WEST SIDE WOODS SUBDIVISION ENVIRONMENTAL ASSESSMENT, COMMUNITY IMPACT REPORT, AND SUMMARY OF PROBABLE IMPACTS

PREPARED FOR:

SUSSEX DEVELOPMENT, LLC
3060 CABERNET DRIVE, #4
HELENA, MT 59601

PREPARED BY:

WWC ENGINEERING
1275 MAPLE STREET, SUITE F
HELENA, MT 59601
(406) 443-3962
WWW.WWCENGINEERING.COM

SEPTEMBER 2022

West Side Woods Subdivision Environmental Assessment, Community Impact Report and Summary of Probable Impacts

Prepared for: Sussex Development, LLC
ATTN: Ron Bartsch
3060 Cabernet Drive, #4
Helena, MT 59601
(406) 431-9663

Prepared by: WWC Engineering
1275 Maple Street Suite F
Helena, MT 59601
(406) 443-3962

Principal Authors: Jeremy Fadness, P.E., Project Manager

Reviewed by: Drew Pearson, E.S., Project Engineer

Date: September 2022

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 OVERVIEW

The proposed West Side Woods Subdivision located in Section 23, Township 10 N, Range 04 West, is a privately funded project that aims to develop 92 single-family residential lots, 4 multi-family lots with 80 condo units, and 4 open space lots within a 58.85-acre vacant rural lot south of Highway 12, west of Park Drive and Hauser Boulevard. The subdivision will include 4 open space lots that will incorporate natural or landscaped features. Storm water conveyance and treatment will be provided on the northern open space lots to control storm runoff from the site. This proposal calls for the City of Helena to annex all proposed lots and associated rights-of-way. The residential lots will tie into the City of Helena's water and sewer system along with their local services including police, school, fire, and emergency services. Several adjacent roads leading to the subdivision will also need to be annexed into the City of Helena and include Hauser Boulevard and Park Drive.

No dwellings, other buildings, improvements, or commercial buildings exist within the subject parcel. There are several recreational trails that border and cross through the project that are part of the Mt. Helena trail system. The applicant is proposing an extensive trail system throughout the proposed open space lots and include sidewalks adjacent to proposed streets. The applicant is in discussions with Prickly Pear Land Trust in development, construction, and maintenance of the proposed trail system.

Access to the subdivision will be through the eastern boundary on Park Drive and Hauser Boulevard. There will be three access points that will provide adequate traffic flow for residents and emergency services; see the preliminary plat drawing provided in Appendix A. Roads will be constructed to meet all requirements of the City of Helena Engineering Standards with only minor deviations requested due to topographic constraints.

One seasonal wetland, classified as R4SBC, runs through the eastern portion of the project site. The seasonal wetland is planned to be incorporated into one of the open areas of the subdivision, therefore impacts are expected to be minimal. Impacts and mitigation measures of this wetland are discussed further in Section 3.2 Surface Water and Section 3.5 Wetlands.

2.0 INTRODUCTION

2.1 DOCUMENT ORGANIZATION

This Environmental Assessment for the West Side Woods Subdivision is organized to address the application topics in the MDEQ Subdivision Review Joint Application Form, Montana Code Annotated 76-3-603 and 76-3-608, and the requirements of the City of Helena. The appendices and figures provide supplemental information pertinent to the West Side Woods Subdivision.

2.2 LEGAL DESCRIPTION

The West Side Woods Subdivision is located in Lewis and Clark County south of Highway 12 (Euclid Avenue) and west of Park Drive and Hauser Boulevard in the northeast corner of Section

26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 58.85 acres and consists of rural vacant land bordered by residential areas, Highway 12, and the Mt. Helena open space. The full legal description for the property is as follows:

Parcel 1: The SW1/4 of the SW1/4 of Section 23, Township 10 North, Range 4 West, P.M.M., Lewis and Clark County, Montana. Together with a tract of land being Portion A, located in Block 307 of the Bellevue Addition as shown on the Amended Plat filed under Doc. No. 3310725. Excepting therefrom Certificate of Survey filed under Doc. No. 462306-T, and Deed of Highway Right of Way recorded in Book 241 of Deeds, page 177.

Parcel 2: Blocks 4, 5, 6, and 9 of Highland Park in Section 26, Township 10 North, Range 4 West, P.M.M. in Lewis and Clark County as shown on the Retracement file under Doc. No. 3339312.

3.0 ENVIRONMENTAL DESCRIPTION

3.1 GEOLOGY, SOILS, AND SLOPES

3.1.1 Geology

Geology of the West Side Woods Subdivision consists mainly of gravelly colluvium and alluvium derived from limestone, marly siltstone, and other limey sedimentary rock. Landforms include alluvial fans, fan remnants, stream terraces, structural benches, escarpments, ridges, divides, hills, and mountains. The project site mainly consists of a heterogeneous mixture of sand, gravel, clay, silt, and loam. Bedrock is typically more than 60 inches deep but is shallower in some areas.

There are no identified areas of slope instability, landslides, or any geological hazards such as slumps, slides, or falls. The West Side Woods Subdivision resides in Seismic Zone 3, which is typical for the City of Helena and the surrounding area. No faults were identified within the project; however, Seismic Zone 3 still presents a moderate hazard for damage due to an earthquake. Proper precautions will be taken before, during, and after construction to mitigate any major damage from an earthquake.

3.1.2 Soils

Information presented on the Natural Resource Conservation Service (NRCS) shows that there are three different types of soil located at the site. A full description of each soil and a map showing the approximate boundaries of the soils is included in Appendix B.

The main soil that makes up approximately 73% of the site is a Windham-Lap channery loam (164E) that has slopes that vary from 8% to 45%. Windham-Whitecow-Lap cannery loams (664E) makes up approximately 18% of the site; it has slopes that range from 15% to 45%. The last major soil of the site is Cargo-Musselshell gravely loams (433E); it has slopes of 4% to 35% and is present in about 9% of the site. The rest of the site is comprised of Musselshell-Cargo complex (137B); it has slopes of 2 to 8% and makes up less than 1% of the site.

The main soils on site are rated as a severe erosion hazard for roads and trails with a slope/erodibility rating of 0.95. All soils on site are also ranked as "moderately susceptible" for fire damage and "low" for soil puddling since all three soils are well-drained. A Storm Water Pollution Prevention Plan (SWPPP) will be submitted to MDEQ prior to construction to mitigate any potential erosion of the site or other hazards that will occur.

Overall, the three main soils of the site are poorly suited for both deep mechanical site preparation and shallow mechanical site preparation. However, proper precautions will be taken to ensure the soil is adequately prepared to meet the requirements of the project prior to construction.

3.1.3 Slopes

The topography of the site slopes moderately downward from the south to the north. The most dramatic inclines are located on the northern and western boundary as well as within the natural drainage in the eastern portion of the site. These areas have slopes ranging from 30% to 35% while the rest of the site has slopes within the 0% to 20% range. The site drops in elevation from 4225 feet to 4000 feet from south to north; two small ridges run north to south in parallel through the center of the site. Slope stability is not expected to pose an issue for the site; any cut and fill values for grading will be outlined in later design reports for the project.

3.1.4 Liquefaction

Liquefaction is the process of transforming water-saturated granular material from a solid state to a liquid state through motion. This most commonly occurs in fine grained silts and sand that have become saturated above their liquid limit and then vibrated by mechanical activity such as construction, heavy traffic, or earthquakes. The vibrations separate the sediment into solid grains and water, which reduces the bearing compacity of the soil and can cause catastrophic damage to a facility if not properly accounted for prior to construction. The Lewis and Clark County Growth Policy contains a Liquefaction Susceptibility Map that identifies a small, moderate hazard encroaching into the northern boundary of the site; see Figure 1 below. Prior to construction, geotechnical tests will be performed by the developer to determine the density, grain size sorting, liquid limit, and saturation of the soils to determine a more accurate liquification potential for the area if it is deemed necessary.

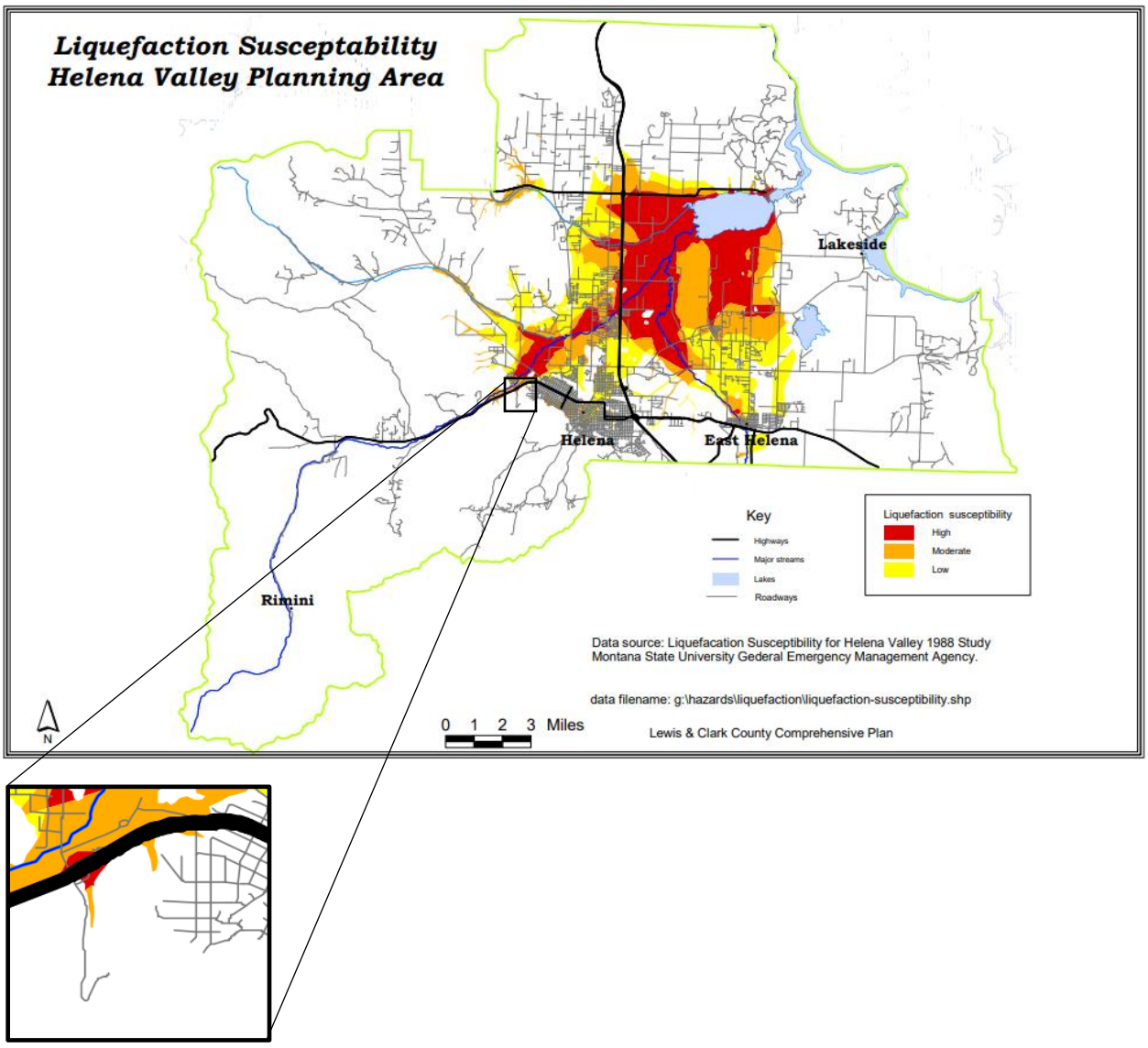


Figure 1 - Liquefaction Susceptability Helena Valley Planning Area

3.2 Surface Water

Based on the information from the National Wetland Inventory (NWI), there is one riverine habitat running through the site that is classified as R4SBC. This riverine is a channel that has flowing water for only part of the year. The drainage would be classified as an intermittent ephemeral drainage as it does not contain water most of the year and only during large storm water runoff events. The wetland inventory map is included in Appendix C. The closest large stream to the project boundary is Ten Mile Creek located northwest of the site; it is classified as a R3UBF. Figure 2 shows that both the 100-year and 500-year floodplain of Ten Mile Creek are outside the project boundary and do not pass over Highway 12 into the project area.

There are two ephemeral drainage channels that run through the subject property. The drainages that flow through the subdivision only flow water directly after a rainfall or snowmelt

event and are therefore classified as ephemeral drainages. The drainages have been classified as such due to the size, topography, vegetation, and soil characteristics of the drainage areas. A series of site inspections confirmed the drainages are not a stream or intermittent stream due to a consistently dry flow path and non-erosive vegetation along the flow path. Therefore, per City Code 12-4-11.B setbacks are not required from an ephemeral drainage. Setbacks are only required from perennial or intermittent streams per City Code.

Annexation of this project site into city limits will assist in coordinating storm water routing for this area. A storm water drainage plan that meets City of Helena regulations will assure that off-site surface water quality is protected and that runoff rates from the parcel do not exceed historic levels. Surface drainage from the property will likely flow north based on surface topography.

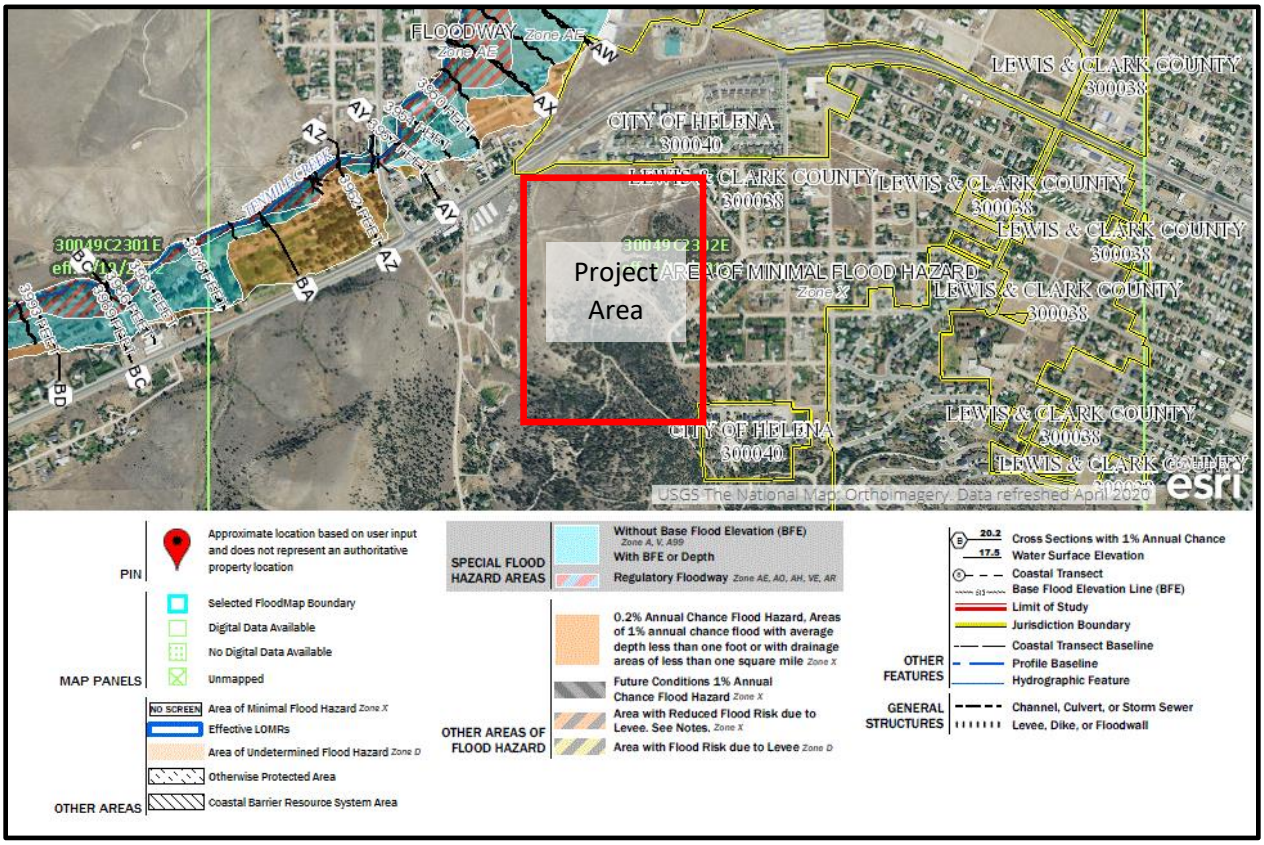


Figure 2 - Floodplain Map

3.3 GROUNDWATER

On site depth-to-groundwater is anticipated to be greater than 12 feet. Montana Bureau of Mines and Geology (MBMG) and the Ground Water Information Center (GWIC) identify 8 different wells in the area around the subdivision. The data provided on the MBMG website indicates that the static water level within these 8 wells ranges from 40 feet to 128 feet, with an average of 98 feet. Copies of the well logs are included in Appendix D. On-site disposal of domestic wastewater is not proposed. The project will collect wastewater from all lots via underground

gravity sewer mains that will be buried 4-ft to 8-ft deep. Groundwater is not a concern in the area that sewer mains will be constructed. Sewer mains will be constructed to MDEQ and City of Helena standards and will be watertight to ensure that leakage will not occur. Further, the subdivision will be served by City of Helena water. Individual wells will not be permitted within the subdivision. Therefore, direct drawdown of the groundwater from the subdivision is not anticipated due to water consumption from the subdivision. It is anticipated the subdivision will have no impact of groundwater resources.

3.4 VEGETATION

An aerial map showing the vegetative cover is provided below in Figure 3 - Site Aerial. The main vegetation on site includes grass, shrubs, and pine trees located on the south and east side of the project. The project site has been historically vacant land with a few trails belonging to the Mt. Helena trail system running through the southern portion of the site. Construction will include development of 94 single-family residential lots, 4 multi-family lots with 76 condo units, and 4 open space lots. Disturbed areas during construction will be landscaped and reseeded with native vegetation.

Information from the Montana Natural Heritage Program (MTNHP) website illuminates two species of concern that lie within the Section 23 and 26, Township 10 North, Range 04 West. These two species include the Lesser Rushy Milkvetch (*Astragalus convallarius*) and the Wedge-leaf Saltbrush (*Atriplex truncata*). MTNHP indicates that the Lesser Rushy Milkvetch was listed as a species of concern due to invasion of noxious weeds and poor development within the Helena Valley. For the Wedge-leaf Saltbrush, it is listed as a species of concern due to its rare occurrence within the area. MTNHP also indicates two species of potential concern that may lie within the project site. These include the Small Yellow Lady's-Slipper (*Cypripedium parviflorum*) and the Slender Wedgegrass (*Sephnopholis intermedia*). MTNHP information is provide in Appendix E.

The proposed subdivision has a strong likelihood of encountering these four species due to its vicinity to the current open space of Mt. Helena. Prior to construction, proper precautions will be taken to identify potential areas that may contain the species of concern. The developer will be cognizant of areas where these plant species may exist and will try to minimize disturbance of these areas to the best of their ability.

A preliminary site inspection will be conducted to identify any noxious weeds within the area that may be present. Noxious weeds that are identified will be removed prior to construction. Once the project is complete, all lot owners will be responsible for controlling noxious weeds within their respective lot.

Figure 3 - Site Aerial

3.5 WETLANDS

EO 11990, Protection of Wetlands, requires federal agencies to take action to avoid wherever possible adverse impacts to wetlands, minimize wetlands destruction, and preserve the values of wetlands. The USACE and EPA define wetlands as (USACE n.d.):

> "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

The NWI database shows wetlands in the area are generally found within the floodplain of Ten Mile Creek, which is classified as a R3UBF and is the closest large stream to the project

boundary. According to the NWI, there is one seasonal wetland, classification R4SBC, running through the project area. This riverine is a channel that only holds flowing water for part of the year and is not suitable for aquatic life. When the water is not flowing, it may remain in isolated pools although it is typically completely dewatered most of the year.

Annexation of this project site into city limits will assist in coordinating storm water routing for this area. A storm water drainage plan that meets City of Helena, EPA, and MDEQ regulations will assure that off-site surface water quality is protected and that runoff rates from the parcel do not exceed historic levels. Surface drainage from the property will likely flow north based on surface topography.

