maintain any public sewer or water facilities. Their approach is focused on conservation and smarter use of the existing septic and well infrastructure that currently exists in the area.

The Sewer and Water District has the following goals (www.targetrangeswd.org):

- A localized focus on the sewer, septic and water issues important to residents in the district.
- Conservation of local water resources.
- Protecting the Missoula aquifer by encouraging and preserving low densities and smart wastewater runoff management.
- Education through mailings to residents on proper septic use and maintenance.

- Monitoring and testing of ground water and septic systems in conjunction with the MVWQD.
- Monitoring of the sewer and water issues for future planned development within the district.
- Recommendations for improved septic systems, or level II systems where appropriate.
- Use grants to replace existing cesspools with septic systems. If a cluster of cesspools is identified within a neighborhood, this could potentially include the recommendation that the entire neighborhood be connected to a shared level II system. This would be very beneficial in reducing the nitrate loading on the aquifer.

Inventory

Map 5—Infrastructure & Water Quality Related Data shows the location of all septic systems in the Target Range neighborhood. Map 11—Existing Parcels by Size shows all parcels of land in the Target Range neighborhood and their sizes in acres using different colors for each of five size intervals. The highest nitrate levels tend to be southwest of the locations with the highest density development.

The 1996 Unsewered Areas Study by Missoula Valley Water Quality District identified 1,976 septic systems west of Reserve Street (Target Range and Orchard Homes, TR-OH). Approximately half of these units are in the Target Range neighborhood, but the data was not broken down by neighborhood. Since that time, approximately 100 additional septic systems have been installed. The density of septic systems in TR-OH in 1996 was 0.62 units per acre. That study also found that approximately 36% of the septic systems in TR-OH were "seepage pits," i.e., they did not have a modern drain field. In the same study 16.6% of the septic systems were "replacements," mostly due to failure of original septic systems or seepage pits. These statistics are not outside the range for other Missoula Valley neighborhoods (e.g. lower than some, higher than others). Average nitrate concentration in groundwater was 0.89 mg/L nitrate in a sample of fifty-one wells, which is an order of magnitude below the concentrations which would trigger concern about violation of public health standards (10 mg/L nitrate is used as a drinking water quality standard in Montana).

Historical Background

The Target Range neighborhood developed over a long time period, nearly 100 years; hence, the wastewater treatment systems installed varied in design and quality of treatment as technology and regulations changed. Some older, out dated systems still exist, but there is no reliable data on the number or location of such systems. Most homes built in the last 20 years have a septic system with drain field built to state of Montana specifications.

Irrigation Water Supply: The Missoula Irrigation District (MID) has delivered water to the Target Range area for agricultural irrigation for many decades. This infrastructure of primary and secondary canals that were built starting in 1877 is managed by the MID operating under Title 85 Chapter 7 of the Montana Codes Annotated. Most ditches are unlined, gravity flow systems with simple manual turn-outs. Small private centrifugal pumps are frequently used to tap the canal water and pressurize sprinklers. Most homes irrigate their lawns from submersible

"Rural by Design" 41 ●

pumps in private wells which tap the Missoula aquifer. The location of these irrigation ditches in the Target Range neighborhood can be found on Map 5 and Map 7. Although agricultural acreage has shrunken considerably, substantial irrigation is still underway.

Many properties in Target Range have lost direct access to the ditch system as the result of smaller lot and street development. All owners who pay for MID water on their taxes have a right to use MID water, but must arrange their own delivery line or ditch. The district is only responsible for delivering water in the main supply ditches. Nearly all small lateral ditches are private ditches and disputes over water delivery are private legal matters.



In 2003, a special one-year law was passed in the State Legislature that allowed owners not receiving water to opt out of the MID system. Map 7—Missoula Irrigation District Petitioners and Access as Surveyed by Missoula City/County Health Department - 2005 shows the location of these properties. Montana state law does not require fencing or other barriers along any ditch systems and the only liability is gross negligence, such as allowing dangerous, chemically-polluted water to flood a neighbor's property.

Irrigation canals bring Clark Fork River water into the Target Range neighborhood for irrigation of hayfields, pastures, and gardens throughout the neighborhood. This relatively clean river water benefits crops, and some, inevitably, recharges the shallow Missoula aquifer below. A recent measurement in the main canal at 27th Avenue and Spurgin Road indicated at least twenty cubic feet per second (cfs) of irrigation water entering the Target Range-Orchard Homes area in the early 2009 irrigation season, sufficient to irrigate hundreds of acres.

The combination of soil types and availability of irrigation water result in the designation of 75% of the soils in Target Range as prime agricultural soils. The distribution of agricultural soils in Target Range is shown on Map 6—Important Ag Soils, Sizable Parcels Overlapping Ag Soils and Montana D.O.R. Ag Classification. Maintaining the irrigation infrastructure is critical to the neighborhood plan goal of preserving agricultural soils.

Issues/Resource Impacts

- 1) Protection of drinking water quality in the Missoula aquifer is critical.
- 2) Continuation of agricultural irrigation is important to many landowners, and ditches need to be maintained and improved as time and budgets allow.
- 3) Wastewater treatment must meet the public health and environmental needs of the neighborhood and protect the surrounding water bodies (aquifer and rivers), while remaining reasonable in cost.

- 4) Extension of sewer into the Target Range area is controversial and opposed by a majority of residents, due to the potential for annexation by the city of Missoula and increased residential density.
- 5) The Target Range Sewer and Water District is prepared to take a leading role in improving and monitoring water and wastewater management in the neighborhood.

Immediate Objectives

The Target Range neighborhood is committed to protect, conserve and improve the high water quality in the Missoula aquifer and in the Clark Fork and Bitterroot Rivers. The neighborhood desires to achieve this objective through local involvement, scientific based decision making, and collaboration with Missoula Valley Water Quality District.

Long term Goals

- 1) Improve water quality in the aquifer and rivers by replacing faulty or out-of-date seepage pits.
- 2) Maintain a low residential density (e.g. 1-2 homes per acre) compatible with high water quality, taking into account storm water management, wastewater, and other indirect water quality impacts of high density development.
- 3) Install environmentally sound, state-of-the-art septic systems as it becomes necessary to replace existing treatment units.
- 4) Maintain existing irrigation infrastructure and capacity.

Recommendations and Strategies

- Cooperation between the Target Range Sewer and Water District and Missoula Valley Water Quality District to improve monitoring and management of the neighborhood's and Missoula Valley's groundwater and surface water resources.
- Provide clear guidance on future residential zoning density, as recommended in Section 2.8 Land Use/Zoning section, to address the disputed need for sewer extension into the Target Range neighborhood.
- 3) Support efforts by the Target Range Sewer and Water District to secure grant funding to locate, remove and replace cesspools and faulty septic systems with state-of-the-art onsite wastewater treatment technology.
- 4) Maintain remaining agricultural open space, agricultural land uses and agricultural business opportunities in Target Range, including the Missoula Irrigation District infrastructure.
- 5) Educate homeowners that medications should never be flushed down the toilet, to avoid pharmaceutical contamination in groundwater and surface water; check with the

"Rural by Design" 43 •

- Missoula City/County Health Department for proper methods and. Missoula County sponsored pharmaceutical disposal days.
- 6) Reduce use, discontinue use, or provide information and incentives for proper disposal of hazardous or toxic chemicals such as pesticides, herbicides, chemical fertilizers, automotive products and household cleaners that can contaminate the groundwater. Residents can check with Missoula City/County Health Department for a hazardous waste disposal location.

2.5 Other Utilities: Electricity, Gas, Terrestrial Telephone, Cable/Satellite Television, and Trash Services

Utility providers offer service to over 2500 Target Range neighborhood residents. Typical services include electricity and natural gas delivery, telephone, cable/satellite, and trash service. Target Range is not served by city of Missoula sewer operations or Mountain Water. Section 3.4 Water Infrastructure discusses the Target Range Sewer and Water District's goals, objectives, and activities.



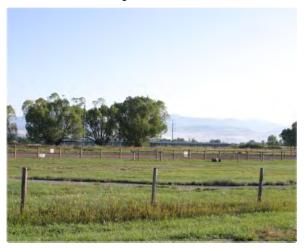
NorthWestern Energy estimates its Target Range electricity delivery customer base includes 2061 households and its natural gas customer base includes 888 households. Missoula Electric Cooperative provides electricity to some Target Range households.

Qwest Communications, Blackfoot Telephone, and other private carriers provide land line telephone service and mobile phone service. Bresnan, DishNetwork, and DirectTV provide cable and satellite services. Allied Waste Services offers trash pickup to Target Range residents.

The Montana Public Service Commission regulates and sets the rates for electric, natural gas, and telephone service providers. In addition to state oversight, federal laws also oversee the utility operations and rate.

"Rural by Design" 45 ●

2.6 Community Facilities



The Target Range survey in April, 2008, revealed that 69% of the respondents highly value the parks and open space that they now enjoy as part of the neighborhood. As compared to other Missoula area neighborhoods, Target Range is blessed with an abundance of parkland and open space, including the joint City/County Fort Missoula Regional Park (158 acres to be expanded to 244 by 2013 with a gift of 86 acres from Knife River, formerly JTL), Big Sky Park (formerly known as the Tower Street Park Complex, 160 acres), and the Tower Street Conservation Area (a riparian area along the

Clark Fork River in Orchard Homes that includes 120 acres owned by the city of Missoula and 80 acres in conservation easement).

Since predominately large home sites (one-half to five acres) dominate the neighborhood, there are few smaller neighborhood parks (typically two to five acres) since those park tends to serve residents with smaller urban yards. However, increasing numbers of five-acre home sites have been subdivided into one-half and one acre lots over the past ten years and this has led to a loss of open space in the Target Range neighborhood. Thus, this plan seeks ways to secure open spaces such as existing parks, conservation land, and trails and other recreation opportunities that are not now dedicated for public use. The community recognizes the need to improve/maintain public lands with new equipment, appropriate facilities, and the maintenance of parks and public trails in order to encourage healthy Missoula residents. [See Map 9–Public Ownership and Open Lands and Map 8–Transportation and Trails.]

Current Situation

Target Range is experiencing decreasing open space because of housing development on agricultural lands which make up the majority of available land. Additionally, new uses of lands formerly unencumbered with development are placing ever increasing pressure on lands currently dedicated to public recreation. This plan follows the open space definition as stated in the Missoula Urban Area Open Space Plan 2006 Update (2006). That is, open space is land that has few or no structures; is primarily in a natural state; and contains significant natural, aesthetic or recreational features that warrant protection.

Dedicated Neighborhood Parks:

There are several areas that presently serve as neighborhood parks. In addition to the large acreage parks mentioned above, the Master Parks and Recreation Plan for the Greater Missoula

Area (Master Parks Plan), jointly adopted by the City and County in May, 2004, lists the following smaller acreage County parks: Schmautz Park (4.17 acres), Rosecrest Park (9.6 acres), Dinsmore River 1 along the Clark Fork River (1.94 acres), and Dinsmore River 4 along the Bitterroot River near Maclay Bridge (1.01 acres). A very small park, Capy Court Park, is located at the corner of Spurgin Road and Capy Court. There is also a five-acre parcel owned by the city of Missoula at the end of Stone Street near the Tower Street Conservation Area (in Orchard Homes) that is considered conservation land. None of these smaller parks have been developed with park amenities, such as equipment, playing surfaces, or restrooms. These parks can be seen on Map 9—Public Ownership and Open Lands.

Other park settings:

Big Sky Park, which is managed under the Tower Street Park Complex Management and Utilization Plan (1998), consists of about 160 acres of county owned land between North Avenue and Spurgin Road. However, only about fifteen acres of this total area are presently designated as parkland. The remaining acreage is currently leased to various groups or organizations. There are three lessees using the area for baseball programs: Westside Little League uses their leased area for Little League Baseball programs; Fastpitch uses their leased area for adult fast pitch softball; and the American Legion sponsors a Legion Baseball program. Community Gardens provides garden plots and the Missoula Horseman's Council uses their leased area for the Equestrian Park and management of the small mammal and bird habitat area. All the improvements and facilities on the site are related to equestrian events. Many Target Range residents use this area for walking, recreational horseback riding, and exercising their dogs. The management plan for Big Sky Park describes in detail how this tract of county land is to be managed. Use of Big Sky Park is not limited to residents of the Target Range neighborhood but is also used by many residents from the city of Missoula and Missoula County, making it an especially valuable park.