Potential wetland impacts would be associated with the construction of utilities, road crossings, and grading. This construction may impact the natural landscape of the area by slightly redirecting flow and creating a less permeable surface which will marginally increase water load into the drainage. The impact on the seasonal wetland within the defined channel will be minimal. However, during construction, temporary disturbance to the channel will be mitigated by installing appropriate Best Management Practices (BMPs) to reduce sediment loading into the channel and reduce the potential for erosion. Construction will also be planned during low water to further reduce impacts to the wetland feature.

3.6 WILDLIFE

The database of the MTNHP website was reviewed to determine whether any animal endangered species or species of concern were located within Section 23 and 26, Township 10 North, Range 04 West (a more expansive search than just the project area). MTNHP information is provided in Appendix E.

Montana Fish, Wildlife and Parks (MFWP) oversees the MTNHP and together they maintain a repository of species data online at the Montana Field Guide. This data shows fourteen animal species of concern and one special status animal species. The species of concern include the Black-tailed Prairie Dog, Spotted Bat, Hoary Bat, Little Brown Myotis, Grizzly Bear, Great Blue Heron, Evening Grosbeak, Pinyon Jay, Cassin's Finch, Clark's Nutcracker, Long-billed Curlew, Sage Thrasher, Green-tailed Towhee, and Brewer's Sparrow. The one special status species is the Bald Eagle. The bald eagle was listed as a special status species because although population numbers have steadily increased since the 1980s and breeding pairs now occupy a high percentage of suitable habitat across the state, the Bald Eagle is still protected under the Bald and Golden Eagle Protection Act of 1940. If any of these species of concern were to occur within the project area, it is likely they would occur outside of the area of disturbance and would not be impacted by activities specific to this project. Regardless of whether the species of concern are located directly within the project site, proper construction BMPs will be implemented to reduce impact. These mainly include sediment control, dust mitigation, reseeding of disturbed areas, and avoiding nest disturbance.

In response to Senate Bill 261 and Executive Orders 10-2014 and 12-2015, all proposed construction projects in the state of Montana must include a letter of comment from the DNRC

Sage Grouse Habitat Conservation Program. Using the DNRC sage grouse area mapping program located at http://sagegrouse.mt.gov/projects/, it was determined that the project location is not located in a sage grouse EO habitat area. The nearest sage grouse habitat is located approximately 45 miles away near White Sulfur Springs.

Mitigation of the proposed action would be taken by developing a reclamation plan that includes revegetation of disturbed areas near the project site, as well as weed prevention and control measures. Sediment control BMPs will be implemented to maintain water quality in the drainage running through the project site.

3.7 Historical Features

The project will not adversely affect any historical features. According to the State Historic Preservation Office (SHPO), any structure over fifty (50) years old is considered historical. Construction of underground utilities, such as water and sewer, usually occur within rights-of-way or easements, which are in place or will be in place prior to construction. No structures are proposed to be altered as part of this project. Should any structures need to be altered, SHPO shall be contacted to evaluate the significance of the structure. Correspondence from SHPO is included in Appendix F that indicates not historical features are present within the project area.

3.8 Flood Hazard Evaluation

The closest large stream to the project boundary is Ten Mile Creek located northwest of the site; it is classified as a R3UBF. Figure 2 - Floodplain Map in Section 3.2 shows that both the 100-year and 500-year floodplain are outside the project boundary. The potential for flooding in the area is minimal due to the natural topography of the site, soil conditions, and proximity to Ten Mile Creek. The grading and drainage of the project site will be discussed later in the design reports.

4.0 COMMUNITY IMPACT ASSESMENT

4.1 Water Supply

Water will be supplied to the West Side Woods Subdivision through a water distribution system that is connected to the City of Helena distribution system. The water will be supplied for domestic, commercial, and fire protection uses. The water distribution system will be designed to meet the City of Helena Design Standards as well as the standards set forth in DEQ Circular 1. Water will be supplied through a looped network with minimal dead-end lines tied into existing water mains. The distribution system will be designed to meet the needs of the entire proposed subdivision at full buildout. A thorough description of the water distribution system as well as capacity of the existing City of Helena system to provide service to the subdivision is provided in the Preliminary Engineering Report (PER) included in the subdivision application package.

4.2 WASTEWATER SYSTEM

The wastewater system for the West Side Woods Subdivision will consist of gravity sanitary sewer main laterals that coincide with the proposed new roadways within the subdivision. These laterals and mains will feed into the collection system of the City of Helena. The system will be designed to meet all the City of Helena standards as well as the MDEQ standards. A thorough description of the wastewater distribution system as well as capacity of the existing City of Helena system to provide service to the subdivision is provided in the PER included in the subdivision application package.

4.3 SOLID WASTE

Solid waste disposal and collection will be provided by the City of Helena. The proposed subdivision will increase the amount of solid waste collected by the City of Helena. Solid waste pickup for individual lots will be provided in front of the proposed single-family residential lots within the proposed street rights-of-way. Solid waste for the multi-family lots will be provided within in each lot at designated container sites within in each lot. These locations will be accessible for the City of Helena garbage collection. The applicant will work with the City of Helena Solid Waste to appropriately design garbage collection locations for each multi-family lot.

4.4 ROADS

4.4.1 Description

Streets within the West Side Woods Subdivision will be designed to meet the City of Helena Design Standards. There are two existing adjacent roads, Park Drive and Hauser Boulevard, that run north to south and will provide three access points to the subdivision on the east side of the project site. These roads will act as the main collector roads for the subdivision. There are currently five new proposed roads for the subdivision; a layout of these roads is included on the preliminary plat provided in Appendix A. The proposed roads within the West Side Woods Subdivision will adequately and safely accommodate the increase in traffic all year round. The interconnectivity of the three access points to Park Drive and Hauser Drive will allow for traffic to move smoothly throughout the subdivision along with emergency service vehicles. Due to some areas of steep terrain and anticipated cuts and fills for roads within the subdivision a variance will be requested to provide curb side sidewalks on both sides for the majority of the internal streets. This will reduce anticipated cuts and fills within the subdivision. A PER is provided with the subdivision application that provides additional information and design for the proposed road network.

4.4.2 Traffic Study

A Traffic Impact Study (TIS) has been prepared for this subdivision and is provided with the subdivision application. The TIS indicates the proposed subdivision will add up to 1,453 trips per day to the area road network at full build-out of the subdivision. Hauser Boulevard and Park Drive adjacent to the proposed subdivision will be improved to City of Helena standards. It is anticipated that the majority of traffic will utilize Hauser Boulevard, 80%, and the remaining

traffic will utilize Knight Street, 20%, to access Granite Street and ultimately Euclid Avenue (Highway 12). It is proposed that Hauser Boulevard and Park Drive be paved to Granite Street and that Hauser Boulevard between Park Drive and Granite Street be widened to minor collector width. Hauser Boulevard and Park Drive will need to be annexed into the City of Helena as part of the annexation process.

4.4.3 Lighting

Lighting within the West Side Woods Subdivision will be in accordance with all city ordinances, codes, and regulations. The applicant will work with Northwestern Energy to develop a lighting plan for the subdivision. Each phase will be provided with street lighting. Each phase will petition the expansion or creation of a lighting district to install and maintain the street lighting. This will be completed as part of the final plat for each phase.

4.5 Drainage Control and Surface Runoff

All storm water that is generated from the proposed development will be routed to several storm water ponds throughout the subdivision located in the open areas of the project site. All storm water will be transferred through a network of storm water inlets, piping infrastructure, and natural channels. Storm water conveyance and treatment will be designed per the City of Helena Engineering Standards. A detailed description of the storm water conveyance and treatment system is provided in the PER included with the subdivision application.

4.6 Utilities

There are several existing utilities that run through the project site. There is an existing City of Helena water transmission main that runs through the northern portion of the property. This existing transmission main will be located within the proposed Livezey Avenue right-of-way for most of the project. Where it is not located within a street right-of-way a 20-ft utility easement will be provided and dedicated to the City of Helena for operation and maintenance of the transmission main. There is also an existing underground gas main that runs through the northern part of the property that is operated and maintained by Northwestern Energy. We have discussed the gas main with Northwestern Energy, and they have indicated that they will relocate the gas main to follow proposed street rights-of-way and this main will provide gas service to the proposed subdivision. No additional easements should be necessary for the gas main. Finally, there is an existing overhead telecommunications line operated and maintained by CenturyLink. This overhead line will be relocated to be underground and will be placed into the proposed street right-of-way to provide service to the proposed subdivision. The applicant will work with CenturyLink to relocate the overhead line prior to final plat of Phase 3. All existing utilities are shown on the preliminary plat provided in Appendix A. All proposed City and private utilities will be located within the proposed street rights-of-way and where necessary a 20-ft utility easement will be provided and dedicated for operation and maintenance of any proposed utilities.

4.7 EMERGENCY SERVICES

St. Peter's Hospital Ambulance Service will serve the proposed subdivision. There are no indications that they cannot provide emergency services. The subdivision is located approximately 5.5 miles from St. Peter's Hospital. The response time for ambulance service would be between 14 and 16 minutes and in urban areas response time depends on traffic loading at the time of the call.

The Helena Police Department will provide law enforcement services. As growth of the city continues and the distance for service is increased, response times will vary and are subject to unit availability and road conditions in the areas they must serve. A letter was sent to the Helena Police Department on April 7, 2021 to provide feedback on service and response times. No response has been received to date; the information will be provided when received.

The Helena Fire Department will provide fire suppression for the subdivision. The Neil Avenue fire station is located approximately 2 miles from the proposed subdivision. Response times will be between 8 and 10 minutes and in urban areas response time depends on traffic loading at the time of the call. A letter was sent to the Helena Fire Department on April 7, 2021 to provide feedback on service and response times. No response has been received to date; the information will be provided when received.

All streets will be constructed to meet City of Helena Engineering Standards. This will ensure that emergency services can access the site to provide service. Further, the private access roads for the proposed multi-family lots will be designed in order to provide emergency services access including adequate width, allowance for turning movements, and on-street parking limitations or provide room for on-street parking and access. The applicant will consult with the City of Helena during the design process to ensure adequate access to the subdivision is provided. Further, water service will be provided by the City of Helena. Water distribution will be designed to meet City of Helena Engineering Standards with adequate fire flows and pressures and adequate storage as required by the City and MDEQ.

4.8 SCHOOLS

Local public-school enrollment will increase slightly with the addition of the West Side Woods Subdivision to the City of Helena. The subdivision will feed into Kessler Elementary School, Hawthorne Elementary School, CR Anderson Middle School and Capital High School. There is a minimal chance that the subdivision causes the capacity of the schools to be exceeded. Based on census data for Helena, Montana, there are 2.14 people per household within the City of Helena. The census also indicates that 19% of household are under 18 years old. Based on this we can calculate that 0.40 people per household are school age. The subdivision proposes 92 single family residential lots with 80 condo units for a total of 172 proposed households. It is anticipated that 70 school age children will be generated at full build-out of the subdivision. The subdivision is planned with 4 phases, Phase 1 in 2023, Phase 2 in 2025, Phase 3 in 2027, and Phase 4 in 2029. The proposed 70 students would be phased in over 6 years. The City of Helena Growth Policy indicates that the projected total enrollment for all schools within the

Helena School District will be 9,310 students by 2025. The anticipated increase from the proposed subdivision accounts for 0.8% of total enrollment in year 2025. It is anticipated that the existing school system can absorb the anticipated students from the proposed subdivision. A letter was sent to the Helena School District on April 7, 2021 to provide feedback on service and response times. No response has been received to date; the information will be provided when received.

4.9 Housing and Population

Based on the 2019 population density estimates for the City of Helena, there are approximately 2.14 people per household within the City of Helena. The subdivision proposes 92 single family residential lots with 80 condo units for a total of 172 proposed households. The proposed subdivision would potentially increase the population of the City of Helena by 368 people at full build-out of the subdivision.

4.10 Land Use

The current land use for project site is vacant rural land. It is bordered to the north, east, and west by improved urban property used for residential units and one apartment complex located directly north of the project site boundary. To the south, it is bordered by exempt property that is owned by the City of Helena that contains several trails that link into the Mt. Helena trail system. The project site is bordered to the North by Highway 12 (Euclid Avenue) and Knight Street, to the east by Hauser Boulevard and Park Drive, to the south by La Grande Cannon Trail (continuing from La Grande Cannon Boulevard), and to the west by Park Drive.

The West Side Woods Subdivision proposes residential and open space land uses on the property. This will consist of 92 single-family residential lots and 4 multi-family lots with 80 condo units. R2 and R3 zoning is proposed for the subdivision to accommodate the proposed land uses. There are also 4 open space lots proposed with the subdivision and an extensive network of trails.

4.11 Easements and Encumbrances

There are several easements that cross the property. There is an existing easement for the City of Helena water transmission main, an easement for the Northwestern Energy gas main, and an easement for the overhead telecommunications line. These easements will be abandoned with the final plats for each phase and all utilities will be located within proposed street rights-of-way or be provided dedicated 20-ft utility easements, as necessary. There is an existing utility easement created per Certificate of Survey #391636 for a private well in the northeast corner of the property. There is a private well and service to the adjacent private lot located within this easement. The existing well has been abandoned and is no longer utilized but the easement is expected to remain in place. There are also several existing platted rights-of-way located within the project area. These proposed rights-of-way do not fit into the overall project layout and therefore are proposed to be abandoned. The applicant is currently working with Lewis and Clark County to abandon the existing rights-of-way and the existing rights-of-way will be abandoned prior to final plat of Phase 1.

4.12 PARKS AND RECREATIONAL FACILITIES

The project site is bordered to the south by the Mt. Helena trail system. The *Seven Sisters* trail runs east to west through the project site before hooking up to the ridge and traversing south toward Mt. Helena. The *Le Grande Cannon Trail* also borders the project site to the south; however, it will not be affected by the development of the subdivision. The subdivision will cause the *Seven Sisters Trail* to be rerouted slightly; however, since this trail is located in the southern portion of the project, there will be ample time to coordinate with the City of Helena about rerouting measures. The trails encompassed within the project site as well as the Mt. Helena trail system will also see a slight increase in traffic due to the population growth of the area.

Within the project site itself, several landscaped areas will be designated open spaces for the subdivision. They will include walking paths, benches, and storm water ponds. The preliminary plat is provided in Appendix A.

4.13 PROJECT PHASING

The project will be phased out into four different phases that will be implemented over 6 years. The breakdown of each phase is outlined below:

Phase 1:

- Phase 1 includes 28 single-family residential lots, 2 multi-family lots with 28 condo units, and 2 open space lot on the northeast side of the subject property. One of the open spaces lots is located on the south side of the subject property. This portion of the project is directly adjacent to Hauser Boulevard.
- The phase will construct three roads Crowley Court, Livezey Avenue, and Lee Court. Livezey Avenue and Crowley Court will both have direct access from Hauser Boulevard.
- Water, wastewater, and storm water infrastructure will be constructed per the City of Helena Engineering Standards to serve all lots within the phase.
- Phase 1 will be final platted by December 2023.

Phase 2:

- Phase 2 includes 10 single-family residential lots, 1 multi-family lot with 20 condo units, and 1 open space lot. This phase is located on the northwest side of the subject property and has access from Livezey Avenue that will be constructed as part of Phase 1.
- One road will be constructed with Phase 2, Livezey Court, both a local city street and private road section.
- Water, wastewater, and storm water infrastructure will be constructed per the City of Helena Engineering Standards to serve all lots within the phase.
- Phase 2 will be final platted by December 2025.

Phase 3:

- Phase 3 includes 43 single-family residential lots and 1 open spaces lot. Phase 3 is located on the south side of the subject property and will be accessed directly from Park Drive and by and internal road created with Phase 1, Livezey Avenue.
- Two roads will be constructed/extended with Phase 2, Lee Drive and Brakeman Avenue, and Brakeman Court.
- Water, wastewater, and storm water infrastructure will be constructed per the City of Helena Engineering Standards to serve all lots within the phase.
- Phase 3 will be final platted by December 2027.

Phase 4:

- Phase 4 includes 11 single-family residential lots, and 1 multi-family lot with 32 condo units. Phase 4 is located on the south side of the subject property and will have direct access from Park Drive.
- 1 public road will be constructed with Phase 4, Flowerree Court, and one private road to access the multi-family lot will be constructed, Flowerree Court.
- Water, wastewater, and storm water infrastructure will be constructed per the City of Helena Engineering Standards to serve all lots within the phase.
- Phase 4 will be final platted by December 2029.

4.14 Covenants

The applicant is proposing covenants and the creation of a Homeowners Association (HOA) for the West Side Woods Subdivision. The proposed covenants and HOA documents are provided with the subdivision application submittal.

5.0 SUMMARY OF PROBABLE IMPACTS & PROPOSED MITIGATION MEASURES

5.1 Effects on Agriculture

The West Side Woods Subdivision is not located on or near any prime farmland. A small portion of the site (<1%) contains farmland of local importance and is located at the northern boundary of the site; this soil is classified as the Musselshell-Cargo complex (137B). The surrounding area is mostly comprised of residential areas or open spaces that are used for recreation. The subject property is currently used as vacant open space and has not been used for agriculture recently. Further, there are no agricultural lands adjacent to or near the subject property. Implementation of this subdivision is not expected to have an impact on agriculture. Due to the lack of prime farmland within the project and the surrounding area, no immediate effects on agriculture are expected, therefore, no mitigation measures are proposed for this project.

5.2 Effects on the Natural Environment

Impacts to the natural environment are expected any time there is a change in land-use. The current rural-vacant land on the property will be changed to residential lots. Changing the land will modify the eco-system in the immediate area but will have little effect on the larger scale. Easing the effects of the residential area will be aided by plans to incorporate open spaces within the subdivision with space for trails, storm water detention ponds, and natural landscape. During design and construction of this subdivision, all state and local regulations will be followed to protect water quality, prevent runoff rates from exceeding historic levels, and provide protection from noxious weeds.

Groundwater quality will see minimal impact from the implementation of the subdivision due to the use of City of Helena water and sewer facilities. The proximity of this parcel to municipal services while allowing open space corridors along existing watercourses attempts to serve as a balance between growth and preservation.

No geological or natural hazards have been identified on the property. Possible environmental contamination from nearby superfund sites or on-site pollution is also not likely.

One intermittent, seasonal drainage running through the eastern portion of the project site will be directly impacted by the implementation of the subdivision. During construction, care will be taken to minimize the impacts of the drainage. All codes set forth by the MDEQ and U.S. Army Corps of Engineers will be followed. Setbacks from lots, BMPs for sediment loading, and construction during low flow will be used to mitigate impacts to potential wetland features.

The effect on the natural environment will be mitigated by dedication of parkland, open space, reseeding procedures, and wetland preservation practices. All infrastructure will be constructed to meet City of Helena and MDEQ design standards. Meeting these design standards will mitigate impacts to the natural environment. All applicable growth plans, regulations, and other planning documents have been consulted in the evaluation and conceptual design of this project. Based on these documents and resources, there are no unmitigated environmental issues identified in this report.

5.3 Effect on Local Services

The subject property will be annexed into the City of Helena. Streets and utilities will be extended to service the property; they will be designed to meet all regulations set forth by the City of Helena and MDEQ. Schools, infrastructure maintenance, and fire and police protections will be funded through property taxes generated from the lots.

The subdivision will impact existing City of Helena water and sewer systems by increasing usage on those systems. The existing water and wastewater systems were evaluated as part of the PER provided with the subdivision application. The PER identified some off-site storm water improvements that may be necessary to accommodate the proposed subdivision. The analysis and recommendations for these systems are provided in the PER included with the subdivision

application. There will be impacts to adjacent local streets that access the project site. The project is estimated to generate 1,453 trips per day to the area road network at full build-out of the subdivision. A TIS was prepared for the project to analyze the impacts of the subdivision on the adjacent street network. Some off-site improvements are recommended in the TIS to address impacts of the proposed subdivision. The TIS is provided with the subdivision application submittal.

5.4 Effect on Wildlife and Wildlife Habitat

Within the proposed project site, there are no wildlife areas such as big game wintering ranges, migration routes, or important habitat for rare or endangered species. The plant and animal species of concern are listed above in Section 3.4 Vegetation and Section 3.6 Wildlife respectively. Proper precautions will be taken prior to construction to ensure that impacts to wildlife and wildlife habitat are minimal. The seasonal drainage running through the project site may provide wildlife a corridor and security areas from the subdivision development as well as other adjacent residential uses. Minor modifications to this drainage may reduce wildlife travel into this area, causing them to migrate elsewhere. Natural landscape is essential for the continuing existence of wildlife; subdivisions pose a large threat to wildlife due to the amount of natural landscape that is removed. However, due to the size of the West Side Woods Subdivision, incorporation of open areas, and proper mitigation practices, impacts to wildlife and wildlife habitat will be marginal. Wildlife will be able to move through the open areas of the subdivision and any landscape damaged from construction will be adequately reseeded with natural vegetation.

5.5 Effect on Public Health and Safety

There are several existing utilities located within the subject property. An existing City of Helena water transmission main, a Northwestern Energy gas main, and an overhead telecommunications line. The existing City of Helena water transmission main will not be disturbed as part of the project. The existing main will be maintained and follows the proposed Livezey Avenue right-of-way. Where it is not in the right-of-way a 20-ft utility easement dedicated to the City of Helena will be provided. The gas main and telecommunications line will be relocated to proposed street rights-of-way. The applicant is currently working with each utility on the relocation of these utilities.

The subdivision will increase traffic on the adjacent road network. A TIS was prepared for this subdivision that outlines the anticipated impacts and recommendations for mitigation of traffic impacts. The TIS recommends some off-site road improvements to mitigate traffic impacts associated with the subdivision. The TIS is provided with the subdivision application submittal. The applicant will work with the City of Helena to mitigate traffic increases during each phase of the subdivision.

There will be an increase in storm water run-off associated with the subdivision. The PER outlines storm water conveyance and treatment recommendations to address on-site and off-site storm water impacts. The applicant will work with the City of Helena to design and

construct storm water infrastructure that protects on-site and off-site properties from storm water impacts associated with the subdivision. The PER is included in the subdivision application submittal.

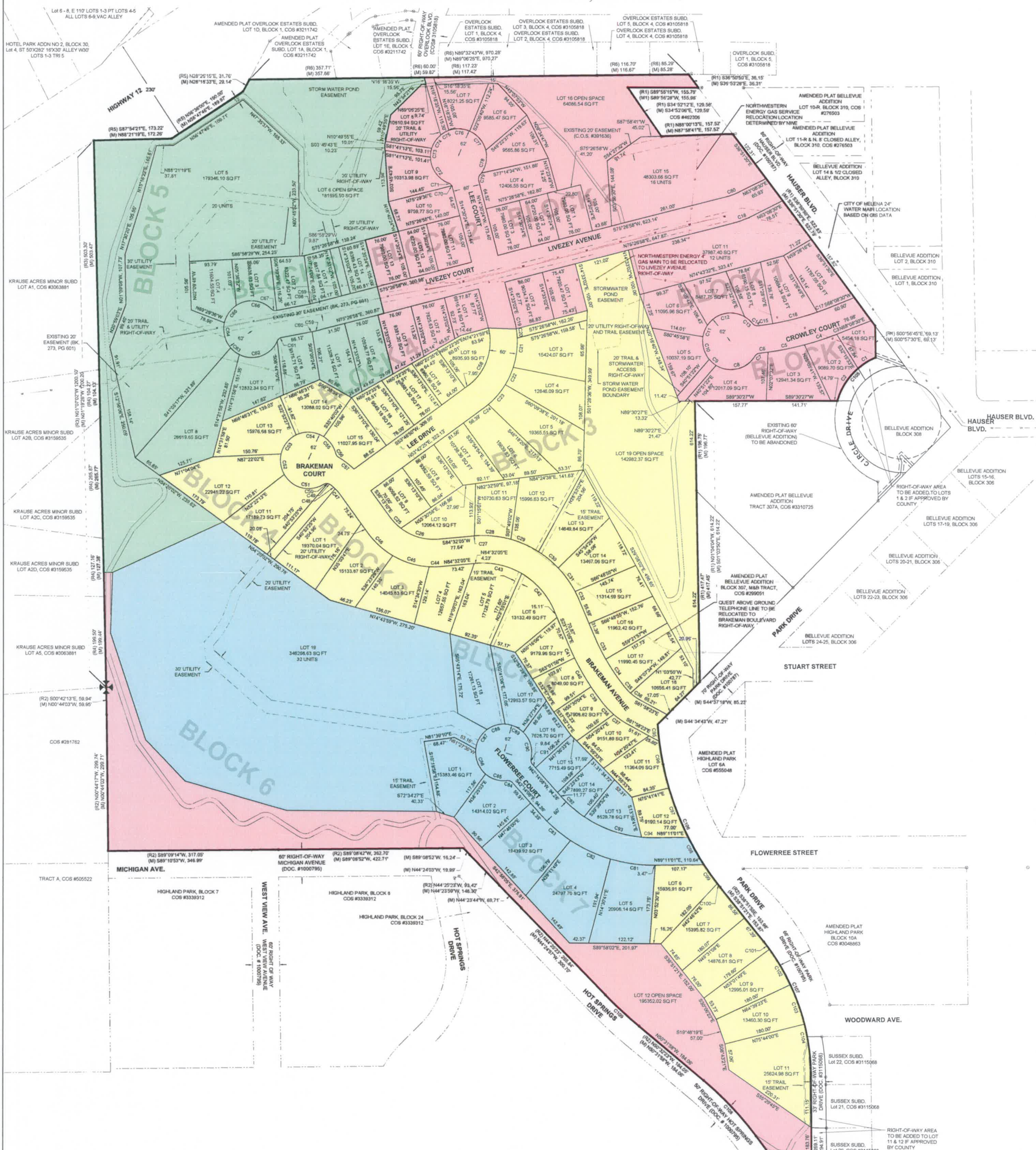
The subdivision will impact existing City of Helena water and sewer systems by increasing usage on those systems. The existing water and wastewater systems were evaluated as part of the PER provided with the subdivision application. No off-site improvements for water and wastewater were identified in the PER. The analysis and recommendations for these systems are provided in the PER included with the subdivision application.

During construction, there will be the potential of dust that may affect air quality. Adequate dust control measures will be implemented to reduce impacts to the local community. Construction will also be scheduled only to occur during daylight hours to avoid disturbance to wildlife and the nearby residents. The West Side Woods Subdivision will conform to all City of Helena and MDEQ Regulations to ensure that public health and safety concerns are mitigated.

APPENDIX A
Preliminary Plat

WEST SIDE WOODS SUBDIVISION PRELIMINARY PLAT

LOCATED IN THE SOUTH 1/2 OF SECTION 23, AND THE NORTH 1/2 OF SECTION 26, TOWNSHIP 10 NORTH, RANGE 4 WEST P.M.M., LEWIS AND CLARK COUNTY, MONTANA



LEGEND

- FOUND S.W. CORNER SECTION 23 AS IRON PIN W/ 3" ALUM. CAP (DITTO 2915S) AS NOTED ON CORNER RECORD DOC. #3038588
- FOUND 5/8" REBAR W/ ORANGE PLASTIC CAP (J. LAY 17305LS) OR AS NOTED
- FOUND 5/8" REBAR W/ 2" ALUM. CAP (NASH 5210S)
- FOUND 5/8" REBAR W/ YELLOW PLASTIC CAP (RIES 4125LS) OR AS NOTED
- SET 5/8" REBAR W/ YELLOW PLASTIC CAP (COLLINS 18626LS)
- SUBDIVISION BOUNDARY
- LOT LINES
- EASEMENTS AS NOTED
- ADJACENT PROPERTY BOUNDARY
- NORTHWESTERN GAS LINE AS NOTED
- QUEST ABOVE GROUND TELEPHONE LINE
- CITY OF HELENA 24 INCH WATER MAIN
- PHASE 1 BOUNDARY
- PHASE 2 BOUNDARY
- PHASE 3 BOUNDARY
- PHASE 4 BOUNDARY

(M) MEASURED (THIS SURVEY)
(R1) RECORD (CERTIFICATE OF SURVEY #3310725)
(R2) RECORD (CERTIFICATE OF SURVEY #3339312)
(R3) RECORD (CERTIFICATE OF SURVEY #3063881)
(R4) RECORD (CERTIFICATE OF SURVEY #3159535)
(R5) RECORD (STATE OF MT STATE HIGHWAY COMMISSION RIGHT-OF-WAY PLAN F_249(30))
(R6) RECORD (CERTIFICATE OF SURVEY #3211742)
(R7) RECORD (CERTIFICATE OF SURVEY #3105818)

BASIS OF BEARING

City of Helena LDP

Reference Frame: NAD83(2011)(EPOCH:2010.0000)
Projection: Transverse Mercator
Central Meridian: W111°57'00" (-111.95°)
Project Origin Latitude: N46°30'00" (46.5°)
Ground Scale Factor at Central Meridian: 1.000191
False Northing: 100,000.000 IFT (30,480m)
False Easting: 200,000.000 IFT (60,960m)

SHEET 2 OF 2

1/4	SEC.	TWP.	RGE.
	23	10N.	4W.
1/4	SEC.	TWP.	RGE.
	26	10N.	4W.

SURVEY IS NOT VALID UNLESS SEAL CONTAINS THE SIGNATURE OF THE PROFESSIONAL LAND SURVEYOR.

CERTIFICATE OF SURVEYOR

DRAFT

DAVID L. COLLINS, PLS   Date

ECO DEVELOPMENT LLC

WEST SIDE WOODS SUBDIVISION

JOB#: 2020-216

REVISIONS

WWC ENGINEERING
1275 MAPLE STREET, SUITE F
HELENA, MT 59601
(406) 443-3962

APPENDIX B
Soils Information

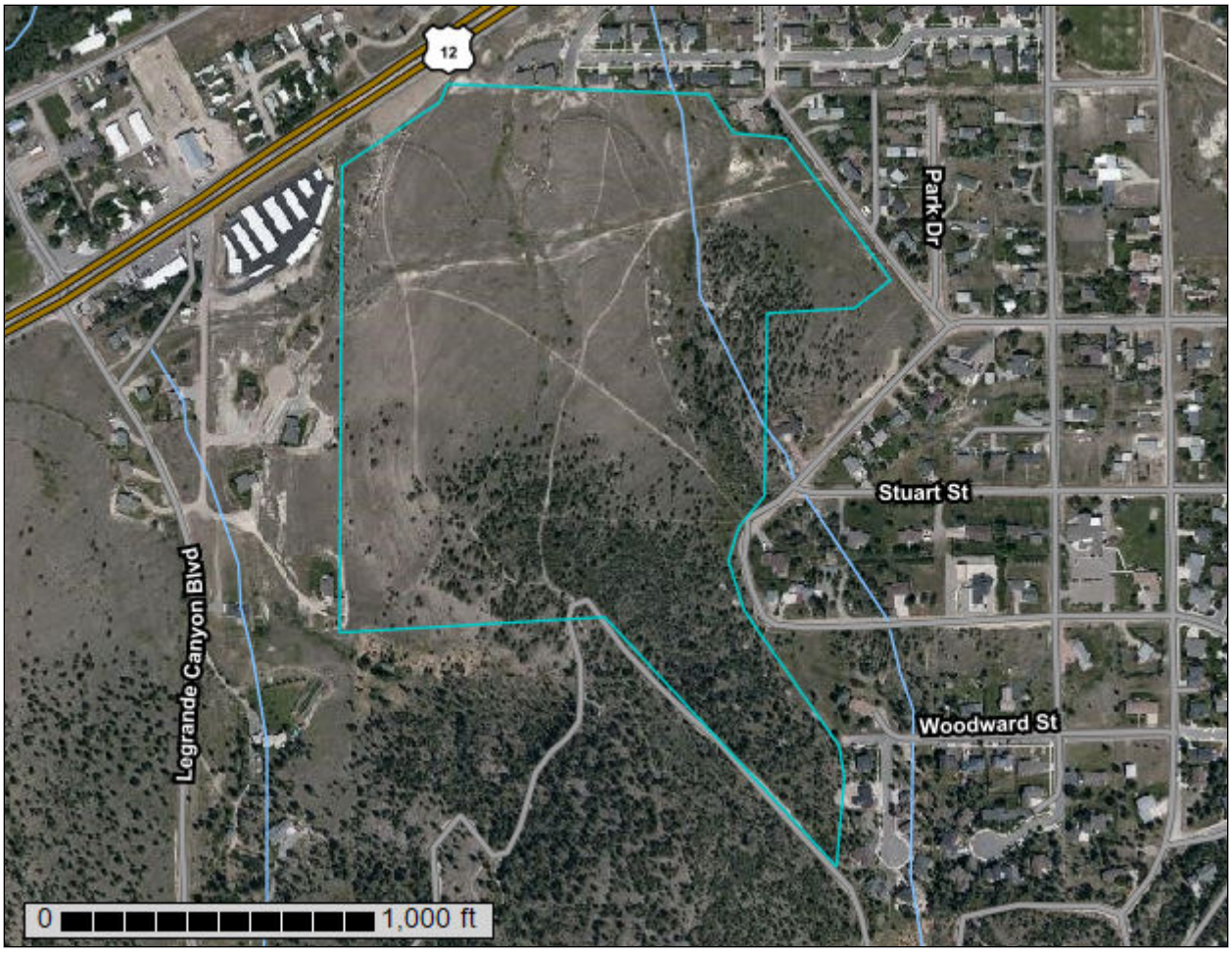
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Lewis and Clark County Area, Montana



July 22, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

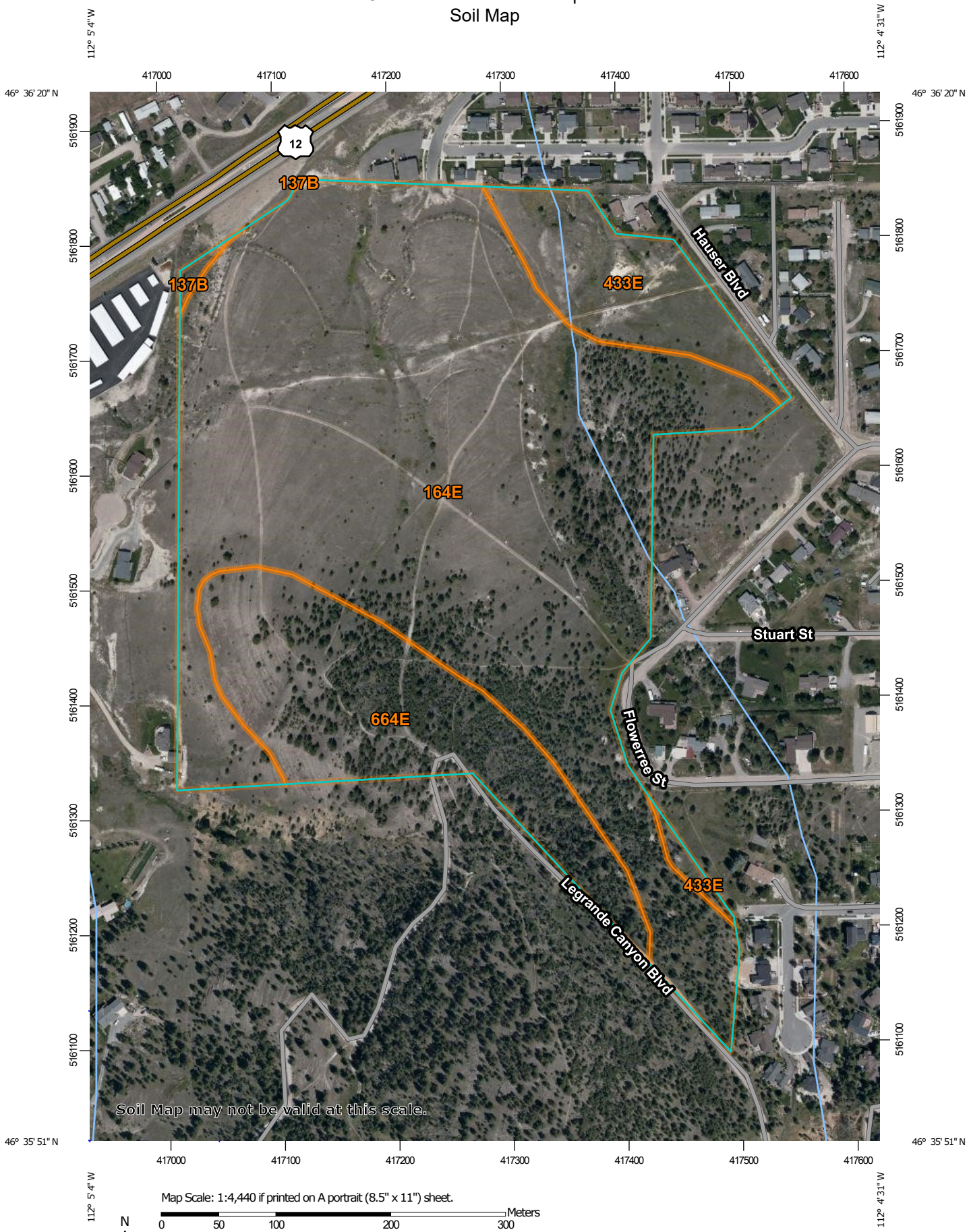
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:4,440 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 12N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lewis and Clark County Area, Montana
Survey Area Data: Version 15, Jun 4, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 24, 2019—Jul 27, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
137B	Musselshell-Crago complex, 2 to 8 percent slopes	0.2	0.3%
164E	Windham-Lap channery loams, 8 to 45 percent slopes	43.4	73.0%
433E	Crago-Musselshell gravelly loams, 4 to 35 percent slopes	5.2	8.8%
664E	Windham-Whitecow-Lap channery loams, 15 to 45 percent slopes	10.7	17.9%
Totals for Area of Interest		**59.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lewis and Clark County Area, Montana

137B—Musselshell-Crago complex, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: 4yph
Elevation: 3,600 to 4,500 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 105 to 120 days
Farmland classification: Farmland of local importance

Map Unit Composition

Musselshell and similar soils: 70 percent
Crago and similar soils: 25 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Musselshell

Setting

Landform: Alluvial fans, hillsides, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium derived from limestone; coarse-loamy slope alluvium derived from limestone

Typical profile

A - 0 to 4 inches: loam
Bk1 - 4 to 34 inches: gravelly loam
Bk2 - 34 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: Limy (Ly) LRU 44B-A (R044BA030MT)
Hydric soil rating: No

Description of Crago

Setting

Landform: Alluvial fans, hillsides, escarpments, plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium derived from limestone; gravelly colluvium derived from limestone; gravelly slope alluvium derived from limestone

Typical profile

A - 0 to 4 inches: gravelly loam
Bk1 - 4 to 32 inches: very gravelly clay loam
Bk2 - 32 to 60 inches: extremely gravelly loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 70 percent
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Limy (Ly) LRU 44B-A (R044BA030MT)
Hydric soil rating: No

Minor Components

Amesha

Percent of map unit: 2 percent
Landform: Hillsides, plains, knolls, alluvial fans
Landform position (two-dimensional): Footslope, toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Crago, cobbly

Percent of map unit: 2 percent
Landform: Alluvial fans, hillsides, escarpments, plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Delpoint

Percent of map unit: 1 percent
Landform: Escarpments, hills, knolls
Down-slope shape: Linear
Across-slope shape: Linear

Ecological site: Draft Silty (Si) RRU 46-N 13-19" p.z. (R046XN252MT)
Hydric soil rating: No

164E—Windham-Lap channery loams, 8 to 45 percent slopes

Map Unit Setting

National map unit symbol: 4ypy
Elevation: 4,000 to 5,500 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition

Windham and similar soils: 75 percent
Lap and similar soils: 20 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windham

Setting

Landform: Hills
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly colluvium derived from limestone

Typical profile

A - 0 to 7 inches: channery loam
Bk1 - 7 to 30 inches: very gravelly loam
Bk2 - 30 to 60 inches: extremely gravelly loam

Properties and qualities

Slope: 8 to 45 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B

Ecological site: Draft Limy (Ly) RRU 46-N 13-17" p.z. (R046XN254MT)
Hydric soil rating: No

Description of Lap

Setting
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from limestone

Typical profile
A - 0 to 6 inches: channery loam
Bk1 - 6 to 8 inches: very channery loam
Bk2 - 8 to 14 inches: extremely channery loam
R - 14 to 60 inches: unweathered bedrock

Properties and qualities
Slope: 8 to 45 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 1.3 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Shallow Grassland (R043BP810MT)
Hydric soil rating: No