The Fort Missoula Regional Park (FMRP), situated just south of South Avenue West, is located just outside the Target Range Neighborhood Plan boundary. However, residents of Target Range use the park facilities daily and so information about the park has been included in Appendix E.

Conservation Lands:

The Target Range neighborhood adjoins both the Bitterroot and Clark Fork Rivers. Because the lands immediately adjacent to the rivers are designated as flood plain, a corridor of natural vegetation lies between most of Target Range and the rivers. In addition, much of the western half of McCauley Butte will be preserved as open space through a conservation easement held by Five Valleys Land Trust. There is currently no public access to the butte, but it is clearly visible from much of the area and contributes to the rural feel of the neighborhood. The landowners of McCauley Butte and the city of Missoula have discussed providing pedestrian access to the eastern half of the butte; nothing has been formally agreed upon.

"Rural by Design" 47 ●

Trails:

Bicycle and foot trails now adjoin South Avenue West, Clements Road, Seventh Street, and portions of North Avenue, Spurgin Road and Humble Road. Heavily-used streets in the neighborhood lacking a bike/pedestrian trail include both Third Street and Spurgin Road from Clements Road to Tower Street. Walking trails off Spurgin Road, Seventh Street and Tower Street provide access to and through riparian areas. Numerous residents use lightly traveled county and other residential streets for daily cycling and walking. (Curbed roads and sidewalks are the exception rather than the rule in the neighborhood). Access to the rivers and floodplain lands varies by location, but there is public access to the rivers at the end of Tower Street, the end of Seventh Street, at the end of Spurgin Road from the Montana Fish, Wildlife & Parks fishing access site, and at Maclay Bridge. Parks and existing and proposed trails may be seen on Maps 8 and 9. For more details on existing and proposed trails see Section 3.3 Transportation Infrastructure.

Open Space:

Open space was very common in the Target Range area prior to the 1950s. The Salish and Pend d'Orielle spent time in the western side of the Missoula Valley digging the bitterroot flower and fishing for bull trout. This specific area has had a history of providing food for whoever frequented the valley. Following this, the US Military used the land west of Fort Missoula and near McCauley Butte as an artillery target range. The area transitioned to agricultural uses such as cattle grazing, hay production, dairy, orchards, and truck farms.

Current area residents are accustomed to living in an area with expansive vistas, public access to walking and bicycle trails, and extensive active and passive recreational opportunities. Current land use is primarily for single family residences interspersed with open pastures, hay fields and gardens. As open lands are developed for new residences, the quality and quantity of open space is affected.

Viewsheds:

In urban planning, viewsheds are areas of particularly scenic or historic value that are deemed worthy of preservation against development or other change. Viewsheds are often spaces that are readily visible from public areas such as from public roadways or public parks and from private areas such as backyards. The preservation of viewsheds is frequently a goal in the designation of open space areas, green belts, and community separators. Large expanses of the valley are visible from most areas in Target Range.

A first step in protecting the neighborhood's valued rural character and vital viewsheds is to identify locations that are most important to us. Once that is completed, protection methods need to be considered. Protections need to apply to the night sky as well. The city of Missoula recently adopted a lighting ordinance to reduce

the effect of lighting on the night sky. Because viewsheds cross city/county lines, protection efforts would benefit from planning between both city and county governments.

"While walking late one evening, as I headed east toward the city, I looked up and could see hundreds of stars. Later when I turned around to head home west further into the Target Range, I looked up again. This time I saw thousands of stars."

Immediate Objectives

- 1) Identify important open space and viewsheds that need protection and create overlays which can be used to guide future development.
- Identify existing and needed trails to enhance connectivity between trails, and create loop systems connecting rural open space and developed areas in the city of Missoula.

Long term Goals

- 1) Secure the entire Big Sky Park (~160 acres) as a dedicated park and secure the area in perpetuity as public park land.
- 2) Establish a system of non motorized trails and pathways to connect the parks and recreation areas within the plan area.
- 3) Protect critical open space and viewsheds.
- 4) Include a person from the Target Range neighborhood as a voting member of the Site Development Planning Group for the Knife River property.

Recommendations and Strategies

- 1) Target Range residents, the Board of County Commissioners, and the Office of Planning and Grants will collaborate to develop a strategy and procedures to protect open space, agricultural soils, and view sheds as additional residential development occurs.
 - a. Set a target date—have the strategy and procedures in place by January 1, 2011.
- 2) Procedures to use would include: voluntary conservation easements; voluntary conservation developments; secure Open Space Bond money for purchase of open space; and evaluate areas identified as important open space and viewsheds in Target Range for their significance as recognized in the Montana Open Space Land and Voluntary Conservation Easement Act.
- 3) Any new lighting in Target Range may follow guidelines similar to those developed by the city of Missoula to limit the impact on the night sky.

"Rural by Design" 49 •

- 4) Plan new developments to protect identified viewsheds and the night sky.
- 5) Plan and propose new trails and extensions to access recreation and improve residents' health and reduce transportation related air pollution.

2.7 Local Services (Police, Fire and Schools)

During the past fifty-plus years the Target Range community has been served by a variety of local government services. As the area has grown, local services have expanded to meet the residents' educational, fire and law enforcement needs. The neighborhood plan provides a framework whereby these services can be evaluated to determine if they meet community and local government needs of the entire Missoula community.

Fire and Emergency Services: Since the early 1960's, the Missoula Rural Fire District has provided emergency services to the Target Range area from the station located at South Avenue and Reserve. As the Target Range community has expanded, this station has expanded to house additional engines and personnel to meet the needs of Target Range and other Missoula Rural Fire District service areas. Through a mutual aid agreement to enhance response time and coverage, Missoula City Fire does assist the Missoula Rural Fire if assistance is requested. From 2006-2008, the Missoula Rural Fire district responded to 258 fire and medical incidents in the Target Range neighborhood.

Law Enforcement: Target Range law enforcement has been provided by the Missoula County Sheriff's Department. Sheriff's deputies conduct routine patrols and additional sheriff support is dispatched from the 911 center. No permanent sheriff department facilities are located in the Target Range area. Montana Highway Patrol troopers also provide regular traffic patrols in the Target Range neighborhood. The Montana Department of Justice does not have any permanent highway patrol facilities in the Target Range area. While the Missoula City Police Department does not have jurisdiction within the Target Range neighborhood, the Missoula County Sheriff's Department may request additional police assistance.

In the three year period from 2006-2008, the Missoula County Sheriff's Department handled 298 incidents that involved a person(s), 298 incidents that involved property, and 2640 incidents involving other reasons, for a total of 3236 incidents in the Target Range neighborhood.

Public and Private Schools: The Target Range neighborhood has seen significant growth in the number and variety of educational institutions. Area citizens have strongly supported these schools and have welcomed them as valued assets.

The Target Range School has been the center of the community for nearly one hundred years. It has grown from a one room schoolhouse (located adjacent to the current School) to a K-8 independent school district, educating approximately 480 students. Target Range graduates attended Missoula County High School until 1965, Hellgate High School until 1980, and currently feed into Big Sky High School.

"Rural by Design" 51 •

Big Sky High School is located on the boundary of the Target Range area at South Avenue West and 33rd Street. In addition to the high school, Missoula County Public Schools owns and operates a farm located in various areas, from Fort Missoula to a field located due east of the Target Range School, as a part of its agricultural education and Future Farmers of America program.

The Mountain View School, a private Seventh Day Adventist school located on Clements Road, has served as an elementary school since the 1970's. The property on which the school is located is owned by the church.

College and University: The University of Montana College of Technology (COT) West Campus is located on South Avenue West just east of the Target Range School. The facility was established in the mid 1970s and provides post secondary classes in diesel mechanics, carpentry, welding, and heavy equipment technology. The facility has added various course offerings within the past decade to meet the needs of a changing workforce.

The 2004 UM Fort Missoula Master Plan identifies land use and development opportunities at three sites at the COT West Campus. Two of the three sites are outside the Target Range neighborhood. However, the site within the neighborhood boundaries includes almost 51 acres of developable property. The master plan recommends keeping the existing COT facility and possibly expanding the COT east and west programs.

Objectives and Goals

- 1) Future growth in the Target Range community will require additional local services such as fire and emergency service responses into the area. As the population ages, it is expected that emergency medical service will increase.
- 2) As additional families with school age children move into the area, it is expected that current public and private school facilities will expand to meet these needs. The University of Montana, College of Technology has seen a thirty percent growth in enrollment in the classes using the West Campus facility. COT officials foresee an expansion of these facilities to meet the increasing enrollment in current classes and future programs created by a changing U.S. and world economy.

Recommendations and Strategies

- 1) Police:
 - a. Support Montana Highway Patrol presence in the Target Range.
 - Support recommendations by the Missoula County Sheriff to the Missoula County Commissioners regarding the need to commit additional resources for increased patrols in



the Target Range community.

2) Fire:

- a. Support Missoula Rural Fire recommendations. They do not anticipate building any new facilities in the Target Range area, but may expand the South Avenue West station to meet anticipated growth. The Missoula City fire station master plan does call for a station to be built in the Spurgin Road area.
- b. Missoula Rural Fire District should be encouraged to create or expand any closest station response program and/or mutual aid agreements.

3) Schools:

- a. Support Target Range School expansion plans if and when the need arises.
- b. The Target Range Neighborhood Plan should anticipate an expansion of the University of Montana College of Technology (COT) West Campus. The COT is currently constrained in terms of COT-owned property at this site. Although the COT does not have expansion plans in place, this neighborhood plan takes into consideration potential future expansion of COT into adjoining properties, and the community is ready to work with the COT in developing an expansion plan which meets the needs of the COT while fitting within the goals of the neighborhood plan.
- c. Mountain View School will remain at its current location. School officials have indicated that no expansion in the current building would occur in the near future. However, a Seventh Day Adventist Church is planned to be built on church owned property adjoining the school.
- d. Missoula County Public Schools may expand its current facilities on South Avenue West at Big Sky High School and its Fort Missoula properties to meet anticipated enrollment increases and/or additional curriculum use within the Agricultural Education and Future Farmers of America program.
- e. Projected expansion in student attendance at the COT, Big Sky High School, and Target Range School should be factored into any transportation plan which impacts Target Range. Mountain Line Bus service, contracted school bus service, and the University of Montana and COT shuttle bus program should expand with

any increase in student enrollment.



2.8 Land Use/Zoning

The Target Range neighborhood has been predominantly a semi rural area on the western edge of the city of Missoula for decades. Twenty-five years ago the west end of South Avenue West was still a gravel road. Today all the streets and most driveways are paved, as the neighborhood has steadily grown. The primary land use of Target Range was, and still is, residential properties on one-half to one or more acres, interspersed with agricultural operations, open space, wildlife habitat and vacant lots. Average density at this time is 1065 dwellings on 1076 actual acres, one dwelling per acre. See Table 5 below. (Only 4.3 acres is zoned for commercial purposes, and commercial activity is



discussed in Section 2.2, Target Range Economy.) The land use envisioned for Target Range in the Missoula Urban Area Comprehensive Plan is for a density of two dwelling units per acre which would effectively double the current number of dwellings in Target Range.

The current zoning is shown in Map 10—Recent Subdivisions & Existing Zoning. As noted in various sections of this neighborhood plan, that level of density would negatively impact many of the resources that are very important to the residents of both Target Range and the greater Missoula Valley. The largest open areas are McCauley Butte (most of which is outside the plan boundary and now under conservation easement), the Bitterroot and Clark Fork floodplains, the Richardson farm, the ball fields and equestrian park on Tower Street (Big Sky Park), and open space associated with the College of Technology. Most agricultural use is related to hay fields, livestock and vegetable gardens.

In a neighborhood survey taken in April, 2008, 88% of the respondents said that they felt it was "Very Important" to preserve the rural character of the neighborhood, while 11% felt it was "Somewhat Important". Protection of the resources that define the rural character of the neighborhood must be a foremost goal of zoning that will guide development of Target Range. Surface waters, the Missoula aquifer, agricultural soils, riparian areas, wildlife habitat, open space and viewsheds are all resources that can, and must, be protected with appropriate zoning. These resources are of value not only to the neighborhood, but to the entire Missoula community.