Minor Components

Beanlake
Percent of map unit: 1 percent
Landform: Outwash fans, alluvial fans, moraines
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 15-19" p.z. (R044XC473MT)
Hydric soil rating: No

Soils with bedrock at 20 to 40 inches
Percent of map unit: 1 percent
Landform: Escarpments, hillsides, hillsides, ridges, ridges, divides
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Droughty-Steep (SiDrStp) 15-19" p.z. (R043BS720MT)
Hydric soil rating: No

Rock outcrop
Percent of map unit: 1 percent

Hydric soil rating: No

Lap, very shallow

Percent of map unit: 1 percent
Landform: Ridges, divides, escarpments, hillsides, hillsides, ridges
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Shallow (Sw) 15-19" p.z. (R044XC469MT)
Hydric soil rating: No

Whitecow

Percent of map unit: 1 percent
Landform: Ridges, divides, escarpments, hillsides, hillsides, ridges
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

433E—Crago-Musselshell gravelly loams, 4 to 35 percent slopes

Map Unit Setting

National map unit symbol: 4yt8
Elevation: 3,600 to 5,000 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 105 to 120 days
Farmland classification: Not prime farmland

Map Unit Composition

Crago and similar soils: 50 percent
Musselshell and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Crago

Setting

Landform: Escarpments, plains, alluvial fans, hillsides
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium derived from limestone; gravelly colluvium derived from limestone; gravelly slope alluvium derived from limestone

Typical profile

A - 0 to 4 inches: gravelly loam
Bk1 - 4 to 32 inches: very gravelly clay loam
Bk2 - 32 to 60 inches: extremely gravelly loam

Properties and qualities

Slope: 4 to 35 percent
Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 70 percent
Available water storage in profile: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Limy Grassland (R043BP804MT)
Hydric soil rating: No

Description of Musselshell

Setting

Landform: Hillsides, plains, alluvial fans
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium derived from limestone; coarse-loamy slope alluvium derived from limestone

Typical profile

A - 0 to 4 inches: gravelly loam
Bk1 - 4 to 34 inches: gravelly loam
Bk2 - 34 to 60 inches: very gravelly sandy loam

Properties and qualities

Slope: 4 to 35 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 7.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Limy Grassland (R043BP804MT)
Hydric soil rating: No

Minor Components

Amesha

Percent of map unit: 3 percent
Landform: Alluvial fans, hillsides, plains, knolls
Landform position (two-dimensional): Footslope, toeslope

Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Crago, greater slope
Percent of map unit: 3 percent
Landform: Alluvial fans, hillsides, escarpments, plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Crago, cobbly
Percent of map unit: 2 percent
Landform: Alluvial fans, hillsides, escarpments, plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Crago, stony
Percent of map unit: 1 percent
Landform: Plains, alluvial fans, hillsides, escarpments
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Limy (SiLy) 10-14" p.z. (R044XC457MT)
Hydric soil rating: No

Pensore
Percent of map unit: 1 percent
Landform: Hillsides, escarpments, ridges, knolls, strath terraces
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Shallow (Sw) 10-14" p.z. (R044XC452MT)
Hydric soil rating: No

664E—Windham-Whitecow-Lap channery loams, 15 to 45 percent slopes

Map Unit Setting
National map unit symbol: 4ywd
Elevation: 4,000 to 5,000 feet
Mean annual precipitation: 15 to 19 inches
Mean annual air temperature: 37 to 45 degrees F
Frost-free period: 90 to 110 days
Farmland classification: Not prime farmland

Map Unit Composition
Windham and similar soils: 45 percent
Whitecow and similar soils: 35 percent

Lap and similar soils: 15 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windham

Setting

Landform: Ridges, divides, escarpments, hillsides
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly colluvium derived from limestone

Typical profile

A - 0 to 7 inches: channery loam
Bk1 - 7 to 30 inches: very gravelly loam
Bk2 - 30 to 60 inches: extremely gravelly loam

Properties and qualities

Slope: 15 to 45 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: Draft Limy (Ly) RRU 46-N 13-17" p.z. (R046XN254MT)
Hydric soil rating: No

Description of Whitecow

Setting

Landform: Ridges, divides, escarpments, hillsides
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly colluvium derived from limestone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
A - 1 to 3 inches: channery loam
Bk1 - 3 to 25 inches: very gravelly loam
Bk2 - 25 to 60 inches: extremely channery loam

Properties and qualities

Slope: 15 to 45 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 50 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: Limy Cool Woodland (F043BP912MT)
Other vegetative classification: Douglas-fir/bluebunch wheatgrass (PK210), Douglas-fir/rough fescue (PK230)
Hydric soil rating: No

Description of Lap

Setting

Landform: Ridges, divides, escarpments, hillsides
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly colluvium over residuum weathered from limestone; gravelly residuum weathered from limestone

Typical profile

A - 0 to 6 inches: channery loam
Bk1 - 6 to 8 inches: very channery loam
Bk2 - 8 to 14 inches: extremely channery loam
R - 14 to 60 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 45 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 1.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: D
Ecological site: Limy Warm Woodland (F043BP913MT)
Hydric soil rating: No

Minor Components

Lap, very shallow

Percent of map unit: 2 percent

Landform: Divides, escarpments, hillsides, ridges
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Shallow (Sw) 15-19" p.z. (R044XC469MT)
Hydric soil rating: No

Whitecow, greater slope

Percent of map unit: 2 percent
Landform: Hillsides, ridges, divides, escarpments
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Maiden

Percent of map unit: 1 percent
Landform: Escarpments, hillsides, ridges, divides
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: Silty-Droughty-Steep (SiDrStp) 15-19" p.z. (R043BS720MT)
Hydric soil rating: No

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX C
Wetland Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

West Side Subdivision Wetland Map

October 28, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

APPENDIX D
Well Logs

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps

Site Name: LITTLE CHURCH
GWIC Id: 62900

Section 1: Well Owner(s)

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	26	NE¼ NW¼ NW¼

County LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.60106	-112.079899	TRS-SEC	NAD83

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition **Block** **Lot**

Section 3: Proposed Use of Water
DOMESTIC (1)
IRRIGATION (2)

Section 4: Type of Work
Drilling Method:
Status: NEW WELL

Section 5: Well Completion Date
Date well completed: Saturday, January 1, 1983

Section 6: Well Construction Details
There are no borehole dimensions assigned to this well.

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
0	0	7				

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
220	365	0			

Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: Well Test Data

Total Depth: 365
Static Water Level: 100
Water Temperature:

Unknown Test Method *

Yield 60 gpm.
Pumping water level 360 feet.
Time of recovery _ hours.
Recovery water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log
Geologic Source
Unassigned
Lithology Data

There are no lithologic details assigned to this well.

Driller Certification
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:
Company:
License No: -0
Date Completed: 1/1/1983

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (11/6/2006 11:42:42 AM)

Site Name: MAKI, JOHN
GWIC Id: 62865

Section 1: Well Owner(s)

1) MAKI, JOHN (MAIL)
1310 SHIRLEY RD
HELENA MT 59601 [05/11/1988]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	26	NE¼ NW¼

County LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.60012515075	-112.075874683	TRS-SEC	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date

Addition	Block	Lot
HIGHLAND PARK		12

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: AIR ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Wednesday, May 11, 1988

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	280	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-1.5	20	6				STEEL
5	280	4.625				PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
200	280	4		1/4X4	PERFORATED CASING

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	20	BENTONITE	

Section 7: Well Test Data

Total Depth: 280
Static Water Level: 120
Water Temperature:

Air Test *

30 gpm with drill stem set at _ feet for 2 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level 260 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassigned

From	To	Description
0	2	TOPSOIL
2	20	BROKEN DECOMPOSED ROCK
20	280	LIMESTONE BEDROCK

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: TERRY LINDSAY
Company: LINDSAY DRILLING CO INC
License No: WWC-253
Date Completed: 5/11/1988

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (12/10/2019 12:20:55 PM)

Site Name: SCOTT, LYMON
GWIC Id: 62789

Section 1: Well Owner(s)

1) SCOTT, LYMON (MAIL)
912 GRANITE ST
HELENA MT 59601 [10/27/1988]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	23	SE¼ SW¼

County LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.60374167005	-112.076252605	TRS-SEC	NAD83

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition **Block** **Lot**

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: AIR ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Thursday, October 27, 1988

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	125	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	20	6				STEEL
5	125	4				PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
80	125	4		1/4X4	PERFORATED CASING

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	20	BENTONITE	

Section 7: Well Test Data

Total Depth: 125
Static Water Level: 40
Water Temperature:

Air Test *

20 gpm with drill stem set at _ feet for 2 hours.
Time of recovery 2 hours.
Recovery water level 40 feet.
Pumping water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassigned

From	To	Description
0	4	TOPSOIL
4	12	CLAY
12	20	DECOMPOSED LIMESTONE
20	125	LIMESTONE BEDROCK

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: TERRY LINDSAY
Company: LINDSAY DRILLING CO INC
License No: WWC-253
Date Completed: 10/27/1988

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (12/10/2019 10:55:12 AM)

Site Name: SANDILAND CONSTRUCTION
GWIC Id: 62780

Section 1: Well Owner(s)

1) SANDILAND CONSTRUCTION (MAIL)
BOX 985
HELENA MT 59601 [03/15/1979]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	23	SW¼

County	Geocode
LEWIS AND CLARK	

Latitude	Longitude	Geomethod	Datum
46.605592	-112.078949	TRS-SEC	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date

Addition	Block	Lot

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: AIR ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Thursday, March 15, 1979

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	215	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
0	20	6				STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
3	215	4			SCREEN-CONTINUOUS-PVC

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	20	MUD	

Section 7: Well Test Data

Total Depth: 215
Static Water Level: 100
Water Temperature:

Air Test *

20 gpm with drill stem set at _ feet for 1 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level 212 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassigned

From	To	Description
0	4	TOPSOIL
4	15	BROKEN ROCK
15	215	LIMESTONE BEDROCK

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: WESLEY LINDSAY
Company: LINDSAY DRILLING CO INC
License No: WWC-38
Date Completed: 3/15/1979

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (12/10/2019 12:20:55 PM)

Site Name: LONG, TRACY
GWIC Id: 62787

Section 1: Well Owner(s)

1) LONG, TRACY (MAIL)
2525 HAUSEN BLVD
HELENA MT 59601 [05/06/1986]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	23	NE¼ SW¼ SW¼

County LEWIS AND CLARK **Geocode**

Latitude	Longitude	Geomethod	Datum
46.60466660755	-112.0802971675	TRS-SEC	NAD83

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition **Block** **Lot**

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Tuesday, May 6, 1986

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	18	9
18	273	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	9	6	0.25			STEEL
9	273	4		160.00		PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
253	273	4		6X1/4	PERFORATED CASING

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	18	BENTONITE	

Section 7: Well Test Data

Total Depth: 273
Static Water Level: 114
Water Temperature:

Air Test *

14 gpm with drill stem set at _ feet for 1 hours.
Time of recovery 1 hours.
Recovery water level 114 feet.
Pumping water level 251 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source
400HELN - HELENA DOLOMITE

From	To	Description
0	273	LIME

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: HAROLD REID
Company: H & L DRILLING INC
License No: WWC-334
Date Completed: 5/6/1986

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps

Site Name: CULLEN RON
GWIC Id: 237034

Section 1: Well Owner(s)

1) CULLEN, RON (WELL)
2020 HAUSER BLVD.
HELENA MT 59601 [06/22/2007]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	23	SW¼ SW¼

County LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.603087	-112.081489	TRS-TWN	NAD27

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition **Block** **Lot**

Section 3: Proposed Use of Water

IRRIGATION (1)

Section 4: Type of Work

Drilling Method:
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Friday, June 22, 2007

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	265	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-1.5	18.5	6	0.25	300.0	WELDED	A53B STEEL
15	265	5	0.24	300.0	THREADED	A53B STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
235	255	5	30	1/8" X 6"	TORCH OR PLASMA CUTS

Annular Space (Seal/Grout/Packer)

There are no annular space records assigned to this well.

Section 7: Well Test Data

Total Depth: 265
Static Water Level: 128
Water Temperature:

Air Test *

25 gpm with drill stem set at 275 feet for 1 hours.
Time of recovery 0.17 hours.
Recovery water level 128 feet.
Pumping water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassigned

From	To	Description
0	2	TOP SOIL
2	13	DECOMPOSED BLUE GRANIT
13	200	HARD BLUE GRANITE
200	265	HARD BLUE/GRAY GRANITE THAT IS HEAVILY FRACTURED

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: LYLE SMITH
Company: AAAA WATER WELL DRILLING INC
License No: WWC-637
Date Completed: 6/22/2007

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps

Site Name: AMUNDSON, ERIK
GWIC Id: 262554
DNRC Water Right: 30062766

Section 1: Well Owner(s)

1) AMUNDSON, ERIK (WELL)
3236 LEGRANDE CANYON BLVD
HELENA MT 59601 [03/19/2012]
2) FURLONG, TOM (MAIL)
1816 ARRASTRA GULCH RD.
HELENA MT 59601 [06/30/2011]
3) FURLONG, TOM (WELL)
3236 LEGRANDE CANNON BLVD.
HELENA MT 59601 [06/30/2011]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	22	SE¼ SE¼ SE¼

County LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.60248203565	-112.0852637345	TRS-SEC	NAD83

Ground Surface Altitude **Ground Surface Method** **Datum** **Date**

Addition	Block	Lot
	26	6, 7

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Thursday, June 30, 2011

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	461	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	38	6	0.25		WELDED	A53B STEEL
21	461	4			GLUED	PVC-SDR 17

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
421	461	4		.020	FACTORY SLOTTED

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	38	BENTONITE	

Section 7: Well Test Data

Total Depth: 461
Static Water Level: 105
Water Temperature:

Air Test *

10 gpm with drill stem set at 461 feet for 1 hours.
Time of recovery 0.88 hours.
Recovery water level 105 feet.
Pumping water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassigned

From	To	Description
0	1	TOPSOIL
1	37	FRACTURED LIMESTONE & TAN CLAY
37	461	HARD LIMESTONE

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: SHAWN TONEY
Company: H & L DRILLING INC
License No: WWC-447
Date Completed: 6/30/2011

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is compiled electronically from the contents of the Ground Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Go to GWIC website
Plot this site in State Library Digital Atlas
Plot this site in Google Maps
View scanned well log (12/16/2019 11:26:21 AM)

Site Name: GARZA, JUAN R
GWIC Id: 222764

Section 1: Well Owner(s)

1) GARZA, JUAN R (MAIL)
3275 LEGRANDE CANNON BLVD
HELENA MT 59601 [10/24/2005]

Section 2: Location

Township	Range	Section	Quarter Sections
10N	04W	27	NE¼ NE¼ NE¼

County
LEWIS AND CLARK

Geocode

Latitude	Longitude	Geomethod	Datum
46.60096208085	-112.0850900985	TRS-SEC	NAD83

Ground Surface Altitude	Ground Surface Method	Datum	Date

Addition	Block	Lot

Section 3: Proposed Use of Water

DOMESTIC (1)

Section 4: Type of Work

Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date

Date well completed: Monday, October 24, 2005

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	20	10
20	280	6

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	18	6	0.250		WELDED	STEEL
10	280	4		220.00	WELDED	PVC

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
180	200	4		.020	SCREEN-CONTINUOUS-PVC
260	280	4		.020	SCREEN-CONTINUOUS-PVC

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	18	BENTONITE	

Section 7: Well Test Data

Total Depth: 280
Static Water Level: 80
Water Temperature:

Air Test *

10 gpm with drill stem set at 280 feet for 1 hours.
Time of recovery 0.5 hours.
Recovery water level 80 feet.
Pumping water level _ feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log

Geologic Source
Unassigned

From	To	Description
0	1	TOPSOIL
1	280	GRAY LIMESTONE

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: SHAWN TONEY
Company: H & L DRILLING INC
License No: WWC-447
Date Completed: 10/24/2005

APPENDIX E

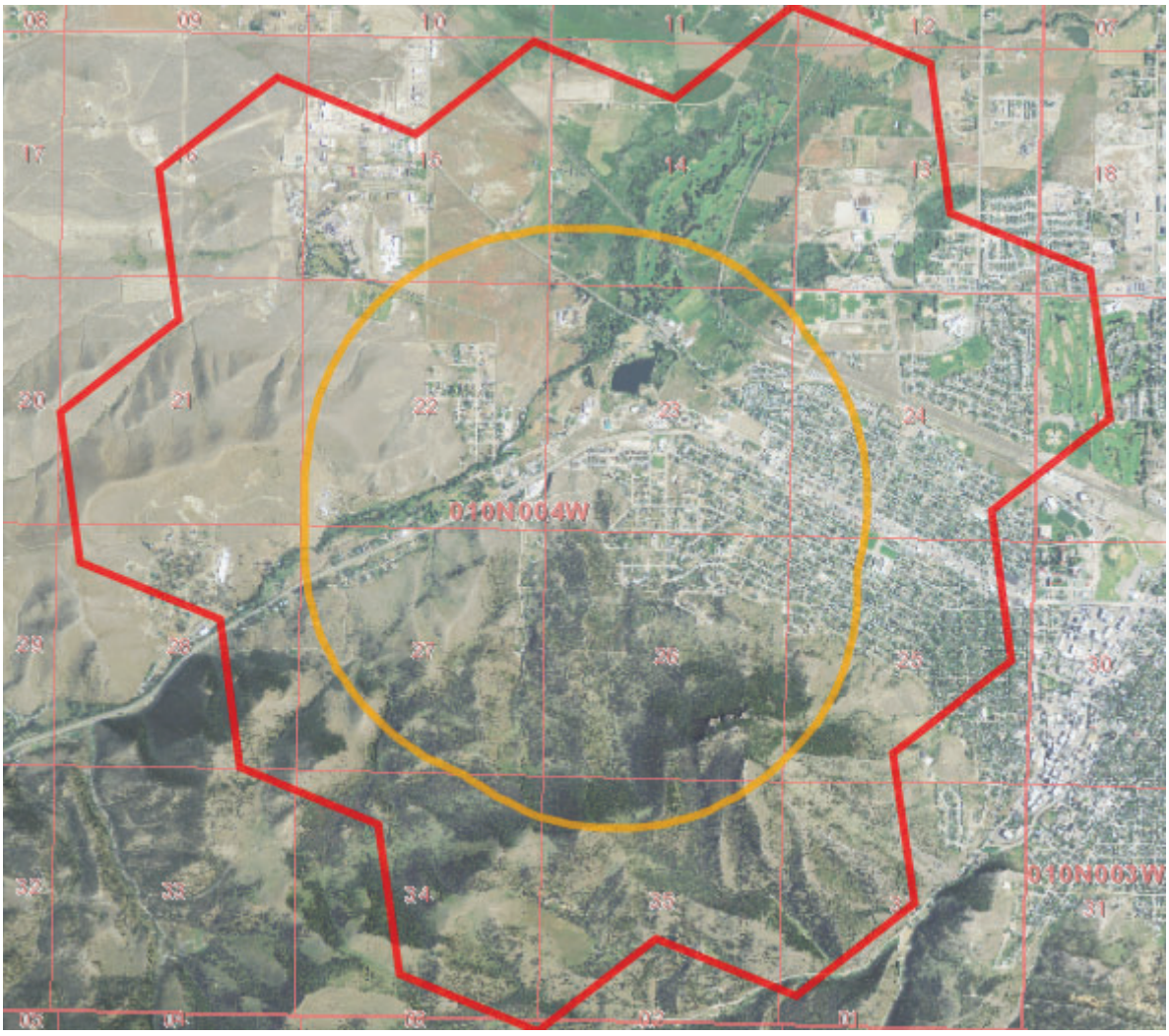
Montana Natural Heritage Program Data

Environmental Summary

MONTANA
Natural Heritage Program
1515 East 6th Avenue
Helena, MT 59620
(406) 444-5363
mtnhp.org

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Summarized by:
21prvt0036 WestSideSub
(Custom Area of Interest)



Suggested Citation
Montana Natural Heritage Program. Environmental Summary Report.
for Latitude 46.57058 to 46.63383 and Longitude -112.03614 to -112.12408. Retrieved on 9/1/2020.