Importance of Zoning

Zoning in the neighborhood is generally consistent with current land uses, focusing on low density residential housing and agriculture. There are significant areas of wildlife habitat on and

near riparian areas, as well as open areas that frame the view of Snowbowl and the Rattlesnake to the north, Blue Mountain to the west, and Lolo Peak and McCauley Butte to the south.

In the 2008 neighborhood survey, a full 56% of respondents indicated a preference for zoning that would limit homes to lots with one or more acres, and 35% preferred two homes per acre. Approximately 38% of the land is currently zoned two homes per acre and 45% is zoned for one home per acre. Public ownership makes up 15% of the area.

One of the primary goals of the Target Range Neighborhood Plan is to assess the current uses and zoning compared to the goals identified in the Missoula Urban Area Comprehensive Plan (Comprehensive Plan). The recently completed UFDA update to the Comprehensive Plan completed in 2008 estimated an additional 1000 new dwellings in the combined Target Range and Orchard Homes neighborhoods over the next twenty years. Target Range's share of the additional 1000 dwellings is 400 dwellings.

While the Comprehensive Plan goals are not the same as zoning, they are the foundation for regulatory action. The following assessment of land use and zoning identifies potential conflicts that may arise because of future growth and makes recommendations to avoid those conflicts where possible.

Current Situation

Map 10 and Table 5 show the location and amount in each zoning category. Map 15—Existing Land Use shows that existing zoning does not reflect the higher density of two dwellings per acre envisioned in the Comprehensive Plan. Recommended changes found at the end of this section would lead to consistent zoning and land use for the Target Range neighborhood. Definitions for each zoning category are found in Appendix C. Table 5 also shows the maximum number of dwellings, 1720, that would be allowed under current zoning based on the acreage of land in each zoning type. According to the 2000 Census there were 981 dwellings in the Target Range neighborhood. In 2008 that number had grown to an estimated 1065 dwellings, an increase of eighty-four dwellings, or 8.6%. Table 6 shows the maximum number of additional dwellings, 655, that could be added to the existing number of dwellings under current zoning.

At the rate of growth experienced between 2000 and 2008 (10.5 dwellings/year), it would take over sixty years before the number of dwellings would equal the theoretical full development level allowed with existing zoning. The 655 potential dwelling units in the Target Range neighborhood also exceed the 400 dwelling units projected by UFDA for Target Range. A similar analysis for the Orchard Homes neighborhood indicates the potential under existing zoning for an additional 1705 dwellings before the theoretical maximum allowable would be reached. The combined total for both neighborhoods under existing zoning allows for 2360 additional dwellings which exceeds the UFDA estimate of 1000 additional dwellings over the next twenty years. Therefore, there is no need to change zoning to allow for more density for at least the next twenty years.

"Rural by Design" 55 •

T 11 7 0 1	T . (D .	•	7 .	1 ,
Table 5. Current	Target Range	zoning types a	nd acreage	hv tvne
Tubic o. Cult cit	i di get ivalige	Loining types a	nu aci cage,	Dy typc

Zoning	Acres	Actual Acres¹	Total Potential Dwelling Units ²
C-C1	4.3	0	0
C-P1	256.5	0	0
C-RR1	366.8	269	269
C-RR1/Miner's PV Easement ³	68.1	0	0
C-RR1/Miner's PV Residential	19.3	16.4	128
C-RR2	619.4	517.1	1034
C-RR2 (16)	1.3	1.3	3
C-RR2 (MH)	16.7	14.3	29
Target Range West End Rural ZD	330.3	257.4	257
GRAND TOTAL	1682.9	1075.5	1720

¹ Actual Acreage excludes Right of Way and constrained land. Constrained lands includes parks, cemetery, 100-year regulatory floodplain, slopes over 25%, restrictive zoning and conservation easements.

Source: Casey Wilson, Missoula County Office of Planning and Grants.

Table 6. Potential dwelling units in Target Range

2000 Census	2008 Estimated	Total Potential Under Current Zoning	Potential NEW Under Current Zoning	Potential NEW With Preliminary Approval
981	1065	1720	655	155

In addition to the information in the tables above, Map 11—Existing Parcels by Size shows all existing parcels of land in the Target Range neighborhood and their sizes in acres in five size intervals coded by color. Here one sees that much of the neighborhood is already fairly densely developed. Map 12—Criteria for 2008 Suitability Analysis of Residential Development and Map 13—Landscape-Based Suitability Analysis were developed by the Missoula County Office of Planning and Grants (OPG) during their 2008 UFDA study to determine where development is likely to occur in the Missoula urban fringe area over the next 20 years. Map 12 consists of eight

² Potential dwelling units (includes existing and potential new) based on current zoning.

³ Only considers conservation easement located inside the Target Range plan boundary.

maps, one for each of the criteria OPG used to determine the suitability for development. It is seen that most of the Target Range neighborhood is rated as having low suitability for development for each of these criteria. Map 13 was made using all eight criteria weighted as given on the map. Three of the criteria, which involve resources the neighborhood wants to protect, are given more weight than the other five criteria. Again, most of the neighborhood is rated as having low suitability for development.

Other sections of this neighborhood plan have identified resources that are "at risk" and that will be affected by additional development. Among these resources are the aquifer and water quality, surface waters, agricultural soils, open space and natural vegetation, viewsheds and wildlife habitat. All of these resources play an important role in the rural character that 99% of the residents of the neighborhood described as very or somewhat important to preserve. And while these resources are important to residents of the Target Range neighborhood, they are also treasured by the greater Missoula community as well. Zoning is an important tool to protect these at-risk resources.

Resources considered "at risk," and the overlays used to identify areas where they exist, are as follows:

- ✓ Agricultural Soils: Map 6—Important Ag Soils, Sizable Parcels Overlapping Ag Soils and Montana D.O.R. Classification
- ✓ Riparian Areas not otherwise protected as floodplain: Map 3—Floodplain (no riparian map is available). This does not include areas having proximity to man-made irrigation waterways.
- ✓ Steep slopes and Open Space Cornerstones: Map 17—Conservation Design, Resources and Parcels Over 3 Acres
- ✓ The aquifer under the entire neighborhood
- ✓ Continued use of irrigation infrastructure: Map 5—Infrastructure

Recommended Zoning Changes

The proponents of this neighborhood plan recognize that:

- a) the Target Range neighborhood is a special, largely developed place in Missoula County where the transition from urban to rural values forms it distinctive character, and
- b) existing parcels of land within the neighborhood may be subdivided in the future as the neighborhood develops further, and
- owners of existing parcels of land that are susceptible to subdivision in the future have valuable vested property rights and development rights that are legally protected and should not be infringed, and

"Rural by Design" 57 •

d) the over arching goal of all neighborhood residents is to preserve the rural residential character of the Target Range neighborhood while preserving parcel owners' property rights and development rights.

For those resources identified in this neighborhood plan that are "at risk" from increasing growth and development, the following changes in zoning are proposed to be implemented following approval of this neighborhood plan. All recommendations below are consistent with residents' desires as expressed in the Neighborhood Survey completed in 2008 (See Appendix A). The recommendations below do not apply to parcels in existing Rural Zoning Districts unless specifically stated.

1. Land Use Tools:

In working toward thoughtful future development, it is appropriate that developers explore use of land use tools that comply with the provisions of Title 76, Montana Code Annotated, and the various levels of governmental regulations promulgated there under, to protect potentially "at risk" resources when presently existing parcels are subdivided, while at the same time maintaining property rights and development rights for affected property owners.

Land use tools envisioned by the Target Range Neighborhood Plan have some similarities to those discussed in the public draft (5/29/09) of the city of Missoula Zoning Ordinance, 20.55.020, in that the portion of the parcel that is permanently dedicated to resource conservation "...must be protected in perpetuity by a binding legal instrument that is recorded with the deed." However, concerns have been raised about the financial impact on property owners affected by some land use tools.

One recently published research article comparing conservation subdivisions to conventional subdivisions indicated that lots in conservation subdivisions can provide higher profits to developers (Mohamed 2006). Conversely, an article in the *Missoulian* reported on a parcel that was reduced in value 46% because of deed restrictions that prohibited all further development (Missoulian 2010).

The types of land use tools (set forth in no particular order or hierarchy) that are available for consideration to provide resource protection and maintain property rights and development rights for affected property owners include:

- a. Open space bond issuance for purchase of appropriate conservation easements and/or development rights.
- b. Voluntary conservation easements or voluntary conservation development proposed by the developer of existing parcels.
- c. Deed restrictions imposed by the developer of existing parcels restricting further subdivision of tracts created from presently existing parcels.

- d. Voluntary transfer of development rights by owners of existing parcels at market value of those rights.
- e. Imposition of permanent restrictive covenants by the developer that run with the land for any subsequent owner.

Other land use tools may exist, or may become known in the future, which could protect potentially "at risk" resources when existing parcels are subdivided while at the same time maintaining property rights and development rights for affect owners and maintaining the rural residential quality of the neighborhood.

Details that guide and govern the use of land use tools to protect the potentially "at risk" resources when existing parcels are subdivided while at the same time maintaining development rights for the affected owners must be developed by a joint cooperative effort by residents of the Target Range neighborhood, representatives of OPG and the Missoula County Attorney's office with specific language submitted to the Missoula County Commissioners before their implementation of this Neighborhood Plan via zoning.

2. Zoning Changes:

A. The following recommendation is for all parcels in the rectangular piece of land with Seventh Street as its northern boundary, Clements Road as its western boundary, 37th Avenue and its extension as its eastern boundary, and Rose Crest Park between Spurgin Road and Mount Avenue as its southern boundary. (See Map 14—Proposed Zoning.) This recommendation is made to protect the aquifer, wildlife habitat, riparian landscapes, and viewsheds, and to make it easier to preserve some of the remaining agricultural soil in the Target Range neighborhood. As documented in Section 1.1, Water Resources, protection of these resources cannot be accomplished with densities higher than one dwelling per acre, even with the use of the sewer.

The 78 parcels in the contiguous area, defined in the paragraph above, should be rezoned from C-RR2 to C-RR1. These 78 parcels would be deemed to be part of the large contiguous area of parcels currently zoned C-RR1, west of Clements Road. All parcels less than one acre would be designated as conforming and grandfathered in.

B. The following recommendation is for four parcels of land whose location description follows: Four lots on the West side of Clements Road at the corner of Third Street and Clements Road that are within the Target Range neighborhood boundary. The southern boundary of these four lots is the Mobile Home Rural Zoning District. [See Map 14—Proposed Zoning.] Most of the largest of these four lots is occupied by three radio towers and their stabilizing cables. All four of these parcels are partially in the floodplain. This recommendation is to protect the riparian land and wildlife habitat located here.

"Rural by Design" 59 •

The four parcels, defined in the paragraph above, should be rezoned from C-RR2 to C-RR1. Since they have a common edge with the large area zoned C-RR1 located west and south of their location, they should be part of this contiguous area currently zoned C-RR1.

3. Rural Zoning Districts:

- A. All parcels currently zoned C-RR1 within the Target Range Plan boundary, except those in rural zoning districts and the parcel where Knife River is located, but including the parcels in Recommendations 2A-2B above, would be deemed to be in their own separate rural zoning district, apart from other areas of the county with the same C-RR1 zoning. The new zoning district would be named the "Target Range North Rural Zoning District." The following wording in the *Intent* section of the standard C-RR1 zoning definition, "Planned unit developments and planned variations are encouraged to preserve agricultural land and to enhance environmental amenities found in rural areas," would be replaced with "Land use tools, as defined in Section 2.8 of the Target Range Neighborhood Plan (2010), are encouraged to be used to preserve the resources considered "at risk" in the plan. The total number of dwellings allowed by zoning on a parcel does not change with the use of land use tools (no density bonus or reduction)" Other than the new zoning district boundary and the wording changes above, all other aspects of the new zoning district would be the same as its standard C-RR1 wording in the county zoning resolution.
- B. All parcels currently zoned C-RR2, remaining after the rezoning changes in Recommendations 2A-2B above, except those in a rural zoning district, would be deemed to be in their own separate Rural Zoning District, apart from other areas of the county with the same C-RR2 zoning. The new zoning district would be named the "Target Range Central Rural Zoning District." The following wording in the *Intent* section of the standard C-RR1 zoning definition, "Planned unit developments and planned variations are encouraged to further the intent of this district," would be replaced with "Land use tools, as defined in Section 2.8 of the Target Range Neighborhood Plan (2010), are encouraged to be used to preserve the resources considered "at risk" in the plan. The total number of dwellings allowed by zoning on a parcel does not change with the use of land use tools (no density bonus or reduction)". All other aspects of the new zoning district would be the same as its current wording. By definition, C-RR2 zoning states as its intent that it applies to "... areas served by an adequate public water or sewer system..." Although Target Range is NOT served by either public water or sewer system, the reality is that this recommendation applies to an area of Target Range that is currently almost fully developed at two homes per acre. Any further development at densities higher than C-RR2 would present potentially serious risks to water resources.
- C. The following wording, "Land use tools, as defined in Section 2.8 of the Target Range Neighborhood Plan (2010), are encouraged to be used to preserve the resources considered 'at risk' in the plan. The total number of dwellings allowed by zoning on a parcel does not

change with the use of land use tools (no density bonus or reduction)," would be added to Section 1 - Purpose of the Target Range West End Rural Zoning District. Minimum lot size would be adjusted to permit the total number of dwellings equal to a density of one dwelling per acre. All other aspects of that zoning district would remain unchanged.

4. Proposed Land Use Change:

Map 14—Proposed Zoning locates all the proposed recommendations for comparison with existing zoning shown on Map 10—Recent Subdivisions and Existing Zoning. Additional information about the eighty-two parcels affected by recommendations 2A-2B (rezone from C-RR2 to C-RR1) is included in Appendix B.

Once the proposed zoning changes are implemented, land use will change in the Target Range neighborhood. Map 15—Existing Land Use shows land use as it currently is in the Missoula County Comprehensive Plan. Map 16—Proposed Land Use shows what the land use for the neighborhood would look like after zoning changes proposed in the neighborhood plan are implemented.

The existing land use envisioned in the Missoula County Comprehensive Plan should be changed to reflect the proposed zoning in the Target Range Neighborhood Plan, as shown on Map 16—Proposed Land Use. The importance of this change is reflected in the fact that if Target Range were to be fully developed for residential use as envisioned in the existing Comprehensive Plan land use description, it would be impossible to protect and preserve the resources and life style that the vast majority of residents desire. By aligning the zoning recommendations in this neighborhood plan with the proposed land use, it will be possible to accomplish those strong resident desires. At the same time it will be possible to accommodate the level of residential development projected by the UFDA analysis for the next twenty years, and for some time beyond that as well.

"Rural by Design" 61 •

Human Environment Summary

There are two primary objectives of the Target Range Neighborhood Plan. The first is to determine the ability of the area to accommodate the growth of 400 additional homes over the next twenty years as predicted by the UFDA study. In 2008 there were an estimated 1065 dwellings in Target Range, and under existing zoning there is the potential for 655 additional dwellings. Thus, it is possible to meet the UFDA growth projection without changing the zoning to allow higher residential density. Of the 400 new homes predicted, there are already 155 new dwelling parcels with preliminary approval.

The second objective is to define and protect those community resources which are critical for maintaining the rural character of the neighborhood, identified by 88% of the residents as "Very Important". We believe the increase in residential dwellings has the potential to negatively impact community resources including: air, surface and ground water, open space, viewsheds, transportation, agricultural soils, irrigation and wildlife habitat. The negative impacts of development are identified throughout the neighborhood plan, primarily in the Natural Resources sections and in the discussion of traffic congestion.

The only way the Neighborhood Plan Working Group could find to reconcile the demand for additional housing and potential resource impacts was to recommend a change in zoning that would affect approximately 29 properties and encourage the use of land use tools that would permanently protect resources identified as "at risk." These recommendations are consistent with resident desires as expressed in the neighborhood survey completed in 2008.

Conclusion

The natural setting of the Target Range neighborhood includes natural resources that are of unique value to both neighborhood residents and the greater Missoula community. We are located at the confluence of two major Montana rivers, the Bitterroot and the Clark Fork. The regionally important and sensitive Missoula aquifer serves as our drinking water supply. Productive agricultural soils underlie almost the entire Target Range neighborhood. We still have an intact and functioning surface water irrigation system supporting pastures, hayfields, livestock production and market gardens on these important soils. The Target Range neighborhood includes natural vegetation and agricultural open space of critical importance to wildlife in the Missoula Valley. The riparian deciduous forests and associated wetlands along the Bitterroot River and Clark Fork River floodplains are part of the regionally important wildlife corridor between the Frenchtown Valley and Bitterroot Valley recognized by Montana Fish Wildlife and Parks as one of four Tier I wildlife habitat conservation areas west of the Continental Divide.

Residents of Target Range have a strong desire to protect and maintain the abundant natural resources that contribute to the quality of life both here and in the greater Missoula Valley. As residents we also acknowledge the stewardship responsibility to protect community resources while preparing for residential growth of 400 additional homes predicted over the next 20 years by UFDA. To accomplish both resource protection and residential growth, this neighborhood plan makes numerous recommendations. Implementation of these recommendations in a timely manner will accomplish both the resource protection and development objectives necessary to achieve the common vision for our neighborhood presented in the Vision Statement at the beginning of this plan. Recommendations to change the zoning and encourage the use of land use tools that would permanently protect "at risk" resources must be implemented and reflected as updates to the Missoula County Growth Policy and the Missoula Urban Comprehensive Plan. Continued residential development as reflected in the current Missoula Urban Comprehensive Plan will eventually result in the degradation and/or destruction of resources we need to protect. The choice is becoming clearer every day, either we implement the recommendations in the neighborhood plan or the neighborhood characteristics that 88% of the residents said were "Very Important" will be lost.

"Rural by Design" 63 •

References and Credits

Jon Harvala, Missoula County Water Quality District, 2009, personal communication.

Master Parks and Recreation Plan for the Greater Missoula Area. 2004. City of Missoula and Missoula County, Montana. [http://www.ci.missoula.mt.us/index.aspx?NID=174].

Missoula Urban Area Open Space Plan 2006 Update. 2006. City of Missoula. [http://www.ci.missoula.mt.us/DocumentView.aspx?DID=652].

 $\label{lem:missoula_county} Missoula County Growth Policy, 2005 Update. Missoula County. \\ \underline{ftp://www.co.missoula.mt.us/opgftp/Documents/LRCounty/GrowthPolicy/CurrentGP/CoGPW} \\ \underline{holeDoc.pdf}$

Tower Street Park Complex Management and Utilization Plan. Missoula County. 1998. [ftp://www.co.missoula.mt.us/opgftp/Documents/LRCounty/TowerPark/TowerPark.pdf].

Missoula County Noxious Weed Management Plan. 2006. Adopted by the Missoula County Weed Board Nov. 16, 2006. [http://missoulaeduplace.org/docs/weedplan2006.pdf].

Missoula County Water Quality District, 1006, "Evaluation of Unsewered Areas in Missoula, MT," Missoula, Montana.

Evaluation of Unsewered Areas in Missoula, Montana. Missoula Valley Water Quality District, Environmental Health Division, Missoula City County Health Department. March 2006

Missoulian. 2010. Missoula looks at land deals. Missoulian, March 27, 2010, Page A1.

Mohamed, Rayman. 2006. The economics of conservation subdivisions: price premiums, improvement costs, and absorption rates. Urban Affairs Review, January 2006.

Montana Code Annotated, Title 76, Land Use, Chapter 76-3-501, Local Subdivision Regulations and Chapter 76-3-608, Criteria for Local Government. State of Montana, 2009.

Tri-State Water Quality Council, 2005, Septic System Impacts on Surface Waters," Sandpoint, Idaho. http://www.tristatecouncil.org

Master Plan - The University of Montana Missoula, Fort Missoula, 2004

University of Montana Natural Areas Vegetation Management Plan. 2006. Prepared by Marilyn Marler. Division of Biological Sciences, University of Montana, Missoula, MT. 31 pp. [http://www.umt.edu/sentinel/UM_nat_areas_veg_plan_2006_final.doc].

U.S. Department of Agriculture, Natural Resources Conservation Service, Soil Data Mart. http://soildatamarrt.nrcs.usda.gov/SSURGOMetadata.aspx

"Rural by Design" 64 •

Most images were provided to us courtesy of Target Range residents and were taken in Target Range except those noted below:

Spotted knapweed: John Cardina, The Ohio State University, Bugwood.org

All other weed images (Section 1.4) courtesy of USDA-NRCS PLANTS Database. [http://plants.usda.gov].

"Rural by Design" 65 •

Appendix A

Results of Target Range Homeowners Association Survey, June 7, 2008 The Board of Directors of the Target Range Homeowners Association conducted a mail survey of property owners in the Target Range area to determine how they felt on a number of important issues. One of the main issues was how they felt about the development of a growth plan for the Target Range area. A questionnaire was written and mailed to 1185 homeowners in the Target Range area on April 1, 2008. 329 questionnaires were returned for a 27.8% response rate. They were widely distributed over the Target Range area.

This is a report on the results of this survey. Question numbers below correspond to the numbers on the questionnaire. The opinions of the majority are clear on all issues.

General Questions

1. How many years have you lived in the Target Range Area (TRA).

Respondents had lived in the TRA from 1-67 years with an average of 22.4 years. 80% had lived in the TRA 10 or more years.

2. What do you find attractive about living in the TRA? (This is an open ended question.)

The top 6 answers, in order, were:

Rural feeling of the area (51%)

Open space/views (38%)

Low housing density (23%)

Low noise (21%)

Close to Missoula and its services (20%)

Safe, friendly, diverse neighborhoods (17%)

3. Do you want the TRA to be annexed by the city of Missoula?

Yes 4% No 93% No answer 3%

4. Are you satisfied with the current Missoula County Services?

Police protection	Yes 93%	No 5%	No answer 2%
Fire protection	Yes 96%	No 2%	No answer 2%
Street maintenance	Yes 76%	No 22%	No answer 2%
Snow removal	Yes 90%	No 8%	No answer 2%

Questions Related to a Possible Neighborhood Plan

1. Are you in favor of the development of a Neighborhood Plan for the TRA?

Yes 84%

No 7%

No answer 9%

2. How important is it to preserve the rural character of the TRA?

Very important 88% Somewhat important 11% Not very important 1%

3. Are you in favor of having a maximum number of houses per acre?

Yes 87% No 10%

No answer 1%

Don't know 2%

If yes, how many houses per acre do you prefer? (Percentages are of the 296 who answered.)

Breakdown 1: less than 1/acre 1% 1-2/acre 91% 3-4/acre 6% more than 4/acre 2%

Breakdown 2: 1/acre 55% 2/acre 35% everything else 10%

4. Are there any types of businesses that you feel should be prohibited in the TRA?

Yes 86% No 7% Not answered 7%. (The number of yeses was 284.)

If yes, please provide examples. (Percentages are of the 284 who answered yes.)

The top 7 answers, in order, were:

Casinos (25%)

All businesses (24%)

Bars (21%)

Businesses impacting traffic, air, water, noise, neighbors (21%)

Big box stores and shopping centers (20%)

Auto sales, auto repair, and large gas stations (20%)

Industrial and those using large trucks (19%)

5. Are there any types of businesses that you feel should be encouraged in the TRA?

Yes 37% No 51% Not answered 12% (The number of yeses was 123.)

If yes, please provide examples. (Percentages are of the 123 who answered yes.)

The top 5 answers, in order, were:

Green houses, nurseries, and small produce farms (32%)

"Rural by Design" 67 •

Small, local, and Mom & Pop stores (29%)

Small, home based, low or no client visits (24%)

Small grocery stores (24%)

Small restaurants, coffee shops, etc (24%)

With 86% saying there are businesses they want to prohibit and 51% saying there are no businesses they want to encourage, there is strong evidence that residents want very little commercial activity in the TR area. The lists of businesses they want to prohibit and to encourage give a good picture of the type of commercial activity they want to allow in the TR area.