The Montana Natural Heritage Program is a program of the Montana State Library's Natural Resource Information System. It is operated as a special program under the Office of the Vice President for Research and Creative Scholarship at the University of Montana, Missoula.

The Montana Natural Heritage Program is part of NatureServe – a network of over 80 similar programs in states, provinces and nations throughout the Western Hemisphere, working to provide comprehensive status and distribution information for species and ecosystems.

Montana Natural Heritage Program · Montana State Library · University of Montana · NatureServe

Table of Contents

Introduction to Environmental Summary Report

The Environmental Summary report for your area of interest consists of introductory and related materials in this PDF and an Excel workbook with worksheets summarizing information managed in the Montana Natural Heritage Program's (MTNHP) databases for: (1) species occurrences; (2) other observed species without Species Occurrences; (3) other species potentially present based on their range, presence of associated habitats, or predictive distribution model output if available; (4) structured surveys (organized efforts following a protocol capable of detecting one or more species); (5) land cover mapped as ecological systems; (6) wetland and riparian mapping; (7) land management categories; and (8) biological reports associated with plant and animal observations. In order to do this in a consistent manner across Montana and allow for rapid delivery of summaries, we have intersected this information with a uniform grid of hexagons that have been used for planning efforts across the western United States (e.g. Western Association of Fish and Wildlife Agencies - Crucial Habitat Assessment Tool). Each hexagon is one square mile in area and approximately one kilometer in length on each side. Summary information for each data layer is then stored with each hexagon and those summaries are added up to an overall summary for the report area you have requested. Users should be aware that summaries do not correspond to the exact boundaries of the polygon they have specified, but instead are a summary across all hexagons intersected by the polygon they specified.

In presenting this information, MTNHP is working towards assisting the user with rapidly assessing the known or potential species and biological communities, land management categories, and biological reports associated with the report area. We remind users that this information is likely incomplete and may be inaccurate as surveys to document species are lacking in many areas of the state, species' range polygons often include regions of unsuitable habitat, methods of predicting the presence of species or communities are constantly improving, and information is constantly being added and updated in our databases. **Field verification by professional biologists of the absence or presence of species and biological communities in a report area will always be an important obligation of users of our data. Users are encouraged to only use this environmental summary report as a starting point for more in depth analyses and are encouraged to contact state, federal, and tribal resource management agencies for additional data or management guidelines relevant to your efforts. Please see the Appendix for introductory materials to each section of the report, additional information resources, and a list of relevant agency contacts.**

MONTANA Natural Heritage Program

Aprogram of the **Montana State Library's Natural Resource Information System** operated by the **University of Montana**.

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
N Suitable (native range)	C Common	I Introduced	Count of obs with 'good precision' (<=1000m)
O Optimal Suitability	O Occasional	Y Year-round	+ indicates additional 'poor precision' obs (1001m-10,000m)
M Moderate Suitability		S Summer	
L Low Suitability		W Winter	
I Suitable (introduced range)		M Migratory	
		H Historic	

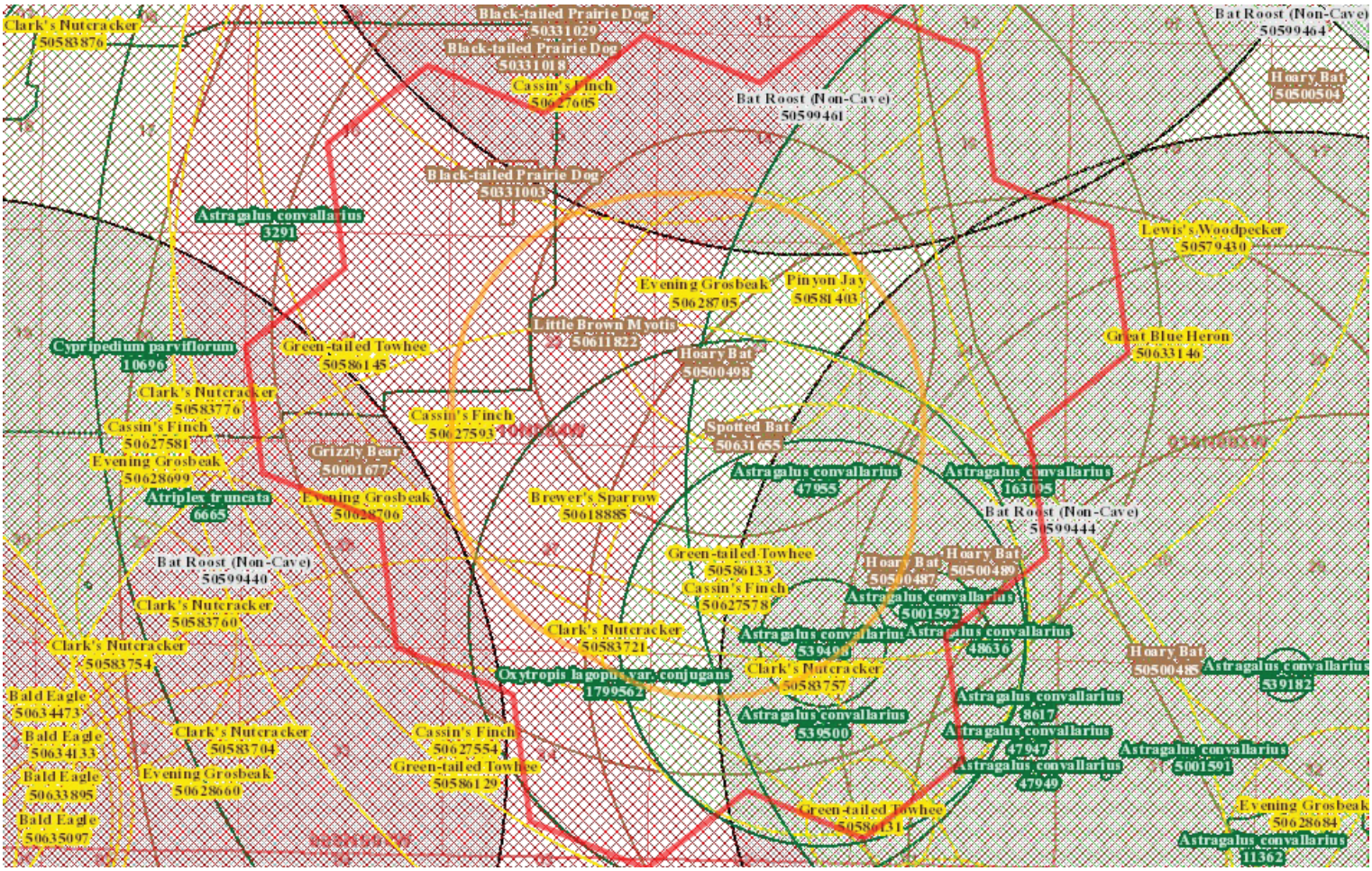
Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Native Species

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*

Filtered by:

MT_Status='Species of Concern', 'Special Status', 'Important Animal Habitat', 'Potential SOC'



Species Occurrences

	USFWS Sec7	# SO	# Obs	Predictive Model	Associated Habitat	Range
M - Little Brown Myotis *(Myotis lucifugus)* SOC		1	1			Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3** State: **S3** FWP SWAP: **SGCN3**

Delineation Criteria Confirmed area of occupancy based on the documented presence (mistnet captures, definitively identified acoustic recordings, or definitively identified roosting individuals) of adults or juveniles. Point observation location is buffered by a distance of 1,600 meters in order to encompass the greater than 1,500 meters foraging distance reported for the species in New Brunswick, Canada and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. When cave locations are involved, point observations are mapped in the center of a one-square mile hexagon to protect the exact location of the cave entrance as per the Federal Cave Resource Protection Act and associated regulations (U.S. Code Title 16 Chapter 63, Code of Federal Regulations Title 43 Subtitle A Part 37). The outer edges of the hexagon are then buffered by a distance of 1,600 meters and otherwise by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. All of the one-square mile hexagons intersecting this buffered area are presented as the Species Occurrence record. (Last Updated: Jan 03, 2020)

Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive) **Associated Habitats:** C 74% Common, O 26% Occasional

M - Hoary Bat *(Lasiurus cinereus)* SOC		4	1			S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3G4** State: **S3** BLM: **SENSITIVE** FWP SWAP: **SGCN3**

Delineation Criteria Confirmed area of occupancy based on the documented presence (mistnet captures, definitively identified acoustic recordings, and definitively identified roosting individuals) of adults or juveniles during the active season. Point observation location is buffered by a minimum distance of 3,500 meters in order to be conservative about encompassing the maximum reported foraging distance for the congeneric Lasiurus borealis and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: May 14, 2019)

Predictive Models: M 75% Moderate (inductive), L 25% Low (inductive) **Associated Habitats:** C 56% Common, O 35% Occasional

M - Spotted Bat *(Euderma maculatum)* SOC

1 S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3** USFS: **Sensitive - Known on Forests (BD, CG)** BLM: **SENSITIVE** FWP SWAP: **SGCN3, SGIN**

Delineation Criteria Confirmed area of occupancy based on the documented presence (mistnet captures, definitively identified acoustic recordings, and definitively identified roosting individuals) of adults or juveniles. Point observation location is buffered by a distance of 10,000 meters in order to encompass the reported maximum foraging distance for the species in British Columbia. If the locational uncertainty associated with the observation is greater than 10,000 meters, the observation is not valid for creation of a species occurrence. (Last Updated: Mar 24, 2020)

Predictive Models: M 42% Moderate (inductive), L 58% Low (inductive) **Associated Habitats:** C 42% Common, O 33% Occasional

B - Great Blue Heron *(Ardea herodias)* SOC

1 16 + Y S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3**

Delineation Criteria Confirmed nesting area buffered by a minimum distance of 6,500 meters in order to be conservative about encompassing the areas commonly used for foraging near the breeding colony and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Mar 24, 2020)

Predictive Models: M 42% Moderate (inductive), L 42% Low (inductive) **Associated Habitats:** C 2% Common

B - Pinyon Jay *(Gymnorhinus cyanocephalus)* SOC

1 1 + Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3** State: **S3** USFWS: **MBTA; BCC17** FWP SWAP: **SGCN3**

Delineation Criteria Observations with evidence of breeding activity buffered by a minimum distance of 4,500 meters in order to be conservative about encompassing the home ranges reported for flocks and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Sep 25, 2019)

Predictive Models: M 25% Moderate (inductive), L 67% Low (inductive) **Associated Habitats:** C 14% Common, O 18% Occasional

B - Green-tailed Towhee *(Pipilo chlorurus)* SOC

4 1 + S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**

Delineation Criteria Confirmed breeding area based on the presence of a nest, chicks, or territorial adults during the breeding season. Point observation location is buffered by a minimum distance of 125 meters in order to encompass the breeding home range size reported for the species and otherwise is buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Sep 25, 2019)

Predictive Models: M 17% Moderate (inductive), L 75% Low (inductive) **Associated Habitats:** C 45% Common, O 12% Occasional

B - Cassin's Finch *(Haemorhous cassinii)* SOC

5 6 + Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA; BCC10** FWP SWAP: **SGCN3** PIF: **3**

Delineation Criteria Observations with evidence of breeding activity buffered by a minimum distance of 300 meters in order to be conservative about encompassing the courtship and foraging distance from nesting areas and otherwise buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Jan 03, 2020)

Predictive Models: M 17% Moderate (inductive), L 67% Low (inductive) **Associated Habitats:** C 17% Common

B - Clark's Nutcracker *(Nucifraga columbiana)* SOC

4 2 + Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** USFS: **Species of Conservation Concern on Forests (FLAT)** FWP SWAP: **SGCN3** PIF: **3**

Delineation Criteria Observations with direct evidence of breeding activity or indirect evidence of breeding activity between early March and mid-July within forested habitats containing Whitebark Pine (Pinus albicaulis), Limber Pine (Pinus flexilis), or Ponderosa Pine (Pinus ponderosa). Observations are buffered by a minimum distance of 1,000 meters in order to encompass the spring/summer breeding territory size reported for the species or the locational uncertainty of the observation to a maximum distance of 10,000 meters. (Last Updated: Sep 25, 2019)

Predictive Models: M 17% Moderate (inductive), L 58% Low (inductive) **Associated Habitats:** C 18% Common

B - Evening Grosbeak *(Coccothraustes vespertinus)* SOC

4 5 + Y W M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3**

Delineation Criteria Confirmed breeding area based on the presence of a nest, chicks, or territorial adults during the breeding season. Point observation location is buffered by a minimum distance of 1,000 meters in order to encompass the maximum foraging distance from nests reported for the species and otherwise is buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Jan 03, 2020)

Predictive Models: M 8% Moderate (inductive), L 83% Low (inductive) **Associated Habitats:** C 38% Common, O 1% Occasional

M - Grizzly Bear *(Ursus arctos)* SOC

7 1 Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S2S3** USFWS: **PS: LT; XN** USFS: **Threatened on Forests (BD, CG, HLC, KOOT, LOLO)** BLM: **THREATENED** FWP SWAP: **SGCN2-3**

Delineation Criteria Species Occurrence polygons represent the greatest extent of 1) Recovery Zone Boundaries, 2) Demographic Monitoring Areas, and 3) Current Known Distribution within Montana as defined in the 2018 Grizzly Bear Recovery Program annual report. This includes the Bitterroot Recovery Zone, which is not currently occupied by a resident population of Grizzly Bears. (Last Updated: Jul 05, 2019)

Predictive Models: L 100% Low (inductive) **Associated Habitats:** C 46% Common, O 10% Occasional

B - Brewer's Sparrow *(Spizella breweri)* SOC

1 1 + S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC10; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**

Delineation Criteria Confirmed breeding area based on the presence of a nest, chicks, or territorial adults during the breeding season. Point observation location is buffered by a minimum distance of 100 meters in order to encompass the maximum territory size reported for the species and otherwise is buffered by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Jan 03, 2020)

Predictive Models: L 83% Low (inductive) **Associated Habitats:** C 10% Common

V - Atriplex truncata *(Wedge-leaf Saltbush)* SOC

1 + Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** MNPS: **3**

Delineation Criteria Individual occurrences are generally based upon a discretely mapped area provided by an observer and are not separated by any pre-defined distance. Individual clusters of plants mapped at fine spatial scales (separated by less than approximately 25-50 meters) may be grouped together into one occurrence if they are not separated by distinct areas of habitat or terrain features. Point observations are buffered to encompass any locational uncertainty associated with the observation. (Last Updated: Jun 05, 2018)

Predictive Models: L 67% Low (inductive) **Associated Habitats:** C 2% Common

V - Astragalus convallarius *(Lesser Rushy Milkvetch)* SOC | 6 | 3 + | Not Available | Y

View in Field Guide View Associated Habitat View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** MNPS: **2**

Delineation Criteria Individual occurrences are generally based upon a discretely mapped area provided by an observer and are not separated by any pre-defined distance. Individual clusters of plants mapped at fine spatial scales (separated by less than approximately 25-50 meters) may be grouped together into one occurrence if they are not separated by distinct areas of habitat or terrain features. Point observations are buffered to encompass any locational uncertainty associated with the observation. (Last Updated: Jun 21, 2019)

Associated Habitats: C 47% Common, O 3% Occasional

M - Black-tailed Prairie Dog *(Cynomys ludovicianus)* SOC | 1 | 3 + | Not Available | Y

View in Field Guide View Associated Habitat View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3** USFS: **Sensitive - Known on Forests (CG)** BLM: **SENSITIVE** FWP SWAP: **SGCN3**

Delineation Criteria Areas with recent evidence of activity (i.e. burrow entrances) visible on the 2005, 2009, 2013, or 2015 National Agricultural Imagery Program (NAIP) aerial color photographic imagery that are within a distance of 200 meters of definitive observations buffered by the locational uncertainty of less than or equal to 1,000 meters. (Last Updated: Jul 03, 2019)

Associated Habitats: C 3% Common, O 59% Occasional

V - Cypripedium parviflorum *(Small Yellow Lady's-slipper)* PSOC | 1 | + | Not Available | Not Assigned | Y

View in Field Guide View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S3S4** USFS: **Sensitive - Known on Forests (CG, HLC, KOOT, LOLO)** **Sensitive - Suspected on Forests (BRT)** MNPS: **2**

V - Oxytropis lagopus var. conjugans *(Hare's-foot Locoweed)* PSOC | 1 | Not Available | Not Assigned | Y

View in Field Guide View Range Maps

Potential Species of Concern - Native Species Global: **G4G5T3T4** State: **S3S4** MNPS: **3**

Delineation Criteria Individual occurrences are generally based upon a discretely mapped area provided by an observer and are not separated by any pre-defined distance. Individual clusters of plants mapped at fine spatial scales (separated by less than approximately 25-50 meters) may be grouped together into one occurrence if they are not separated by distinct areas of habitat or terrain features. Point observations are buffered to encompass any locational uncertainty associated with the observation. (Last Updated: Feb 25, 2020)

O - Bat Roost (Non-Cave) *(Bat Roost (Non-Cave))* IAH | 3 | Not Available | Not Assigned

View in Field Guide

Important Animal Habitat - Native Species Global: **GNR** State: **SNR**

Delineation Criteria Confirmed area of occupancy based on the documented presence of adults or juveniles of any bat species at non-cave natural roost sites (e.g. rock outcrops, trees), below ground human created roost sites (e.g. mines), and above ground human created roost sites (e.g., bridges, buildings). Point observation locations are buffered by a distance of 4,500 meters in order to encompass the 95% confidence interval for nightly foraging distance reported for Townsendâ€™s Big-eared Bat (a resident Montana bat Species of Concern) and otherwise by the locational uncertainty associated with the observation up to a maximum distance of 10,000 meters. (Last Updated: Oct 22, 2019)

MONTANA Natural Heritage Program

A program of the **Montana State Library's Natural Resource Information System** operated by the **University of Montana**.