6. Would you like to see parts of the TRA preserved for agricultural uses?

Yes 88% No 7% No answer 5%

7. Would you like to see more public parks and open space in the TRA?

Yes 69% No 27% No answer 4%

8. Would you like to see streetlights or stoplights at major corners and school intersections?

Yes 44% No 51% No answer 5%

If streetlights and stoplights had been separated in the question, the results may have been clearer.

9. Are you in favor of including walking/bicycle paths wherever feasible for major roads when they are upgraded?

Yes 85% No 12% No answer 3%

10. The Target Range Sewer & Water District has identified several possible sources of funding to replace cesspools. Do you have a cesspool, rather than a septic system? Yes__ No__ I don't know__

Yes 10% No 74% Don't know 15% No answer 1%

Appendix B

Information about the 83 C-RR2 parcels recommended for rezoning to C-RR1.

These 83 C-RR2 parcels are proposed to be rezoned to C-RR1 to protect and preserve the aquifer, wildlife habitat, riparian land, and agricultural soil.

DEVELOPED PARCELS* 52 Average size = 1.024

Size	No. parcels	Cumulative No. parcels
.001499	30	30
.500999	10	40
1.000 - 1.999	5	45
2.000 - 4.999	3	48
5.000 - 6.499	4	52
TOTAL	52	

^{*} A developed parcel is one where the value of the improvements on the parcel are worth more than the land itself.

DEVELOPABLE PARCELS* 31 Average size = 2.456

Size	No. parcels	Cumulative No. parcels
.001499	10	10
.500999	3	13
1.000 - 1.999	2	15
2.000 - 4.999	12	27
5.000 - 6.999	2	29
7.000 - 15.000	2	31
TOTAL	31	

^{*} A developable parcel is one where the value of the land alone is worth more than the improvements on the parcel.

"Rural by Design" 69 •

Information about the 488 C-RR2 parcels remaining after a rezoning of 82 C-RR2 parcels to C-RR1 (8/23/09)

These 488 C-RR2 parcels are proposed to stay zoned C-RR2.

DEVELOPED PARCELS* 432 Average size = .713

Size	No. parcels	Cumulative No. parcels
.001499	222	222
.500999	134	356
1.000 - 1.999	63	419
2.000 - 4.999	11	430
5.000 - 9.499	2	432
TOTAL	432	

^{*} A developed parcel is one where the value of the improvements on the parcel are worth more than the land itself.

DEVELOPABLE PARCELS* 56 Average size = .957

Size	No. parcels	Cumulative No. parcels
.001499	19	19
.500999	16	35
1.000 - 1.999	11	46
2.000 - 4.999	7	53
5.000 - 15.000	3	56
TOTAL	56	

^{*} A developable parcel is one where the value of the land alone is worth more than the improvements on the parcel.

Analysis of the potential loss in dwelling units under the proposed rezoning of 83 parcels from C-RR2 to C-RR1

The loss in potential dwelling units under the proposed rezoning would likely be around 75 dwelling units as the analysis below shows.

There are 83 parcels proposed for rezoning from two dwelling units per acre to one dwelling unit per acre. Of these parcels only 29 are one acre or more in size and would have a change in potential dwelling units when rezoned. Each individual parcel was analyzed to determine the effect that rezoning would have on the parcel's potential dwelling units. This is the most accurate way of determining the effect of the rezoning. For the entire 83 parcels, there is a potential for 251 dwelling units when zoned at two dwelling units per acre and a potential for 147 dwelling units when zoned at one dwelling unit per acre. The theoretical effect of the rezoning is a reduction of 104 potential dwelling units. The actual reduction in potential dwelling units is very likely substantially less than 104 due to several factors summarized in the following paragraph.

The loss in dwelling units is likely to be much less than 104 dwelling units. Ten parcels, greater than one acre in size that theoretically could lose 30 dwelling units under the proposed rezone are unlikely to have losses due to the following reasons:

- The Seventh Day Adventist Church owns one parcel of 5.28 acres. It currently has a school building on it and they plan to build a church on it soon. No houses are planned.
- Three parcels larger than one acre are partially in the flood plain.
- One parcel of 7.5 acres currently has three radio towers with associated stabilizing cables located on a large portion of it. Plus, it is partially in the flood plain.
- Five parcels are barely one acre in size and each currently has a house on it. A second house is unlikely to be built on any of these parcels.

These factors likely mean less dwelling units on these parcels regardless of the zoning. Theoretically these parcels would lose 30 potential dwelling units after the proposed rezone. However, it is unlikely that any of these parcels would or could be fully developed at two houses per acre.

Thus the loss in potential dwelling units under the proposed rezoning would likely be around 75 dwelling units and not the theoretically possible loss of 104 dwelling units.

"Rural by Design" 71 •

Appendix C

Zoning Definitions

This section details the zoning found in the Target Range neighborhood. The information is taken from THE MISSOULA COUNTY ZONING RESOLUTION.

1. Zoning Districts Established by Missoula County

C-P1Public Lands and Institutions	
C-A1Open and Resources	
C-A2Residential	C-R1Residential
C-A3Residential	C-R2Residential
C-RR1Residential	C-R3Residential
C-RR2Residential	C-C1Neighborhood Commercial
C-RR3Residential	C-C2General Commercial
C-I1Light Industry	C-C3Community Commercial
C-I2Heavy Industry	

2. Detailed Definitions for the Zoning Districts in the Target Range Neighborhood Plan Area

This section gives the official detailed definitions for C-P1, C-RR1, C-RR2, and C-C1. These definitions come from **Chapter II ZONING DISTRICTS**, in **The Missoula County Zoning Resolution**, which establishes all zoning rules and regulations for Missoula County. Information from this same source for **RURAL ZONING DISTRICTS** and **PLANNED VARIATION (PV) SUBDIVISIONS** is also found in this section.

SECTION 2.05 - C-P1 PUBLIC LANDS AND INSTITUTIONS

A. Intent

This classification provides for major public lands and major public and quasi-public buildings and uses, including existing land reserves for future public and institutional use to serve the neighborhood, community and region.

B. Space and Bulk Requirements

Minimum lot area	None
Wilnimiim lot area	None

Minimum lo	ot width None
Minimum re	equired yard
fron	t Twenty-five (25) feet

Maximum building height.... One hundred (100) feet or that height specified in FAA standards, whichever is more restrictive

C. General Standards See Supplementary Regulations - Chapter III Missoula County Zoning Resolution

D. Permitted Uses

- 1. Airport and landing field with related accessory uses and buildings incidental to airport operation.
- 2. Public and quasi-public buildings and uses.
- 3. Accessory buildings and uses.

E. Special Exception

- 1. Commercial recreation, amusement and cultural activity.
- 2. Public utility installation.

SECTION 2.09 - C-RR1 RESIDENTIAL

A. Intent

This district recognizes the existence of rural areas that will come under pressure for residential development. This zone provides for a transitional low density residential district between urbanized areas and agricultural uses, as well as provides a zone that may be used to meet residential needs while limiting density to recognize environmental concerns. Planned unit developments and planned variations are encouraged to preserve agricultural land and to enhance environmental amenities found in rural areas.

B. Space and Bulk Requirements

Maximum residential density	One (1) dwelling per one (1) acre
Minimum lot width	One third (1/3) its average depth
Minimum required yard	
front Twent	y-five (25) feet

"Rural by Design" 73 •

side	Fifteen (15) feet
rear	Twenty-five (25) feet
Maximum building height	Thirty (30) feet

C. General Standards

See Supplementary Regulations - Chapter III Missoula County Zoning Resolution

D. Permitted Uses

- 1. Single-family dwelling.
- 2. Accessory buildings and uses.
- 3. Agriculture on lots five (5) acres or larger, including any and all structures or buildings needed to pursue such activities, except intensive agriculture use such as feed lots and poultry farms. Minimum yard setbacks of fifty (50) feet shall be maintained for all agricultural buildings.
- 4. Mobile homes on lots five (5) acres or larger, including yard setbacks of fifty (50) feet.

E. Conditional Uses

- 1. Home occupation.
- 2. Child day care home.
- 3. Buildings housing livestock in conjunction with residential use only, excluding commercial livestock raising. Buildings shall be set back fifty (50) feet from any property line, and one hundred (100) feet from any dwelling of human habitation.
- 4. Community residential facility serving less than nine (9) persons.

F. Special Exceptions

- 1. Public and quasi-public uses and buildings.
- 2. Nursing home.
- 3. Child daycare center.
- 4. Residential mini-warehouse.
- 5. Public utility installation.

SECTION 2.10 - C-RR2 RESIDENTIAL

A. Intent

This zone promotes a single family residential environment in areas served by an adequate public water or sewer system, and promotes a residential density consistent with the availability of public facilities and with the physical limitations of the land. Planned unit developments and planned variations are encouraged to further the intent of this district.

B. Space and Bulk Requirements

Maximum residential density...... Two (2) dwellings per one (1) acre

Minimum lot width...... One hundred (100) feet

Minimum required yard

front...... Twenty-five (25) feet

side..... Fifteen (15) feet

rear.....Twenty-five (25) feet

Maximum building height...... Thirty (30) feet

C. General Standards See Supplementary Regulations - Chapter III Missoula County Zoning Resolution

D. Permitted Uses

- 1. Single family dwelling.
- 2. Accessory buildings and uses.
- 3. Agriculture on lots five (5) acres or larger, including any and all structures or buildings needed to pursue such activities, except intensive agriculture use such as feed lots and poultry farms. Minimum yard setbacks of fifty (50) feet shall be maintained for all agricultural buildings.
- 4. Market gardens
- 5. Mobile homes on lots five (5) acres or larger and minimum yard setbacks of fifty (50) feet.

E. Conditional Uses

- 1. Home occupation.
- 2. Child daycare home.
- 3. Community residential facility serving less than nine (9) persons.

F. Special Exceptions

- 1. Public and quasi-public buildings and uses.
- 2. Two-family dwelling.
- 3. Nursing home.
- 4. Child daycare center.
- 5. Residential mini warehouse.
- 6. Public utility installation.

"Rural by Design" 75 •

SECTION 2.15 - C-C1 NEIGHBORHOOD COMMERCIAL

A. Intent

This district provides convenience shopping for a limited neighborhood market which involves retail enterprises dispensing commodities and providing personal or professional services to the individual. The uses should be both at the same intensity level and in the architectural scale of the neighborhood which they serve. Such developments should be clustered to provide centers of commercial activity which will effectively serve adjacent neighborhoods.

B. Space and Bulk Requirements

Minimum lot areaNone		
Minimum lot widthNone		
Minimum setbacks		
frontTwenty-five (25) feet		
sideTen (10 feet)		
rearTwenty-five (25) feet		
Maximum building heightThirty (30) feet		

Maximum floor area standards....Two thousand five hundred (2,500) square feet per establishment, except as indicated below.

C. General Standards See Supplementary Regulations - Chapter III Missoula County Zoning Resolution

D. Permitted Uses

- 1. Retail food store, with a maximum floor area of three thousand five hundred (3500) square feet.
- 2. Personal service.
- 3. General merchandising.
- 4. Hardware store.
- 5. Clothing shop and tailoring service.
- 6. Accessory buildings and uses.
- 7. One family dwelling in same building as other allowed uses.

E. Conditional Uses

- 1. Professional, business, and governmental offices.
- 2. Repair services, except automotive repair.

- 3. Eating establishments, except drive-in establishments.
- 4. Commercial mini warehouse.

F. Special Exceptions

- 1. Public and quasi-public buildings and uses.
- 2. Automobile service stations.
- 3. Multiple family dwellings.
- 4. Other retail trades and services with no outdoor display or storage.
- 5. Public utility installation.

The following information comes from **CHAPTER VI** - **RURAL ZONING DISTRICTS** in the Missoula County Zoning Resolution. Rural Zoning Districts are generally developed using the general outline found in the Zoning District definitions found above.

"Rural by Design" 77 •

ATTACHMENT A

Section 6.12 Missoula County Zoning Resolution

"TARGET RANGE-WEST END" RURAL ZONING DISTRICT

SECTION I - PURPOSE:

This County Rural Zoning District ("Target Range-West End") in Target Range is established to promote the public health, safety and general welfare of the citizens and to recognize its citizens' desire to maintain the area's rural and low density pattern of development (See Section 6.12 Missoula County Zoning Resolution 76-113, as amended).

This district is part of the greater Target Range community, which offers easy accessibility to the City and the rural County. This district offers the unique opportunity to enjoy a rural setting and such facilities that are only available in an area that is not overcrowded. This district is being expressly created to perpetuate these characteristics and its rural design. Planned Unit Developments, Planned Variations, and Cluster Developments are neither encouraged nor deemed necessary to meet the intent of this district.

The purpose of this district is to retain the area's unique rural character. This area is a transition zone between the open space of McCauley Butte and the Bitterroot River, and the more densely developed areas of Target Range to the north and east of the district.

The regulations are strongly prescriptive so that citizens will know exactly what is expected of them. The district emphasizes low-density housing consistent with the area's historical and current level of development.

SECTION II- APPLICABLE:

The boundaries of District are from the center point of the intersection of North Avenue and Humble Avenue, then south along the centerline of Humble Avenue to the intersection of South Avenue, then east along the centerline of South Avenue to the western boundary of Target Range School. The boundary will then follow the private property boundaries shown on the attached map to the intersection with the Bitterroot River. Then the District boundary follows the Bitterroot River downstream along the centerline of the Bitterroot River to the point where the Maclay Bridge crosses the Bitterroot River, excluding Certificate of Survey #5680, then east along the centerline of North Avenue to the intersection with Humble Avenue, the beginning point. The District includes all streets and properties within these boundaries located in Sections 26 and 35, Township 13 North, Range 20 West, P.M.M., Missoula County, Montana. (Please see attached Map)

SECTION III - SPACE AND BULK REQUIREMENTS:

Minimum lot size: One (1) acre including adjacent County right-of-way.

Setbacks: Front and Rear: Twenty-five (25) feet. Side: Fifteen (15) feet.

Height: Maximum of Thirty (30) feet, as defined by Missoula County Zoning

Resolution 76-113 (as amended).

SECTION IV - USES:

A. <u>Permitted Uses:</u>

- One single residential dwelling unit, including manufactured homes and mobile homes on permanent foundations.
- 2. Residential Accessory Uses.
- Accessory Buildings.
- 4. Agricultural activities as defined in M.C.A. 76-2-902.

Appendix D

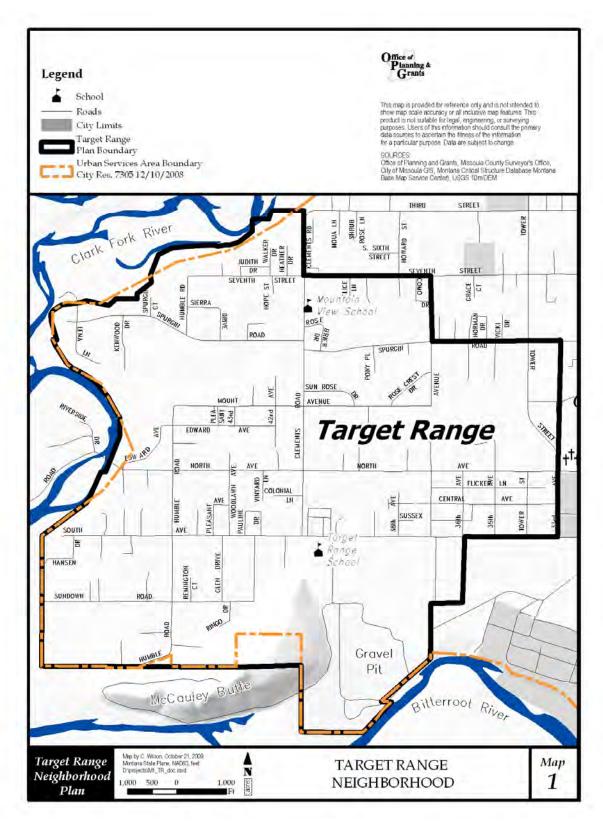
List of Maps in Order of Appearance

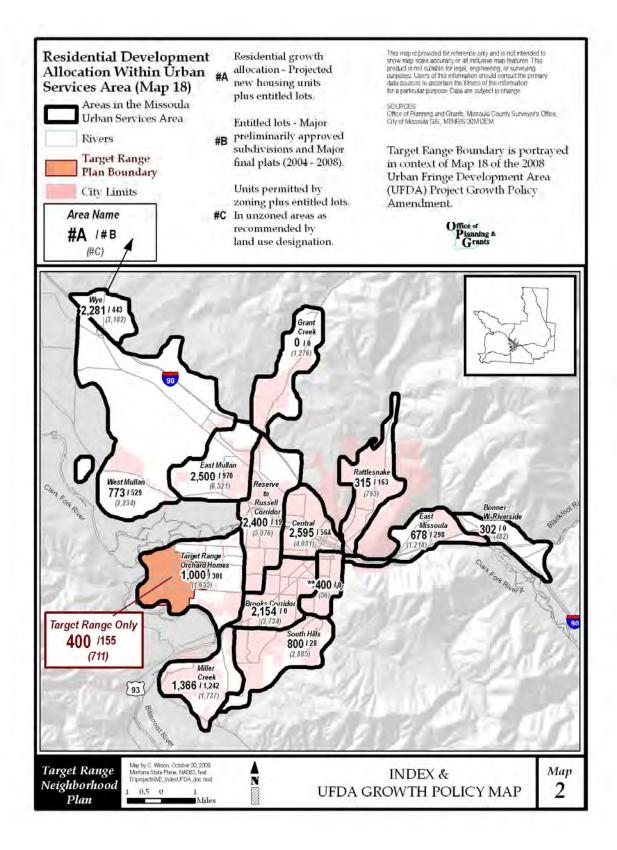
Map 1	Target Range Neighborhood
Map 2	Index and UFDA Growth Policy Map
Map 3	100-Year Floodplain (DFIRM)
Map 4	Flow Direction of Missoula Aquifer
Map 5	Infrastructure & Water Quality Related Data
Map 6	Important Ag Soils, Sizable Parcels Overlapping Ag Soils & Montana D.O.R. Ag Classification
Мар 7	Missoula Irrigation District Petitioners and Access as Surveyed by Missoula City/County Health Department - 2005
Map 8	Transportation & Trails
Map 9	Public Ownership and Open Lands
Map 10	Recent Subdivisions & Existing Zoning
Map 11	Existing Parcels by Size
Map 12	Criteria for 2008 Suitability Analysis of Residential Development
Map 13	Landscape Based Suitability Analysis
Map 14	Proposed Zoning
Map 15	Existing Land Use
Map 16	Proposed Land Use
Map 17	Conservation Design - Resources and Parcel Over 3 Acres

NOTES

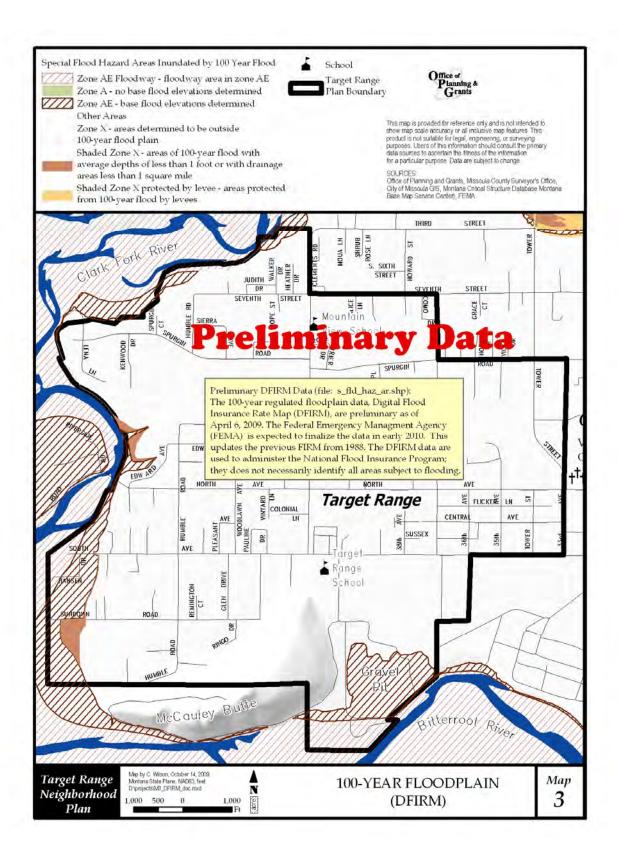
There is no Wildlife Habitat Map. There is no data available to generate such a map. It is understood that the river corridors in and adjacent to the Target Range neighborhood are prime wildlife habitat and are heavily used by wildlife for residence and as travel corridors through the area. There is no Riparian Map. No data is available to make this map. Map 3 Floodplain is the most relevant.