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
N Suitable (native range)	C Common	I Introduced	Count of obs with 'good precision' (<=1000m)
O Optimal Suitability	O Occasional	Y Year-round	+ indicates additional 'poor precision' obs (1001m-10,000m)
M Moderate Suitability		S Summer	
L Low Suitability		W Winter	
I Suitable (introduced range)		M Migratory	
		H Historic	

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Native Species

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*
Filtered by:
MT_Status='Species of Concern', 'Special Status', 'Important Animal Habitat', 'Potential SOC'

Other Observed Species

	USFWS Sec7	# Obs	Predictive Model	Associated Habitat	Range
B - Bald Eagle *(Haliaeetus leucocephalus)* SSS		22 +			Y
B - Golden Eagle *(Aquila chrysaetos)* SOC		3 +			Y
B - Hooded Merganser *(Lophodytes cucullatus)* PSOC		7			Y M
B - Northern Goshawk *(Accipiter gentilis)* SOC		+			Y W M
B - Bobolink *(Dolichonyx oryzivorus)* SOC		+			S M
B - Lewis's Woodpecker *(Melanerpes lewis)* SOC		2			S M
B - Rufous Hummingbird *(Selasphorus rufus)* PSOC		2 +			S M
B - Common Poorwill *(Phalaenoptilus nuttallii)* PSOC		1			S M
B - Long-billed Curlew *(Numenius americanus)* SOC		+			S M
M - Canada Lynx *(Lynx canadensis)* SOC	7	1			Y
B - Short-eared Owl *(Asio flammeus)* PSOC		+			Y

B - Bald Eagle *(Haliaeetus leucocephalus)* SSS

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Special Status Species - Native Species Global: **G5** State: **S4** USFWS: **DM; BGEPA; MBTA; BCC10; BCC11; BCC17**
USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)** BLM: **SENSITIVE** PIF: **2**
Predictive Models: M 42% Moderate (inductive), L 50% Low (inductive) **Associated Habitats:** C 15% Common, O 28% Occasional

B - Golden Eagle *(Aquila chrysaetos)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **BGEPA; MBTA; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3**
Predictive Models: M 33% Moderate (inductive), L 67% Low (inductive) **Associated Habitats:** C 54% Common, O 5% Occasional

B - Hooded Merganser *(Lophodytes cucullatus)* PSOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S4** USFWS: **MBTA** FWP SWAP: **SGIN** PIF: **2**
Predictive Models: M 33% Moderate (inductive), L 8% Low (inductive) **Associated Habitats:** C 2% Common

B - Northern Goshawk *(Accipiter gentilis)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: M 17% Moderate (inductive), L 42% Low (inductive) **Associated Habitats:** C 14% Common, O 2% Occasional

B - Bobolink *(Dolichonyx oryzivorus)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**
Predictive Models: M 17% Moderate (inductive), L 33% Low (inductive) **Associated Habitats:** C 51% Common, O 1% Occasional

B - Lewis's Woodpecker *(Melanerpes lewis)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S2B** USFWS: **MBTA; BCC10; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN2** PIF: **2**
Predictive Models: L 100% Low (inductive) **Associated Habitats:** C 15% Common, O 2% Occasional

B - Rufous Hummingbird *(Selasphorus rufus)* PSOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S4B** USFWS: **MBTA** PIF: **3**
Predictive Models: L 92% Low (inductive) **Associated Habitats:** C 65% Common, O 9% Occasional

B - Common Poorwill *(Phalaenoptilus nuttallii)* PSOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S4B** USFWS: **MBTA** FWP SWAP: **SGIN** PIF: **3**
Predictive Models: L 75% Low (inductive) **Associated Habitats:** C 50% Common, O 24% Occasional

B - Long-billed Curlew *(Numenius americanus)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC10; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 67% Low (inductive) **Associated Habitats:** C 28% Common, O 11% Occasional

M - Canada Lynx *(Lynx canadensis)* SOC

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **LT; CH**
USFS: **Threatened on Forests (BD, BRT)**
Threatened, Critical Habitat on Forests (CG, HLC, KOOT, LOLO)
BLM: **THREATENED** FWP SWAP: **SGCN3**
Predictive Models: L 67% Low (inductive) **Associated Habitats:** C 4% Common, O 14% Occasional

B - Short-eared Owl *(Asio flammeus)* PSOC

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S4** USFWS: **MBTA; BCC11; BCC17** PIF: **3**
Predictive Models: L 50% Low (inductive) **Associated Habitats:** C 46% Common, O 22% Occasional

B - Barrow's Goldeneye *(Bucephala islandica)* PSOC — 8 — Y WM

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S4** USFWS: **MBTA** FWP SWAP: **SGIN** PIF: **2**
Predictive Models: L 50% Low (inductive) **Associated Habitats:** C 2% Common

B - Brown Creeper *(Certhia americana)* SOC — + — Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **1**
Predictive Models: L 33% Low (inductive) **Associated Habitats:** C 16% Common

B - Pileated Woodpecker *(Dryocopus pileatus)* SOC — 4 + — Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 33% Low (inductive) **Associated Habitats:** C 15% Common, O 1% Occasional

B - Flammulated Owl *(Psiloscops flammeolus)* SOC — + — S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC10**
USFS: **Sensitive - Known on Forests (BD, BRT, HLC, KOOT, LOLO)**
Sensitive - Suspected on Forests (CG)
Species of Conservation Concern on Forests (FLAT) BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **1**
Predictive Models: L 33% Low (inductive) **Associated Habitats:** C 14% Common, O 2% Occasional

B - Peregrine Falcon *(Falco peregrinus)* SOC — 1 + — Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3** USFWS: **DM; MBTA; BCC10; BCC11; BCC17**
USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 25% Low (inductive) **Associated Habitats:** C 42% Common, O 9% Occasional

B - American Bittern *(Botaurus lentiginosus)* SOC — 1 — S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **3**
Predictive Models: L 25% Low (inductive) **Associated Habitats:** C 2% Common

B - Black Tern *(Chlidonias niger)* SOC — 1 — S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4G5** State: **S3B** USFWS: **MBTA; BCC11** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 17% Low (inductive) **Associated Habitats:** C 1% Common, O 1% Occasional

B - Black-backed Woodpecker *(Picoides arcticus)* SOC — 1 + — Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA**
USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **1**
Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 16% Common

B - Common Tern *(Sterna hirundo)* SOC — 2 — S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 2% Common

B - Black-necked Stilt *(Himantopus mexicanus)* SOC — 1 — S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**
Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 1% Common, O 2% Occasional

B - Varied Thrush *(Ixoreus naevius)* SOC — 1 — Not Available — S M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**
Associated Habitats: C 16% Common, O 1% Occasional

B - White-faced Ibis *(Plegadis chihi)* SOC — + — Not Available — S M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Associated Habitats: C 2% Common

B - Black-crowned Night-Heron *(Nycticorax nycticorax)* SOC — 2 — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**
Associated Habitats: C 2% Common

B - Red-headed Woodpecker *(Melanerpes erythrocephalus)* SOC — + — Not Available

View in Field Guide View Associated Habitat
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Associated Habitats: C 1% Common, O 20% Occasional

B - Franklin's Gull *(Leucophaeus pipixcan)* SOC — 5 + — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Associated Habitats: C 1% Common, O 7% Occasional

B - Caspian Tern *(Hydroprogne caspia)* SOC — 13 — Not Available — S M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S2B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN2** PIF: **2**
Associated Habitats: C 1% Common, O 2% Occasional

B - Forster's Tern *(Sterna forsteri)* SOC — 1 — Not Available — S M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Associated Habitats: C 1% Common, O 2% Occasional

B - Gray-crowned Rosy-Finch *(Leucosticte tephrocotis)* SOC — + — Not Available — Y WM

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S2B,S5N** USFWS: **MBTA** FWP SWAP: **SGCN2, SGIN**
Associated Habitats: C 1% Common

B - American White Pelican *(Pelecanus erythrorhynchos)* SOC — 5 + — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**
Associated Habitats: C 1% Common

B - Common Loon *(Gavia immer)* SOC — 14 + — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** USFS: **Sensitive - Known on Forests (KOOT, LOLO)**
FWP SWAP: **SGCN3** PIF: **1**
Associated Habitats: C 1% Common

B - Horned Grebe *(Podiceps auritus)* SOC — 5 — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Associated Habitats: C 1% Common

F - Westslope Cutthroat Trout *(Oncorhynchus clarkii lewisi)* SOC — 1 + — Not Available — Not Assigned — Y

View in Field Guide View Range Maps
Species of Concern - Native Species Global: **G5T4** State: **S2** USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)**
BLM: **SENSITIVE** FWP SWAP: **SGCN2**

Legend

Model Icons	Habitat Icons	Range Icons	Num Obs
N Suitable (native range)	C Common	I Introduced	Count of obs with 'good precision' (<=1000m)
O Optimal Suitability	O Occasional	Y Year-round	+ indicates additional 'poor precision' obs (1001m-10,000m)
M Moderate Suitability		S Summer	
L Low Suitability		W Winter	
I Suitable (introduced range)		M Migratory	
		H Historic	

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Native Species

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*
Filtered by:
MT_Status='Species of Concern', 'Special Status', 'Important Animal Habitat', 'Potential SOC'

Other Potential Species

	USFWS Sec7	Predictive Model	Associated Habitat	Range
V - Eleocharis rostellata *(Beaked Spikerush)* SOC			Not Assigned	Y

View in Field Guide | View Predicted Models | View Range Maps
USFS: **Sensitive - Known on Forests (BD, CG, HLC)**
Species of Concern - Native Species Global: **G5** State: **S3** **Species of Conservation Concern on Forests (FLAT)** MNPS: **3**
Predictive Models: M 92% Moderate (inductive), L 8% Low (inductive)

M - Porcupine *(Erethizon dorsatum)* PSOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S4** FWP SWAP: **SGIN**
Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive) **Associated Habitats:** C 74% Common

M - Western Spotted Skunk *(Spilogale gracilis)* PSOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **SNR** FWP SWAP: **SGIN**
Predictive Models: M 83% Moderate (inductive), L 8% Low (inductive) **Associated Habitats:** C 53% Common, O 18% Occasional

M - Silver-haired Bat *(Lasionycteris noctivagans)* PSOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Potential Species of Concern - Native Species Global: **G3G4** State: **S4**
Predictive Models: M 67% Moderate (inductive), L 33% Low (inductive) **Associated Habitats:** C 56% Common, O 31% Occasional

M - Fringed Myotis *(Myotis thysanodes)* SOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3** BLM: **SENSITIVE** FWP SWAP: **SGCN3**
Predictive Models: M 50% Moderate (inductive), L 50% Low (inductive) **Associated Habitats:** C 56% Common, O 30% Occasional

M - Townsend's Big-eared Bat *(Corynorhinus townsendii)* SOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3** USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)**
BLM: **SENSITIVE** FWP SWAP: **SGCN3**
Predictive Models: M 50% Moderate (inductive), L 50% Low (inductive) **Associated Habitats:** C 56% Common, O 18% Occasional

M - Pygmy Shrew *(Sorex hoyi)* SOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** FWP SWAP: **SGCN3**
Predictive Models: M 50% Moderate (inductive), L 50% Low (inductive) **Associated Habitats:** C 34% Common

B - Veery *(Catharus fuscescens)* SOC				S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: M 50% Moderate (inductive), L 50% Low (inductive) **Associated Habitats:** C 2% Common, O 1% Occasional

B - Western Screech-Owl *(Megascops kennicottii)* PSOC				Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Potential Species of Concern - Native Species Global: **G4G5** State: **S3S4** USFWS: **MBTA** FWP SWAP: **SGIN** PIF: **3**
Predictive Models: M 42% Moderate (inductive), L 58% Low (inductive) **Associated Habitats:** C 41% Common

B - Yellow-billed Cuckoo *(Coccyzus americanus)* SOC				S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **PS: LT; MBTA; BCC10** USFS: **Threatened on Forests (BRT, LOLO)**
BLM: **THREATENED** FWP SWAP: **SGCN3, SGIN** PIF: **2**
Predictive Models: M 33% Moderate (inductive), L 42% Low (inductive) **Associated Habitats:** C 2% Common

M - Water Vole *(Microtus richardsoni)* PSOC				Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S4**
Predictive Models: M 33% Moderate (inductive), L 25% Low (inductive) **Associated Habitats:** C 2% Common, O 1% Occasional

V - Utricularia intermedia *(Flatleaf Bladderwort)* SOC Not Assigned Y

View in Field Guide View Predicted Models View Range Maps
Species of Concern - Native Species Global: **G5** State: **S2** USFS: **Sensitive - Known on Forests (KOOT)** MNPS: **3**
Predictive Models: M 33% Moderate (inductive), L 25% Low (inductive)

M - Preble's Shrew *(Sorex preblei)* SOC Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3** FWP SWAP: **SGCN3**
Predictive Models: M 25% Moderate (inductive), L 25% Low (inductive) **Associated Habitats:** C 68% Common, O 1% Occasional

M - Dwarf Shrew *(Sorex nanus)* SOC Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S2S3** FWP SWAP: **SGCN2-3**
Predictive Models: M 17% Moderate (inductive), L 75% Low (inductive) **Associated Habitats:** C 10% Common, O 40% Occasional

V - Adoxa moschatellina *(Musk-root)* SOC Not Assigned Y

View in Field Guide View Predicted Models View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** USFS: **Sensitive - Known on Forests (BD, CG, LOLO)**
Predictive Models: M 17% Moderate (inductive), L 50% Low (inductive)

V - Carex crawei *(Crawe's Sedge)* SOC Not Assigned Y

View in Field Guide View Predicted Models View Range Maps
Species of Concern - Native Species Global: **G5** State: **S2S3** MNPS: **2**
Predictive Models: M 8% Moderate (inductive), L 92% Low (inductive)

B - Sage Thrasher *(Oreoscoptes montanus)* SOC S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC10; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **3**
Predictive Models: M 8% Moderate (inductive), L 67% Low (inductive) **Associated Habitats:** C 10% Common

A - Western Toad *(Anaxyrus boreas)* SOC Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S2** USFS: **Sensitive - Known on Forests (BD, BRT, CG, HLC, KOOT, LOLO)**
BLM: **SENSITIVE** FWP SWAP: **SGCN2**
Predictive Models: L 92% Low (inductive) **Associated Habitats:** C 25% Common, O 47% Occasional

B - Ferruginous Hawk *(Buteo regalis)* SOC S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC10; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 67% Low (inductive) **Associated Habitats:** C 39% Common, O 1% Occasional

R - Greater Short-horned Lizard *(Phrynosoma hernandesi)* SOC Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
USFS: **Sensitive - Known on Forests (CG)**
Species of Concern - Native Species Global: **G5** State: **S3** **Sensitive - Suspected on Forests (HLC)** BLM: **SENSITIVE**
FWP SWAP: **SGCN3, SGIN**
Predictive Models: L 58% Low (inductive) **Associated Habitats:** C 31% Common, O 7% Occasional

B - Sprague's Pipit *(Anthus spragueii)* SOC 7 S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G3G4** State: **S3B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **1**
Predictive Models: L 58% Low (inductive) **Associated Habitats:** O 28% Occasional

B - Ovenbird *(Seiurus aurocapilla)* PSOC S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S4B** USFWS: **MBTA** PIF: **3**
Predictive Models: L 58% Low (inductive) **Associated Habitats:** C 4% Common

B - Loggerhead Shrike *(Lanius ludovicianus)* SOC S M

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC10; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**
Predictive Models: L 50% Low (inductive) **Associated Habitats:** C 56% Common, O 6% Occasional

B - Great Gray Owl *(Strix nebulosa)* SOC Y

View in Field Guide View Predicted Models View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** BLM: **SENSITIVE** FWP SWAP: **SGCN3, SGIN** PIF: **3**
Predictive Models: L 50% Low (inductive) **Associated Habitats:** C 5% Common, O 12% Occasional

B - Burrowing Owl *(Athene cunicularia)* SOC S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC17** USFS: **Sensitive - Known on Forests (CG)** **Sensitive - Suspected on Forests (HLC)** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **1**

Predictive Models: L 42% Low (inductive) **Associated Habitats:** C 10% Common, O 38% Occasional

B - McCown's Longspur *(Rhynchophanes mccownii)* SOC — S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3B** USFWS: **MBTA; BCC10; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **2**

Predictive Models: L 33% Low (inductive) **Associated Habitats:** O 52% Occasional

V - Elodea bifoliata *(Long-sheath Waterweed)* SOC — Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4G5** State: **S2?** MNPS: **3**

Predictive Models: L 33% Low (inductive) **Associated Habitats:** C 1% Common

V - Epipactis gigantea *(Giant Helleborine)* SOC — Not Assigned — Y

View in Field Guide | View Predicted Models | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S2S3** USFS: **Sensitive - Known on Forests (BD, HLC, LOLO)** **Sensitive - Suspected on Forests (BRT, CG, KOOT)** **Species of Conservation Concern on Forests (FLAT)** MNPS: **2**

Predictive Models: L 33% Low (inductive)

B - Black-billed Cuckoo *(Coccyzus erythropthalmus)* SOC — S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN3, SGIN** PIF: **2**

Predictive Models: L 25% Low (inductive) **Associated Habitats:** C 14% Common

V - Primula incana *(Mealy Primrose)* SOC — Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFS: **Sensitive - Known on Forests (BD)** **Sensitive - Historically known, not recently documented on Forests (CG)** MNPS: **2**

Predictive Models: L 25% Low (inductive) **Associated Habitats:** C 1% Common

B - Meesia triquetra *(Meesia Moss)* SOC — Not Assigned — Y

View in Field Guide | View Predicted Models | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2** USFS: **Sensitive - Known on Forests (BRT, CG, KOOT)** **Sensitive - Suspected on Forests (LOLO)** **Species of Conservation Concern on Forests (FLAT)**

Predictive Models: L 25% Low (inductive)

V - Trichophorum cespitosum *(Tufted Club-rush)* SOC — Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2** USFS: **Sensitive - Known on Forests (BD, HLC, KOOT)** **Species of Conservation Concern on Forests (FLAT)** MNPS: **3**

Predictive Models: L 17% Low (inductive) **Associated Habitats:** C 1% Common

B - Greater Sage-Grouse *(Centrocercus urophasianus)* SOC — Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3G4** State: **S2** USFS: **Sensitive - Known on Forests (BD)** **Sensitive - Suspected on Forests (CG, HLC)** BLM: **SENSITIVE** FWP SWAP: **SGCN2** PIF: **1**

Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 10% Common

B - Mountain Plover *(Charadrius montanus)* SOC — S M

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3** State: **S2B** USFWS: **MBTA; BCC11; BCC17** BLM: **SENSITIVE** FWP SWAP: **SGCN2** PIF: **1**

Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 3% Common, O 28% Occasional

M - Wolverine *(Gulo gulo)* SOC — 7 — Y

View in Field Guide | View Predicted Models | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3** USFWS: **P** USFS: **Proposed on Forests (BD, BRT, CG, HLC, KOOT, LOLO)** BLM: **SENSITIVE** FWP SWAP: **SGCN3**

Predictive Models: L 8% Low (inductive) **Associated Habitats:** C 3% Common, O 14% Occasional

M - Bison *(Bos bison)* SOC — Not Available — H

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S2** FWP SWAP: **SGCN2**

Associated Habitats: C 52% Common, O 1% Occasional

B - Sharp-tailed Grouse *(Tympanuchus phasianellus)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **SX,S4** FWP SWAP: **SGCN1** PIF: **2**

Associated Habitats: C 50% Common, O 7% Occasional

V - Erigeron linearis *(Linear-leaf Fleabane)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2** MNPS: **2**

Associated Habitats: C 35% Common

V - Eriogonum caespitosum *(Mat Buckwheat)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2S3** MNPS: **3**

Associated Habitats: C 35% Common

V - Polygonum austiniae *(Austin's Knotweed)* PSOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5T4** State: **S3S4** USFS: **Sensitive - Known on Forests (BD, HLC)** **Sensitive - Suspected on Forests (CG)** MNPS: **2**

Associated Habitats: C 28% Common

I - Polygonia progne *(Gray Comma)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2**

Associated Habitats: C 16% Common

B - Pacific Wren *(Troglodytes pacificus)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **2**

Associated Habitats: C 14% Common, O 2% Occasional

B - Northern Hawk Owl *(Surnia ulula)* SOC — Not Available — W M

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** USFWS: **MBTA** FWP SWAP: **SGCN3, SGIN**

Associated Habitats: C 4% Common, O 1% Occasional

B - Boreal Owl *(Aegolius funereus)* PSOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S3S4** USFWS: **MBTA** FWP SWAP: **SGIN** PIF: **3**

Associated Habitats: C 3% Common, O 2% Occasional

M - Black-footed Ferret *(Mustela nigripes)* SOC — Not Available — H

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G1** State: **S1** USFWS: **LE; XN** USFS: **Endangered, Experimental Nonessential on Forests (CG)** BLM: **ENDANGERED** FWP SWAP: **SGCN1**

Associated Habitats: C 3% Common

I - Euphydryas gillettii *(Gillette's Checkerspot)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3** State: **S2**

Associated Habitats: C 2% Common, O 29% Occasional

I - Colias gigantea *(Giant Sulphur)* PSOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S3**

Associated Habitats: C 2% Common, O 2% Occasional

B - Harlequin Duck *(Histrionicus histrionicus)* SOC — Not Available — S M

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S2B** USFWS: **MBTA** USFS: **Sensitive - Known on Forests (BD, CG, HLC, KOOT, LOLO)** FWP SWAP: **SGCN2** PIF: **1**

Associated Habitats: C 2% Common, O 1% Occasional

I - Argia alberta *(Paiute Dancer)* PSOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G4** State: **S2S3**

Associated Habitats: O 2% Occasional

V - Senecio eremophilus *(Desert Groundsel)* SOC — Not Available — Y

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S1S2**

Associated Habitats: C 2% Common

B - Tennessee Warbler *(Leiothlypis peregrina)* PSOC — Not Available — M

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S3S4B** USFWS: **MBTA**

Associated Habitats: C 2% Common

B - Trumpeter Swan *(Cygnus buccinator)* SOC — Not Available — M

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G4** State: **S3** USFWS: **MBTA** USFS: **Sensitive - Known on Forests (BD, CG)** BLM: **SENSITIVE** FWP SWAP: **SGCN3** PIF: **1**
Associated Habitats: C 2% Common

I - Argia vivida *(Vivid Dancer)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S3S5**
Associated Habitats: C 1% Common, O 2% Occasional

I - Libellula saturata *(Flame Skimmer)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S4**
Associated Habitats: C 1% Common, O 2% Occasional

I - Somatochlora minor *(Ocellated Emerald)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S4**
Associated Habitats: C 1% Common, O 2% Occasional

I - Aeshna juncea *(Sedge Darner)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S3S5**
Associated Habitats: C 1% Common, O 1% Occasional