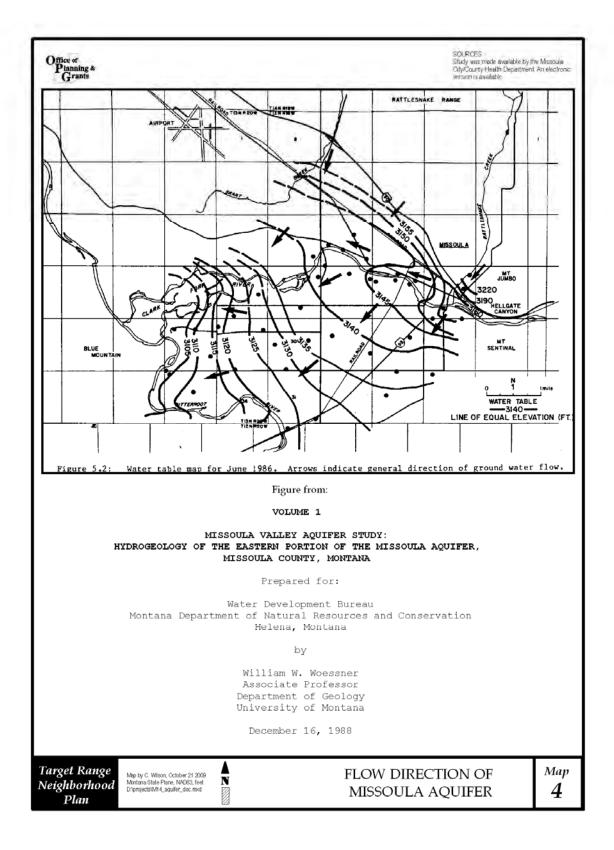
"Rural by Design" 79 •



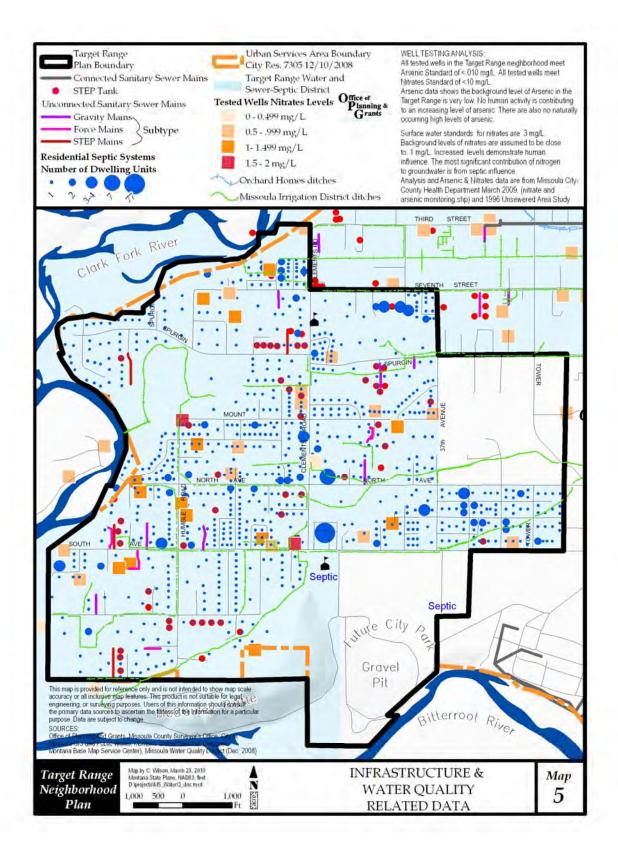


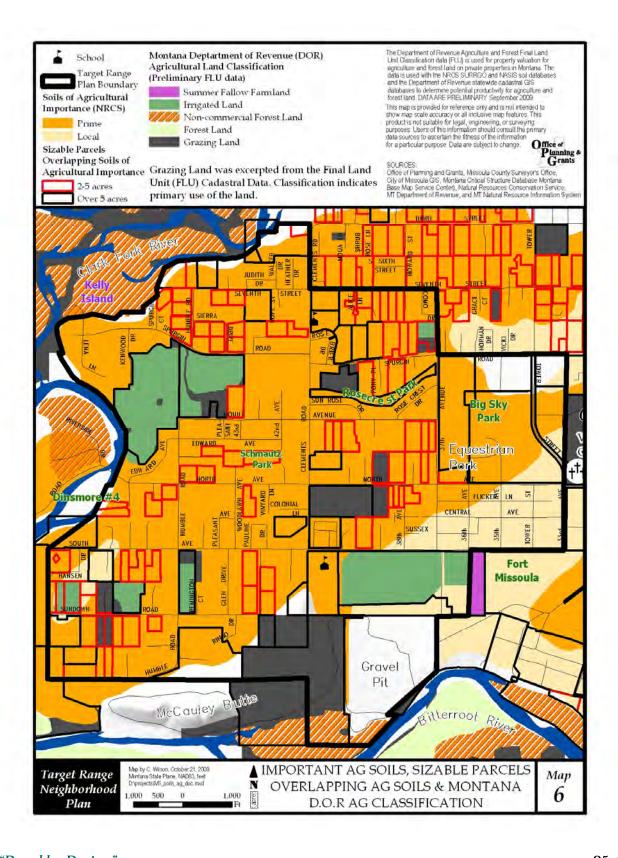
"Rural by Design" 81 •



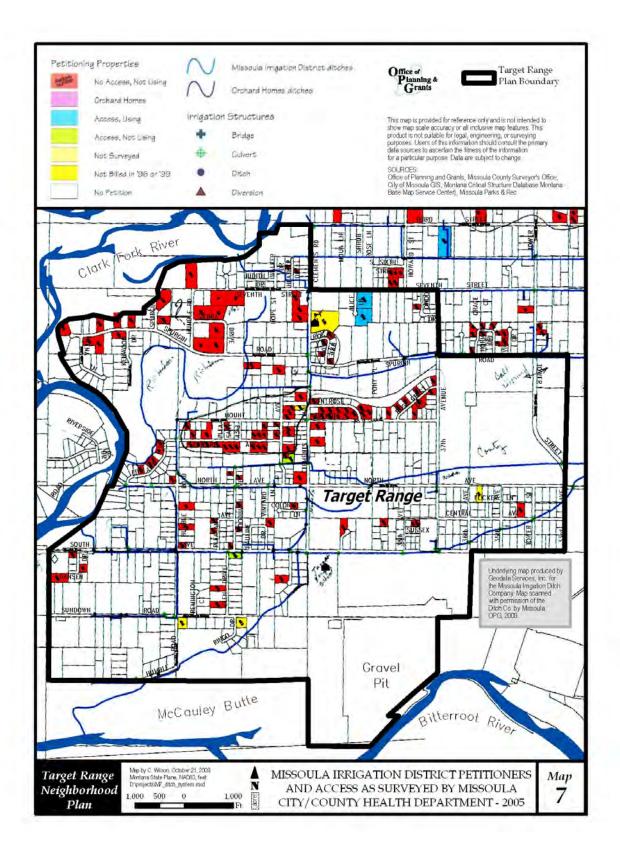


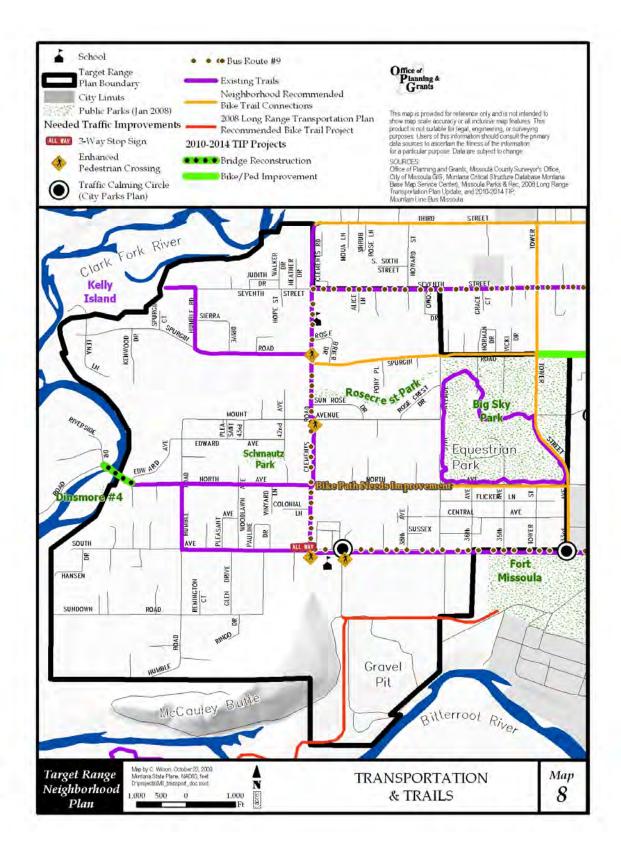
"Rural by Design" 83 •



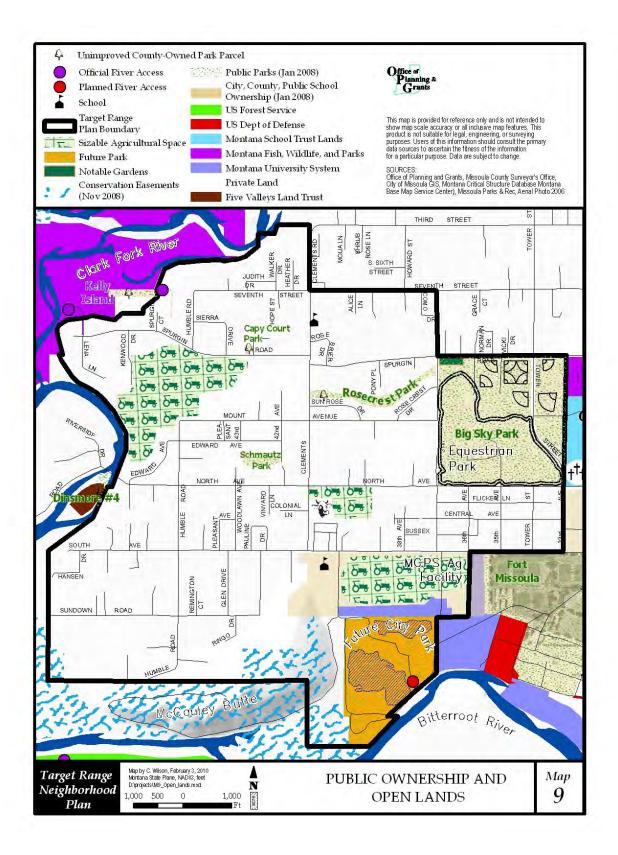


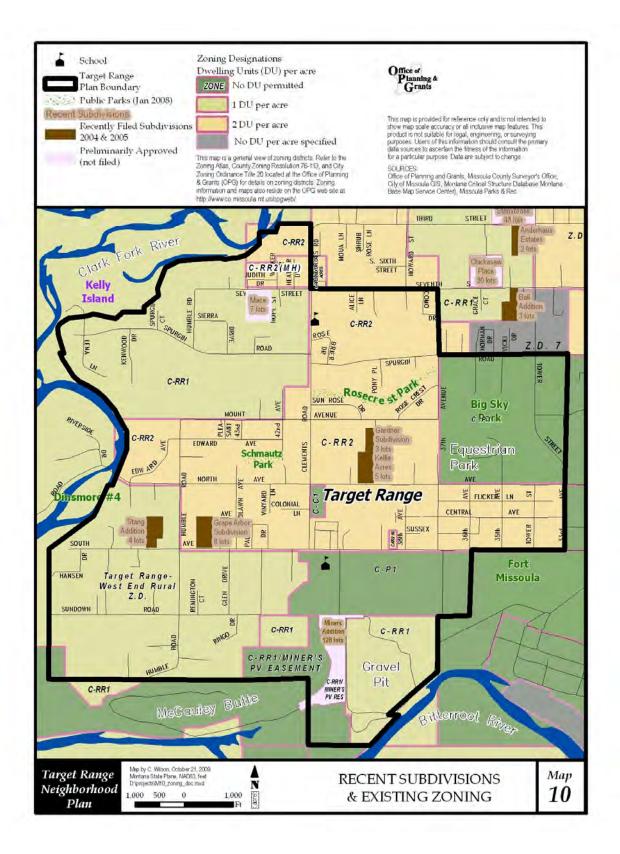
"Rural by Design" 85 •



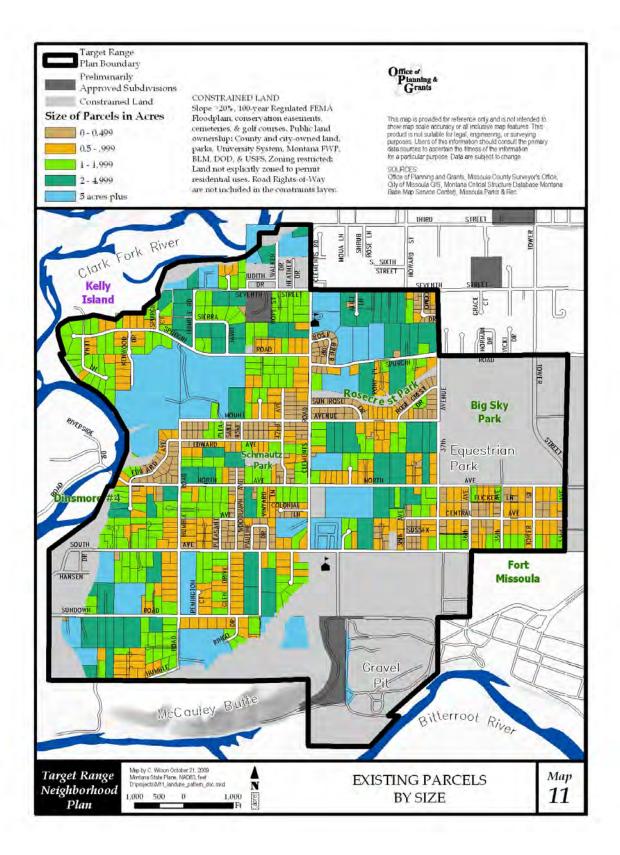


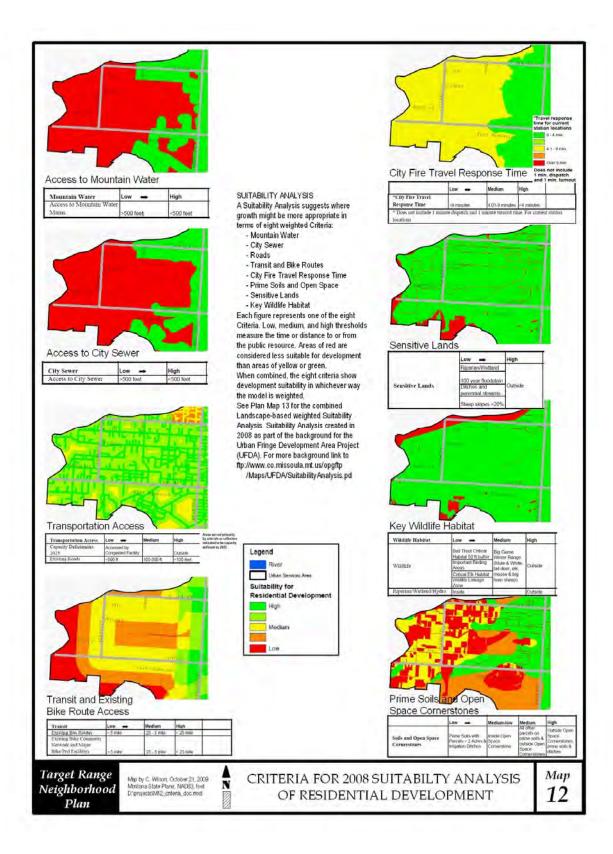
"Rural by Design" 87 •



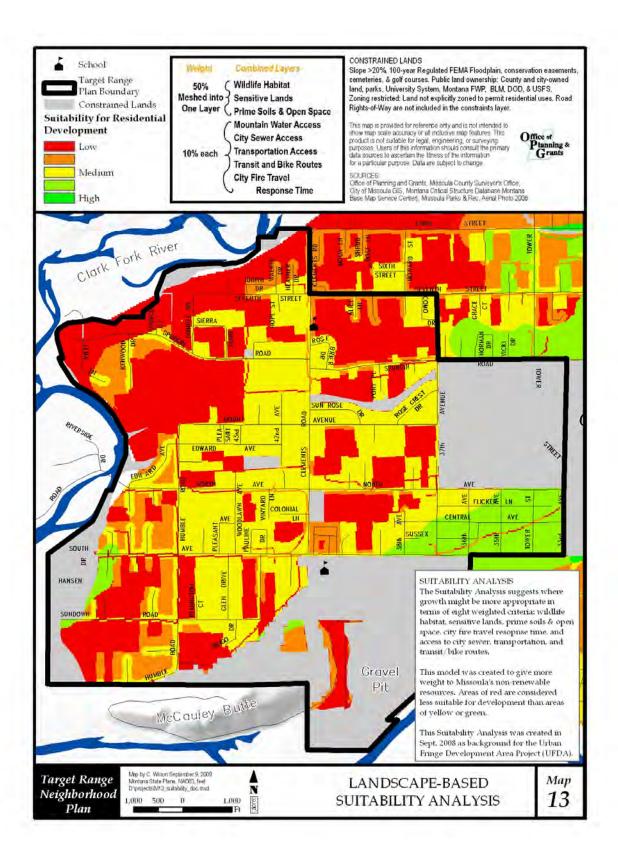


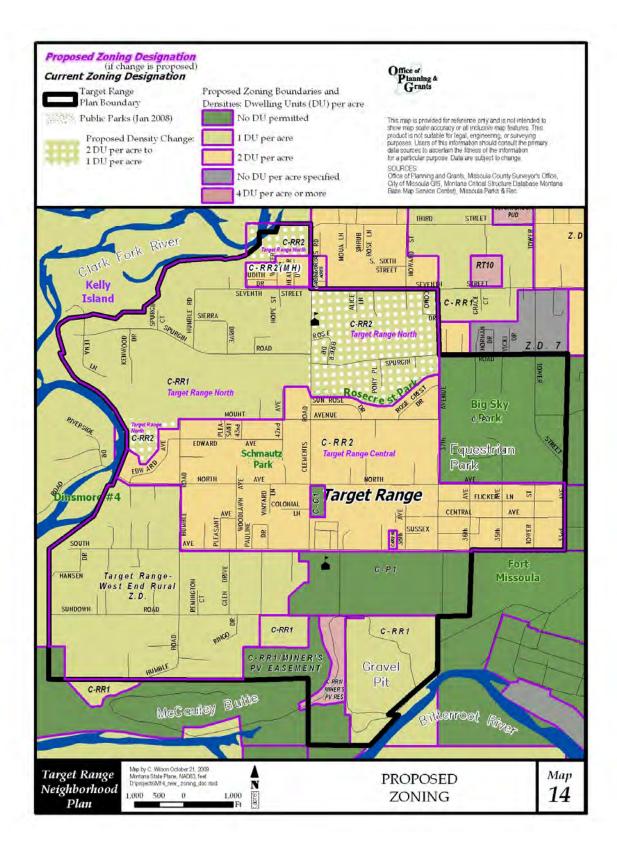
"Rural by Design" 89 •



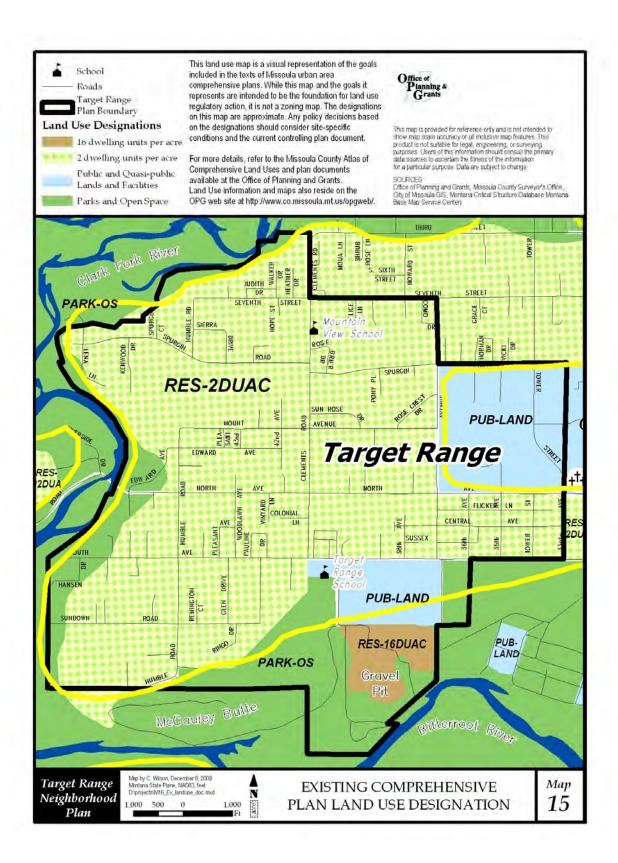


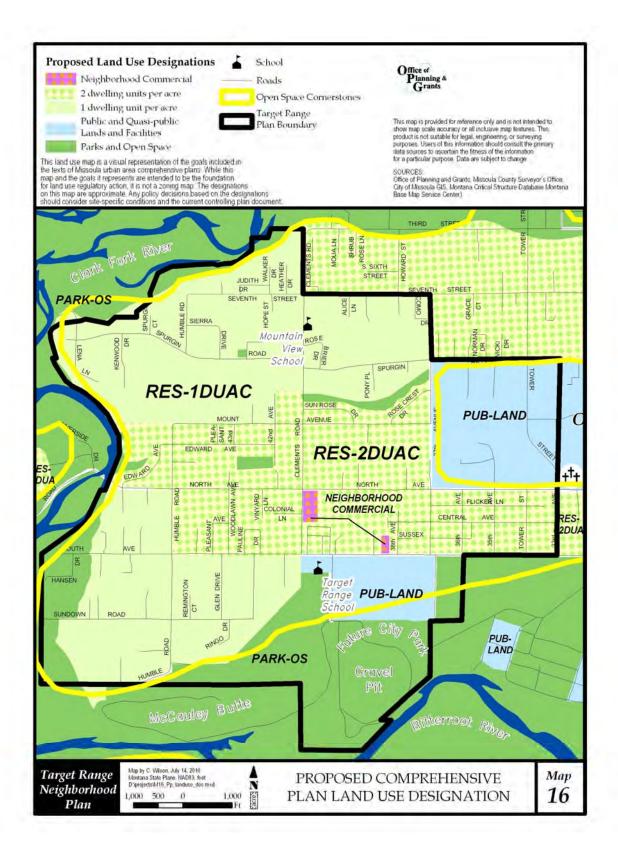
"Rural by Design" 91 •



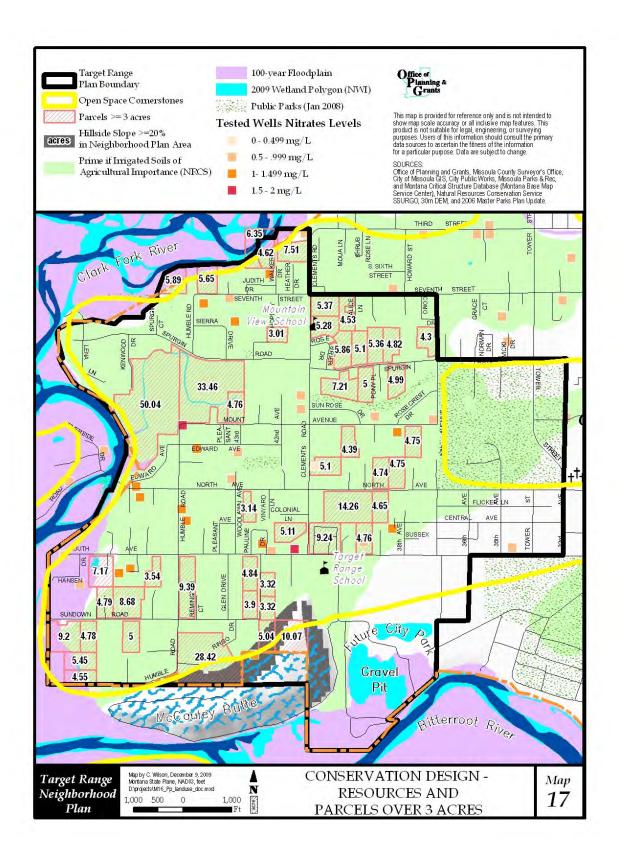


"Rural by Design" 93 •





"Rural by Design" 95 •



Appendix E

Fort Missoula Regional Park (FMRP), situated just south of South Avenue West, is located just outside the Target Range Neighborhood Plan boundary. However, residents of Target Range use the park facilities daily. The existing and planned facilities are located in close proximity (even walking distance) to many of the plan area residents. Fort Missoula Park includes the 60-acre County Park, as well as the 98 acres purchased by the city of Missoula in 1998. The park area presently includes sports fields, tennis courts, restrooms, walking trails, horseshoe pits, picnic areas, an archery practice area, a dog training area, and related park facilities. In 2002, after a year long public process to develop a site plan for improvements to the park, the Board of County Commissioners and the City Council adopted the Fort Missoula Regional Park Master Site Plan. The plan includes the addition of approximately 86 acres of land formerly owned by Knife River, which will be gifted to the city of Missoula for park development on December 31, 2012. The FMRP, when completed, will include 246 acres of trail, picnic areas, ponds, and multi-use