I - Aeshna sitchensis *(Zigzag Darner)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S3**
Associated Habitats: C 1% Common, O 1% Occasional

I - Enallagma clausum *(Alkali Bluet)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S4**
Associated Habitats: C 1% Common, O 1% Occasional

I - Leucorrhinia borealis *(Boreal Whiteface)* **SOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Species of Concern - Native Species Global: **G5** State: **S1**
Associated Habitats: C 1% Common, O 1% Occasional

I - Rhionaeschna californica *(California Darner)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S3S5**
Associated Habitats: C 1% Common, O 1% Occasional

I - Somatochlora hudsonica *(Hudsonian Emerald)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S4**
Associated Habitats: C 1% Common, O 1% Occasional

I - Sympetrum madidum *(Red-veined Meadowhawk)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S3**
Associated Habitats: C 1% Common, O 1% Occasional

I - Aeshna constricta *(Lance-tipped Darner)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S1S3**
Associated Habitats: C 1% Common

I - Aeshna eremita *(Lake Darner)* **PSOC** Not Available Y S W

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S3S4**
Associated Habitats: C 1% Common

I - Argia emma *(Emma's Dancer)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S3S5**
Associated Habitats: C 1% Common

I - Rhionaeschna multicolor *(Blue-eyed Darner)* **PSOC** Not Available Y

View in Field Guide View Associated Habitat View Range Maps
Potential Species of Concern - Native Species Global: **G5** State: **S2S4**
Associated Habitats: C 1% Common

I - Somatochlora semicircularis *(Mountain Emerald)* PSOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Potential Species of Concern - Native Species Global: **G5** State: **S3S5**

Associated Habitats: 1% Common

V - Botrychium ascendens *(Upward-lobed Moonwort)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3** State: **S3** USFS: **Sensitive - Known on Forests (HLC, KOOT)** MNPS: **2**

Associated Habitats: 1% Common

V - Botrychium crenulatum *(Wavy Moonwort)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3** USFS: **Sensitive - Known on Forests (BD, HLC, KOOT, LOLO)** MNPS: **2**

Associated Habitats: 1% Common

V - Botrychium paradoxum *(Peculiar Moonwort)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3G4** State: **S3** USFS: **Sensitive - Known on Forests (BD, HLC, KOOT)** **Sensitive - Suspected on Forests (LOLO)** **Species of Conservation Concern on Forests (FLAT)** BLM: **SENSITIVE** MNPS: **2**

Associated Habitats: 1% Common

V - Botrychium simplex *(Least Moonwort)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2**

Associated Habitats: 1% Common

V - Braya humilis *(Low Braya)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S2** MNPS: **2**

Associated Habitats: 1% Common

V - Kobresia simpliciuscula *(Simple Kobresia)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** MNPS: **3**

Associated Habitats: 1% Common

V - Pinus albicaulis *(Whitebark Pine)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G3G4** State: **S3** USFWS: **C** USFS: **Candidate on Forests (BD, BRT, CG, HLC, KOOT, LOLO)** BLM: **SENSITIVE**

Associated Habitats: 1% Common

V - Potentilla plattensis *(Platte Cinquefoil)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G4** State: **S3** MNPS: **4**

Associated Habitats: 1% Common

V - Ranunculus pedatifidus *(Northern Buttercup)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3** MNPS: **2**

Associated Habitats: 1% Common

B - Clark's Grebe *(Aechmophorus clarkii)* SOC — Not Available

View in Field Guide | View Associated Habitat | View Range Maps

Species of Concern - Native Species Global: **G5** State: **S3B** USFWS: **MBTA** FWP SWAP: **SGCN3** PIF: **3**

Associated Habitats: 1% Common

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Structured Surveys

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*

The Montana Natural Heritage Program (MTNHP) records information on the locations where more than 80 different types of well-defined repeatable survey protocols capable of detecting an animal species or suite of animal species have been conducted by state, federal, tribal, university, or private consulting biologists. Examples of structured survey protocols tracked by MTNHP include: visual encounter and dip net surveys for pond breeding amphibians, point counts for birds, call playback surveys for selected bird species, visual surveys of migrating raptors, kick net stream reach surveys for macroinvertebrates, visual encounter cover object surveys for terrestrial mollusks, bat acoustic or mist net surveys, pitfall and/or snap trap surveys for small terrestrial mammals, track or camera trap surveys for large mammals, and trap surveys for turtles. Whenever possible, photographs of survey locations are stored in MTNHP databases.

MTNHP does not typically manage information on structured surveys for plants; surveys for invasive species may be a future exception.

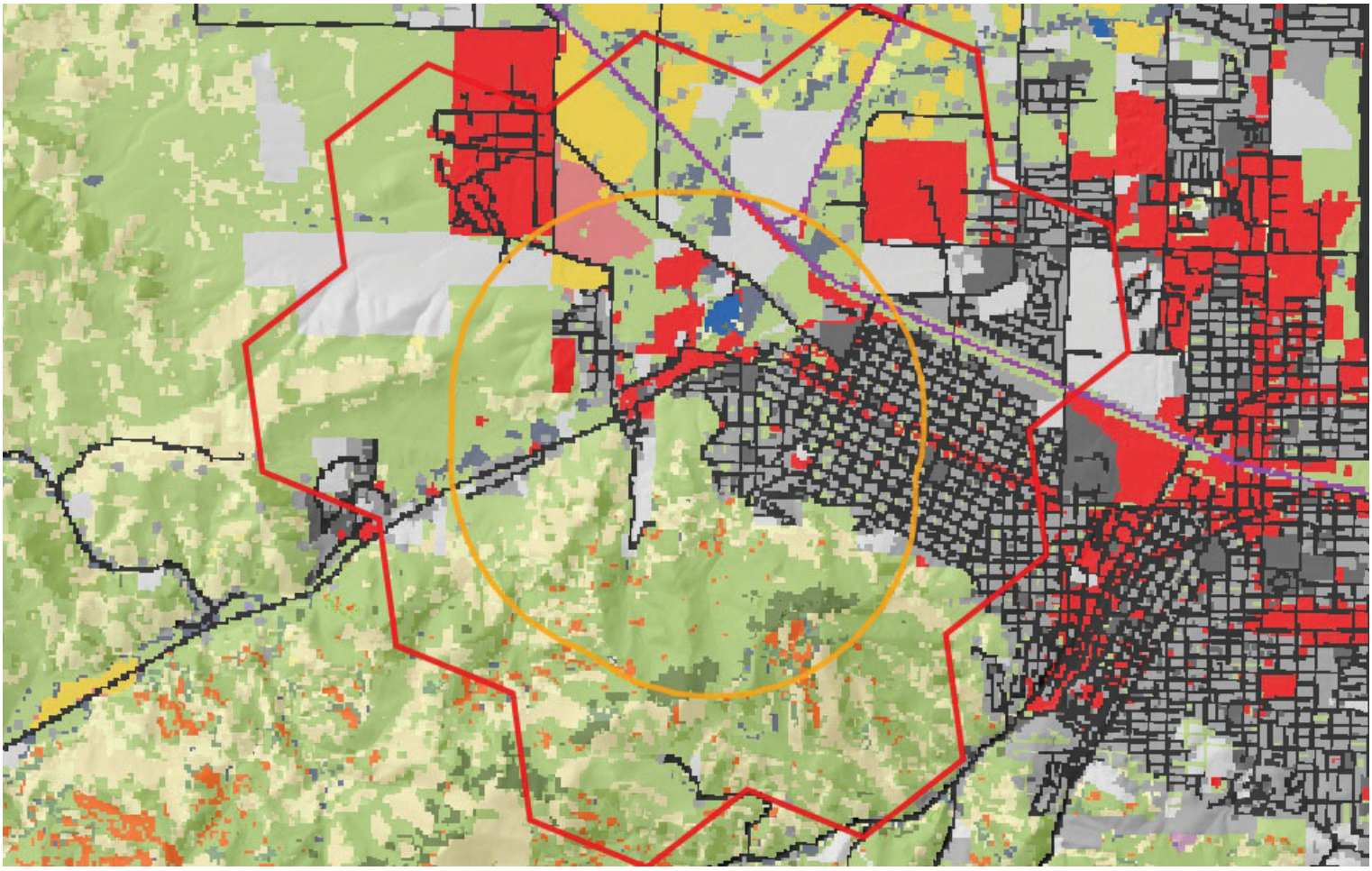
Within the report area you have requested, structured surveys are summarized by the number of each type of structured survey protocol that has been conducted, the number of species detections/observations resulting from these surveys, and the most recent year a survey has been conducted.

B-Colonial-nesting Waterbirds *(Colonial-nesting Waterbird Surveys)*	**Survey Count**: 2	**Obs Count**:	**Recent Survey**: 2011
B-Flammuled Owl Call Playback *(Flammulated Owl Call Playback Survey)*	**Survey Count**: 16	**Obs Count**:	**Recent Survey**: 2009
B-Long-billed Curlew *(Long-billed Curlew, Road-based, Point Count)*	**Survey Count**: 13	**Obs Count**:	**Recent Survey**: 2017
E-Eurasian Water-milfoil Rake *(Rake tows/pulls for Eurasian Water-milfoil)*	**Survey Count**: 36	**Obs Count**: 79	**Recent Survey**: 2020
E-Invasive Mussel Plankton Tow *(Plankton tows for veligers of Invasive Mussels)*	**Survey Count**: 11	**Obs Count**:	**Recent Survey**: 2020
E-Kicknet *(Kicknet Collection Survey for Invasive Mussels and Snails)*	**Survey Count**: 8	**Obs Count**: 1	**Recent Survey**: 2020
E-Noxious Weed, Road-based *(Noxious Weed Road-based Visual Surveys)*	**Survey Count**: 8	**Obs Count**: 9	**Recent Survey**: 2003
E-Visual Aquatic Invasives *(Visual Encounter Surveys for Aquatic Invasives on Shorelines or Underwater)*	**Survey Count**: 4	**Obs Count**:	**Recent Survey**: 2020
F-Fish Other Survey *(Fish Other Survey (FWP Survey Type))*	**Survey Count**: 2	**Obs Count**: 4	**Recent Survey**: 1988
F-Fish Trapping/Netting *(Fish Trapping or Netting Surveys)*	**Survey Count**: 3	**Obs Count**: 13	**Recent Survey**: 2004
I-Mosquito CDC Trap *(Montana Mosquito Surveillance Project)*	**Survey Count**: 1	**Obs Count**: 8	**Recent Survey**: 2011
M-Bat Acoustic *(Bat Acoustic Survey)*	**Survey Count**: 2	**Obs Count**: 1	**Recent Survey**: 1994
M-Bat Mistnet *(Bat Mistnet Survey)*	**Survey Count**: 1	**Obs Count**: 1	**Recent Survey**: 2005
M-Bat Roost (Active Season) *(Bat Roost (Active Season) Survey)*	**Survey Count**: 1	**Obs Count**: 1	**Recent Survey**: 2018
P-Algal scraping *(Algal Scraping)*	**Survey Count**: 2	**Obs Count**: 108	**Recent Survey**: 2001
P-USFS ECODATA Plot *(USFS ECODATA Ecological Inventory Survey Plot)*	**Survey Count**: 4	**Obs Count**: 36	**Recent Survey**: 2011

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Land Cover

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*



27% (*2,058 Acres*)

Grassland Systems
Montane Grassland

Rocky Mountain Lower Montane, Foothill, and Valley Grassland

This grassland system of the northern Rocky Mountains is found at lower montane to foothill elevations in mountains and valleys throughout Montana. These grasslands are floristically similar to Big Sagebrush Steppe but are defined by shorter summers, colder winters, and young soils derived from recent glacial and alluvial material. They are found at elevations from 548 - 1,650 meters (1,800-5,413 feet). In the lower montane zone, they range from small meadows to large open parks surrounded by conifers; below the lower treeline, they occur as extensive foothill and valley grasslands. Soils are relatively deep, fine-textured, often with coarse fragments, and non-saline. Microphytic crust may be present in high-quality occurrences. This system is typified by cool-season perennial bunch grasses and forbs (>25%) cover, with a sparse shrub cover (<10%). Rough fescue (*Festuca campestris*) is dominant in the northwestern portion of the state and Idaho fescue (*Festuca idahoensis*) is dominant or co-dominant throughout the range of the system. Bluebunch wheatgrass (*Pseudoroegneria spicata*) occurs as a co-dominant throughout the range as well, especially on xeric sites. Western wheatgrass (*Pascopyrum smithii*) is consistently present, often with appreciable coverage (>10%) in lower elevation occurrences in western Montana and virtually always present, with relatively high coverages (>25%), on the edge of the Northwestern Great Plains region. Species diversity ranges from a high of more than 50 per 400 square meter plot on mesic sites to 15 (or fewer) on xeric and disturbed sites. Most occurrences have at least 25 vascular species present. Farmland conversion, noxious species invasion, fire suppression, heavy grazing and oil and gas development are major threats to this system.

12% (*904 Acres*)

Forest and Woodland Systems
Conifer-dominated forest and woodland (xeric-mesic)
Rocky Mountain Ponderosa Pine Woodland and Savanna

This system occurs on warm, dry, exposed sites in the foothills of the Rocky Mountains in west-central and central Montana, at the ecotone between grasslands or shrublands and more mesic coniferous forests. Elevations range from 1,066 to 1,676 meters (3,500-5,500 feet), with higher elevation examples mostly confined to central Montana. Occurrences are found on all slopes and aspects; however, moderately steep to very steep slopes or ridgetops are most common. True savanna types are infrequent; the system is more characteristically an open forest with a grassy understory. In the western part of the state, this system is seen mostly on dry slopes in the rainshadow of the Bitterroot Mountains. East of the Continental Divide, it is most widespread around Helena and Lewistown, although it occurs throughout mountain ranges as far east as the Little Rocky and Bearpaw Mountains. Ponderosa pine (*Pinus ponderosa*) is the dominant conifer. Douglas-fir (*Pseudotsuga menziesii*) and western larch (*Larix occidentalis*) may be present in the tree canopy in the more western areas, but are usually absent. In central Montana, limber pine (*Pinus flexilis*) and horizontal juniper (*Juniperus horizontalis*) are frequently components. Although the understory of ponderosa pine forests is often shrubby in other states, in Montana, habitats are mostly dominated by graminoids, although bitterbrush (*Purshia tridentata*), white snowberry (*Symphoricarpos albus*), and skunkrush (*Rhus trilobata*) occur in forests on benchlands and rocky slopes in the central portion of the state. Understory vegetation is more typically grasses and forbs that resprout following low to moderate intensity surface fires. Prolonged drought, beetle kill and exotic invasion are rapidly changing the dynamics of this system.

No Image

11% (*860 Acres*)

Human Land Use
Developed
Other Roads

County, city and or rural roads generally open to motor vehicles.

10% (*801 Acres*)

Human Land Use
Developed
Developed, Open Space

Vegetation (primarily grasses) planted in developed settings for recreation, erosion control, or aesthetic purposes. Impervious surfaces account for less than 20% of total cover. This category often includes highway and railway rights of way and graveled rural roads.

8% (*639 Acres*)

Human Land Use
Developed
Low Intensity Residential

Includes areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 20-50% of total cover. These areas most commonly include single-family housing units in rural and suburban areas. Paved roadways may be classified into this category.

7% (*552 Acres*)

Shrubland, Steppe and Savanna Systems
Sagebrush Steppe
Montane Sagebrush Steppe

This system dominates the montane and subalpine landscape of southwestern Montana from valley bottoms to subalpine ridges and is found as far north as Glacier National Park. It can also be seen in the island mountain ranges of the north-central and south-central portions of the state. It primarily occurs on deep-soiled to stony flats, ridges, nearly flat ridgetops, and mountain slopes. In general, this system occurs in areas of gentle topography, fine soils, subsurface moisture or mesic conditions, within zones of higher precipitation and areas of snow accumulation. It occurs on all slopes and aspects, variable substrates and all soil types. The shrub component of this system is generally dominated by mountain big sagebrush (*Artemisia tridentata ssp. vaseyana*). Other co-dominant shrubs include silver sagebrush (*Artemisia cana ssp. viscidula)*, subalpine big sagebrush (*Artemisia tridentata ssp. spiciformis*), three tip sagebrush (*Artemisia tripartita* ssp. *tripartita*) and antelope bitterbrush (*Purshia tridentata*). Little sagebrush (*Artemisia arbuscula ssp. arbuscula*) shrublands are only found in southwestern Montana on sites with a perched water table. Wyoming big sagebrush (*Artemisia tridentata ssp. wyomingensis*) sites may be included within this system if occurrences are at montane elevations, and are associated with montane graminoids such as Idaho fescue (*Festuca idahoensis),* spike fescue (*Leucopoa kingii*), or poverty oatgrass (*Danthonia intermedia)*. In ares where sage has been eliminated by human activities like burning, disking or poisoning, other shrubs may be dominant, especially rubber rabbitbrush (*Ericameria nauseosa*), and green rabbitbrush (*Chrysothamnus viscidiflorus*). Because of the mesic site conditions, most occurrences support a diverse herbaceous undergrowth of grasses and forbs. Shrub canopy cover is extremely variable, ranging from 10 percent to as high as 40 or 50 percent.

No Image

7% (*517 Acres*)

Human Land Use
Developed
Commercial / Industrial

Businesses, industrial parks, hospitals, airports; utilities in commercial/industrial areas.

3% (*236 Acres*)

Human Land Use
Agriculture
Cultivated Crops

These areas used for the production of crops, such as corn, soybeans, small grains, sunflowers, vegetables, and cotton, typically on an annual cycle. Agricultural plant cover is variable depending on season and type of farming. Other areas include more stable land cover of orchards and vineyards.

3% (*217 Acres*)

Shrubland, Steppe and Savanna Systems
Sagebrush Steppe
Big Sagebrush Steppe

This widespread ecological system occurs throughout much of central Montana, and north and east onto the western fringe of the Great Plains. In central Montana, where this system occurs on both glaciated and non-glaciated landscapes, it differs slightly, with more summer rain than winter precipitation and more precipitation annually. Throughout its distribution, soils are typically deep and non-saline, often with a microphytic crust. This shrub-steppe is dominated by perennial grasses and forbs with greater than 25% cover. Overall shrub cover is less than 10 percent. In Montana and Wyoming, stands are more mesic, with more biomass of grass, and have less shrub diversity than stands farther to the west, and 50 to 90% of the occurrences are dominated by Wyoming big sagebrush with western wheatgrass (*Pascopyrum smithii*). Japanese brome (*Bromus japonicus*) and cheatgrass (*Bromus tectorum*) are indicators of disturbance, but cheatgrassis typically not as abundant as in the Intermountain West, possibly due to a colder climate. The natural fire regime of this ecological system maintains a patchy distribution of shrubs, preserving the steppe character. Shrubs may increase following heavy grazing and/or with fire suppression. In central and eastern Montana, complexes of prairie dog towns are common in this ecological system.

2% (*149 Acres*)

Wetland and Riparian Systems
Floodplain and Riparian
Northern Rocky Mountain Lower Montane Riparian Woodland and Shrubland

This ecological system is found throughout the Rocky Mountain and Colorado Plateau regions. In Montana, sites occur at elevations of 609-1,219 meters (2,000-4,000 feet) west of the Continental Divide. East of the Continental Divide, this system ranges up to 1,676 meters (5,500 feet). It generally comprises a mosaic of multiple communities that are tree-dominated with a diverse shrub component. It is dependent on a natural hydrologic regime with annual to episodic flooding, so it is usually found within the flood zone of rivers, on islands, sand or cobble bars, and along streambanks. It can form large, wide occurrences on mid-channel islands in larger rivers, or narrow bands on small, rocky canyon tributaries and well-drained benches. It is also typically found in backwater channels and other perennially wet but less scoured sites, such as floodplains, swales and irrigation ditches. In some locations, occurrences extend into moderately high intermountain basins where the adjacent vegetation is sage steppe. Black cottonwood (*Populus balsamifera* ssp. *trichocarpa*) is the key indicator species. Other dominant trees may include boxelder maple (*Acer negundo*), narrowleaf cottonwood (*Populus angustifolia*), eastern cottonwood (*Populus deltoides*), Douglas-fir (*Pseudotsuga menziesii*), peachleaf willow (*Salix amygdaloides*), or Rocky Mountain juniper (*Juniperus scopulorum*). Dominant shrubs include Rocky Mountain maple (*Acer glabrum*), thinleaf alder (*Alnus incana*), river birch (*Betula occidentalis*), redoiser dogwood (*Cornus sericea*), hawthorne (*Crataegus* species), chokecherry (*Prunus virginiana*), skunkbush sumac (*Rhus trilobata*), willows (*Salix* species), rose (*Rosa* species), silver buffaloberry (*Shepherdia argentea*), or snowberry (*Symphoricarpos* species).