sports facilities. Other expected features, which are planned to be implemented in phases, include new restrooms, playgrounds, accessible gardens, water features, and places for activities such as croquet, climbing, volleyball, basketball and skating. No timetable is currently established for the development of this land in the near future due to lack of funds.

"Rural by Design" 97 •

Appendix F

Project Start Up: December 2008 - March 2009

- ✓ Develop Timeline
- ✓ Define Neighborhood Boundaries
- **✓** Establish Steering Committee
- ✓ Form Working Groups Based on Specific Interests (Topics) in the Plan.
- ✓ Develop Plan Outline: Topics/Chapters (Current Status), Goals & Objectives, Possible Solutions & Strategies
- ✓ Data Collection and Map Creation
- ✓ Kick-off Meeting February 18, 2009
- ✓ Held On-Going Neighborhood Planning Committee Meetings

Plan Development and Public Involvement - April - May 2009

- ✓ Held On-Going Neighborhood Planning Committee Meetings
- ✓ Held Open House Meeting May 27, 2009, to release draft Neighborhood Plan for Public and Government Review and Comment.

Draft Neighborhood Plan and Public Involvement - June - August 2009

- ✓ Held On-going Neighborhood Planning Committee Meetings
- ✓ Hosted Public Open House, June 13, 2009, to release next draft Neighborhood Plan for Public and Government Review
- ✓ Held August 11, 2009, meeting with County and City Agencies, public, and interested groups to review and discuss plan elements.

Final Draft Neighborhood Plan, Public Involvement, and Government Review and Approval - September – December 2009

- ✓ Held On-going Neighborhood Planning Committee Meetings
- ✓ Released another draft Neighborhood Plan for Public and Government Review
- ✓ Held Open House Meeting October 27, 2009
 Government Review (✓ Formal Agency Review, Planning Board, Board of County Commissioners, City Council)

Release Final Neighborhood Plan & Zoning Tools for public comment.

Implementation - January 2010