No Image

2% (*136 Acres*)

Shrubland, Steppe and Savanna Systems
Deciduous Shrubland
Rocky Mountain Montane-Foothill Deciduous Shrubland

This system is found in the lower montane and foothill regions of western Montana, and north and east into the northern Rocky Mountains. These shrublands typically occur below treeline, within the matrix of surrounding low-elevation grasslands and sagebrush shrublands. They are usually found on steep slopes of canyons, on toeslopes and occasionally on valley bottom lands. These communities can occur on all aspects. In northwestern and west-central Montana, this system forms within Douglas-fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa)* forests and adjacent to fescue grasslands and big sagebrush (*Artemisia tridentata*) shrublands. In northwestern Montana, these shrublands commonly occur within the upper montane grasslands and forests along the Rocky Mountain Front. Immediately east of the Continental Divide, this system is found within montane grasslands and steep canyon slopes. Most sites have shallow soils that are either loess deposits or volcanic clays. Common ninebark (*Physocarpus malvaceus*), bittercherry (*Prunus emarginata*), common chokecherry (*Prunus virginiana*), rose (*Rosa* spp.), smooth sumac (*Rhus glabra*), Rocky Mountain maple (*Acer glabrum*), serviceberry (*Amelanchier alnifolia*), and oceanspray (*Holodiscus discolor*) are the most common dominant shrubs.

2% (*125 Acres*)

Human Land Use
Developed
High Intensity Residential

Includes areas with a mixture of constructed materials and vegetation. Impervious surfaces account for 50-80% of the total cover. These areas most commonly include single-family housing units in urban areas. Paved roadways, parking lots, and other large impervious surfaces may be classified into this category.

Additional Limited Land Cover

1% (*104 Acres*) Rocky Mountain Montane Douglas-fir Forest and Woodland

1% (*97 Acres*) Introduced Upland Vegetation - Annual and Biennial Forbland

1% (*81 Acres*) Insect-Killed Forest

1% (*66 Acres*) Railroad

1% (*53 Acres*) Major Roads

<1% (*32 Acres*) Pasture/Hay

<1% (*21 Acres*) Rocky Mountain Foothill Limber Pine - Juniper Woodland

<1% (*16 Acres*) Open Water

<1% (*4 Acres*) Rocky Mountain Lodgepole Pine Forest

<1% (*2 Acres*) Alpine-Montane Wet Meadow

<1% (*2 Acres*) Low Sagebrush Shrubland

<1% (*1 Acres*) Rocky Mountain Subalpine-Montane Mesic Meadow

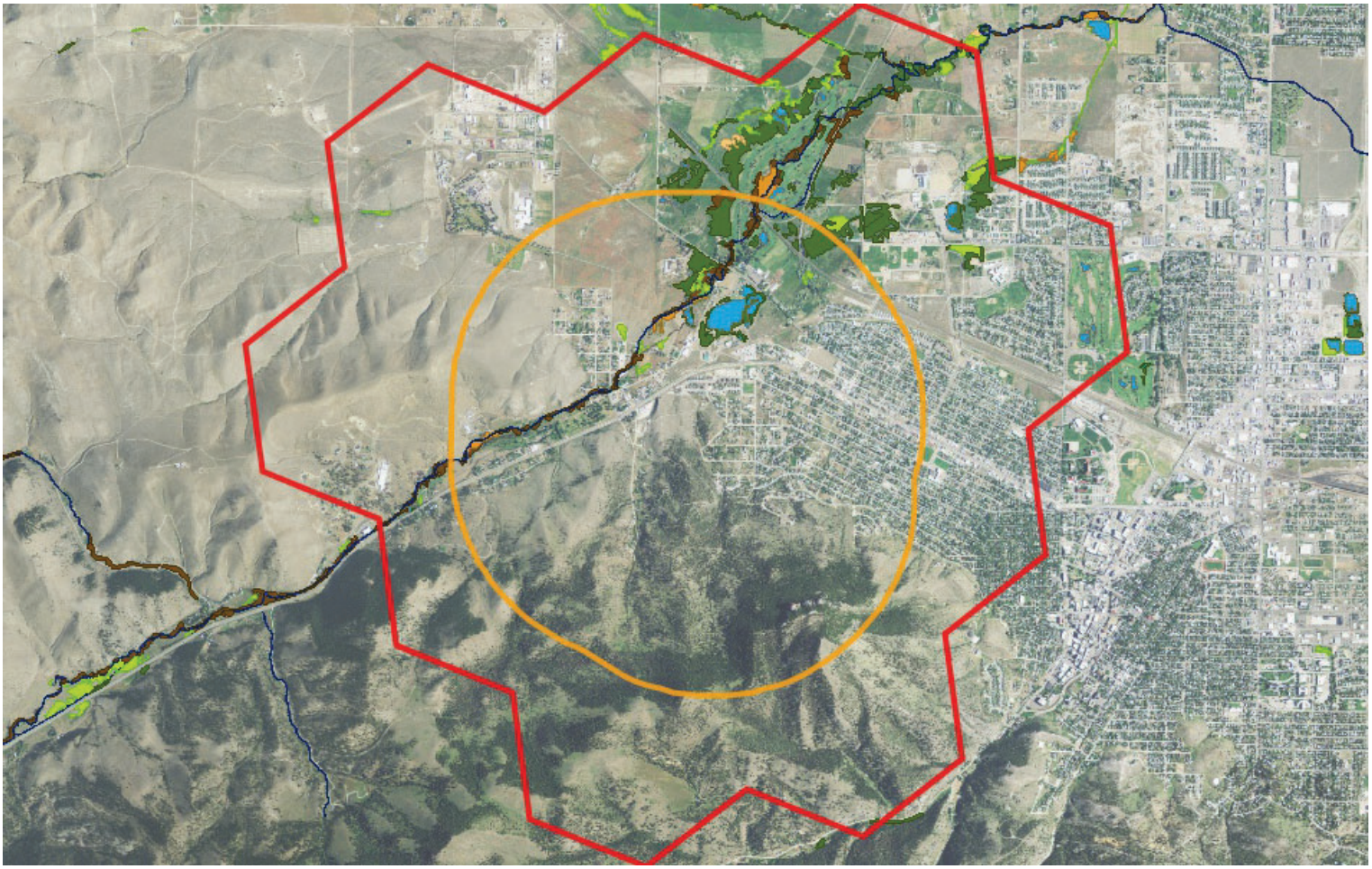
<1% (*0 Acres*) Rocky Mountain Subalpine Mesic Spruce-Fir Forest and Woodland

<1% (*0 Acres*) Emergent Marsh

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Wetland and Riparian

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*



Wetland and Riparian Mapping

Explain

P - Palustrine

UB - Unconsolidated Bottom

F - Semipermanently Flooded	<1 Acres	
x - Excavated	**<1 Acres**	**PUBFx**
G - Intermittently Exposed	<1 Acres	
x - Excavated	**<1 Acres**	**PUBGx**

P - Palustrine, UB - Unconsolidated Bottom
Wetlands where mud, silt or similar fine particles cover at least 25% of the bottom, and where vegetation cover is less than 30%.

AB - Aquatic Bed

F - Semipermanently Flooded	10 Acres	
(no modifier)	**1 Acres**	**PABF**
b - Beaver	**4 Acres**	**PABFb**
x - Excavated	**5 Acres**	**PABFx**
G - Intermittently Exposed	24 Acres	
h - Diked/Impounded	**19 Acres**	**PABGh**
x - Excavated	**5 Acres**	**PABGx**

P - Palustrine, AB - Aquatic Bed
Wetlands with vegetation growing on or below the water surface for most of the growing season.

EM - Emergent

A - Temporarily Flooded	25 Acres	
(no modifier)	**25 Acres**	**PEMA**
h - Diked/Impounded	**<1 Acres**	**PEMAh**
C - Seasonally Flooded	8 Acres	

P - Palustrine, EM - Emergent
Wetlands with erect, rooted herbaceous vegetation present during most of the growing season.

(no modifier) **8 Acres** PEMC

F - Semipermanently Flooded 6 Acres

(no modifier) **6 Acres** PEMF

SS - Scrub-Shrub

P - Palustrine, SS - Scrub-Shrub
Wetlands dominated by woody vegetation less than 6 meters (20 feet) tall. Woody vegetation includes tree saplings and trees that are stunted due to environmental conditions.

A - Temporarily Flooded 50 Acres

(no modifier) **50 Acres** PSSA

C - Seasonally Flooded 62 Acres

(no modifier) **62 Acres** PSSC

FO - Forested

P - Palustrine, FO - Forested
Wetlands dominated by woody vegetation greater than 6 meters (20 feet) tall.

A - Temporarily Flooded 37 Acres

(no modifier) **37 Acres** PFOA

R - Riverine (Rivers)

3 - Upper Perennial

UB - Unconsolidated Bottom

R - Riverine (Rivers), 3 - Upper Perennial, UB - Unconsolidated Bottom
Stream channels where the substrate is at least 25% mud, silt or other fine particles.

G - Intermittently Exposed 11 Acres

(no modifier) **11 Acres** R3UBG

4 - Intermittent

SB - Stream Bed

R - Riverine (Rivers), 4 - Intermittent, SB - Stream Bed
Active channel that contains periodic water flow.

A - Temporarily Flooded 1 Acres

x - Excavated **1 Acres** R4SBAx

Rp - Riparian

1 - Lotic

SS - Scrub-Shrub

(no modifier) **11 Acres** Rp1SS

Rp - Riparian, 1 - Lotic, SS - Scrub-Shrub
This type of riparian area is dominated by woody vegetation that is less than 6 meters (20 feet) tall. Woody vegetation includes tree saplings and trees that are stunted due to environmental conditions.

FO - Forested

(no modifier) **49 Acres** Rp1FO

Rp - Riparian, 1 - Lotic, FO - Forested
This riparian class has woody vegetation that is greater than 6 meters (20 feet) tall.

EM - Emergent

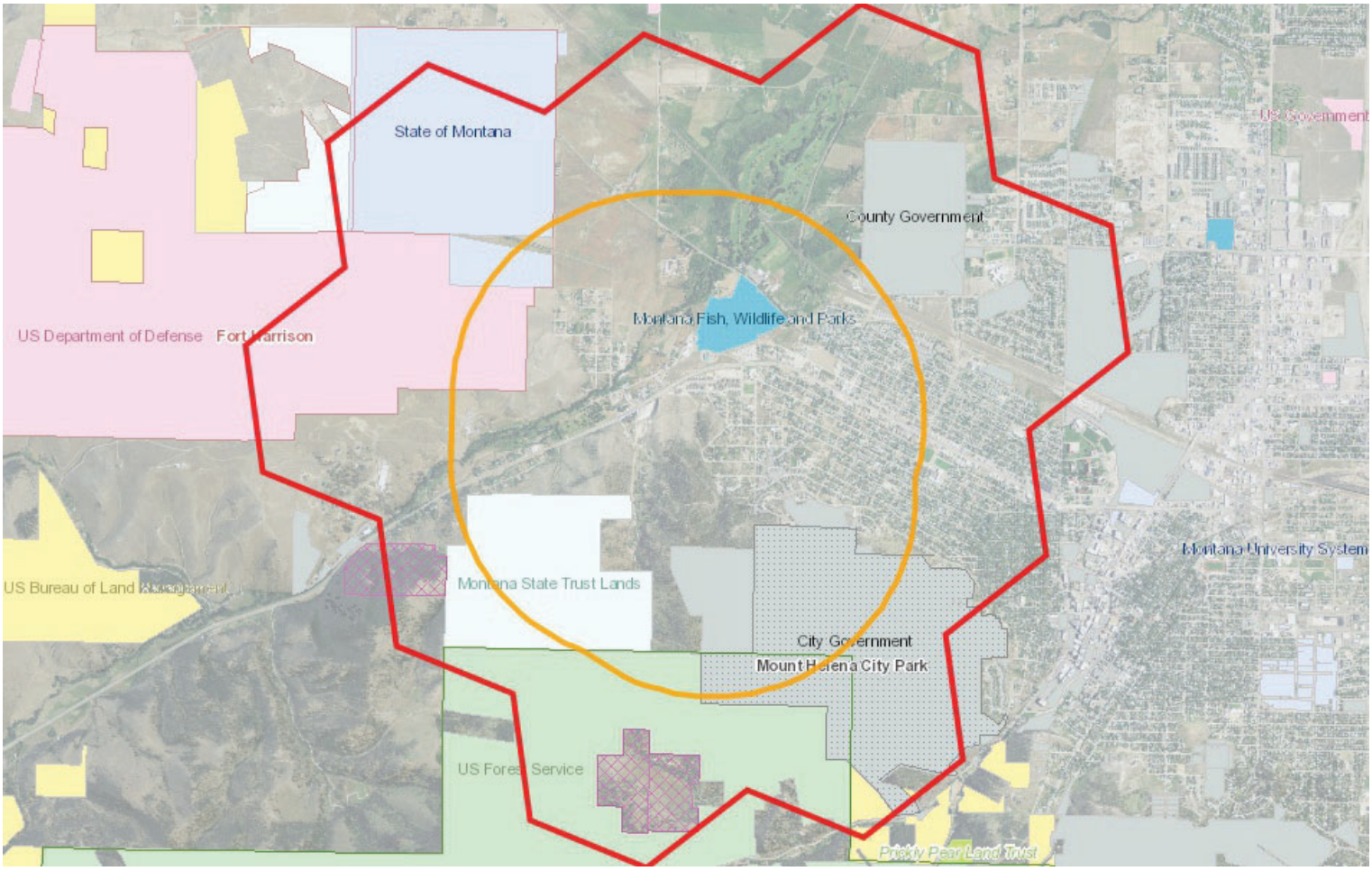
(no modifier) **2 Acres** Rp1EM

Rp - Riparian, 1 - Lotic, EM - Emergent
Riparian areas that have erect, rooted herbaceous vegetation during most of the growing season.

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Land Management

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*



Land Management Summary

Explain

	Ownership	Tribal	Easements	Other Boundaries (possible overlap)
Public Lands	3,487 Acres (45%)			
Federal	1,244 Acres (16%)			
US Forest Service	644 Acres (8%)			
USFS Owned	644 Acres (8%)			
USFS Ranger Districts				926 Acres
Helena-Lewis & Clark National Forest, Helena Ranger District				926 Acres
USFS National Forest Boundaries				926 Acres
Helena-Lewis & Clark National Forest				926 Acres
US Bureau of Land Management	24 Acres (<1%)			
BLM Owned	24 Acres (<1%)			
US Department of Defense	576 Acres (8%)			
USDOD Owned	576 Acres (8%)			
USDOD Military Reserve				1,102 Acres
Fort Harrison				1,102 Acres
State	1,034 Acres (13%)			
Montana State Trust Lands	454 Acres (6%)			
MT State Trust Owned	454 Acres (6%)			
Montana Fish, Wildlife and Parks	60 Acres (1%)			
MTFWP Owned	60 Acres (1%)			
MTFWP State Parks				60 Acres

Land Management Summary

Explain

	Ownership	Tribal	Easements	Other Boundaries (possible overlap)
Spring Meadow Lake State Park				60 Acres
State of Montana	520 Acres (7%)			
State of Montana Owned	520 Acres (7%)			
Local	1,209 Acres (16%)			
Local Government	1,209 Acres (16%)			
Local Government Owned	1,209 Acres (16%)			
Parks				691 Acres
Mount Helena City Park				691 Acres
Conservation Easements			163 Acres (2%)	
Private			163 Acres (2%)	
Prickly Pear Land Trust			163 Acres (2%)	
Private Lands or Unknown Ownership	4,021 Acres (52%)			

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Biological Reports

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*

Within the report area you have requested, citations for all reports and publications associated with plant or animal observations in Montana Natural Heritage Program (MTNHP) databases are listed and, where possible, links to the documents are included.

The MTNHP plans to include reports associated with terrestrial and aquatic communities in the future as allowed for by staff resources. If you know of reports or publications associated with species or biological communities within the report area that are not shown in this report, please let us know: mtnhp@mt.gov

- Cheek, W.K. 1995. ***Population and biomass estimation of turtles at Spring Meadow State Park, Helena, Montana***. Undergraduate Honors Thesis. Carroll College, Helena, MT. 29 p.
- Faunawest Wildlife Consultants. 1998. Status of the black-tailed and white-tailed prairie dog in Montana. Prepared for Montana Department of Fish, WIldlife & Parks.
- Hoffmann, R.S., P.L. Wright, and F.E. Newby. 1969. ***The distribution of some mammals in Montana***. I. Mammals other than bats. Journal of Mammalogy 50(3): 579-604.

Legend

Model Icons
- N Suitable (native range)
- O Optimal Suitability
- M Moderate Suitability
- L Low Suitability
- I Suitable (introduced range)

Habitat Icons
- C Common
- O Occasional

Range Icons
- T Suspect (invasive / pest)
- D Documented (invasive / pest)
- R Released (biocontrol)
- E Established (biocontrol)

Num Obs
Count of obs with 'good precision' (<=1000m)
+ indicates additional 'poor precision' obs (1001m-10,000m)

Latitude	Longitude
46.57058	-112.03614
46.63383	-112.12408

Invasive and Pest Species

Summarized by: **21prvt0036 WestSideSub** *(Custom Area of Interest)*

	# Obs	Predictive Model	Associated Habitat	Range
Aquatic Invasive Species				
I - Orconectes virilis *(Virile Crayfish)* AIS	1	Not Available	Not Assigned	
View in Field Guide Aquatic Invasive Species - Native Species Global: **G5** State: **S5**				
Noxious Weeds: Priority 1A				
V - Isatis tinctoria *(Dyer's Woad)* N1A			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** M 58% Moderate (inductive), L 25% Low (inductive)				
V - Centaurea solstitialis *(Yellow Starthistle)* N1A			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1A - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** M 50% Moderate (inductive), L 25% Low (inductive)				
Noxious Weeds: Priority 1B				
V - Echium vulgare *(Blueweed)* N1B			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 1B - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** M 25% Moderate (inductive), L 58% Low (inductive)				
V - Lythrum salicaria *(Purple Loosestrife)* N1B	2	Not Available	Not Assigned	
View in Field Guide Noxious Weed: Priority 1B - Non-native Species Global: **G5** State: **SNA**				
V - Polygonum cuspidatum *(Japanese Knotweed)* N1B	1	Not Available	Not Assigned	
View in Field Guide Noxious Weed: Priority 1B - Non-native Species Global: **GNRTNR** State: **SNA**				
Noxious Weeds: Priority 2A				
V - Hieracium praealtum *(Kingdevil Hawkweed)* N2A			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** M 25% Moderate (inductive), L 50% Low (inductive)				
V - Lepidium latifolium *(Perennial Pepperweed)* N2A			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** M 17% Moderate (inductive), L 67% Low (inductive)				
V - Rhamnus cathartica *(Common Buckthorn)* N2A	1	Not Available	Not Assigned	D
View in Field Guide View Range Maps Noxious Weed: Priority 2A - Non-native Species Global: **GNR** State: **SNA**				
Noxious Weeds: Priority 2B				
V - Lepidium draba *(Whitetop)* N2B	3		Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** O 25% Optimal (inductive), M 58% Moderate (inductive), L 17% Low (inductive)				
V - Centaurea diffusa *(Diffuse Knapweed)* N2B			Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA** **Predictive Models:** O 17% Optimal (inductive), M 67% Moderate (inductive), L 16% Low (inductive)				
V - Linaria dalmatica *(Dalmatian Toadflax)* N2B	29		Not Assigned	D
View in Field Guide View Predicted Models View Range Maps Noxious Weed: Priority 2B - Non-native Species Global: **G5** State: **SNA** **Predictive Models:** M 100% Moderate (inductive)				
V - Centaurea stoebe *(Spotted Knapweed)* N2B	16		Not Assigned	D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive)

V - Euphorbia virgata *(Leafy Spurge)* N2B — 15 — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNRTNR** State: **SNA**
Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive)

V - Cynoglossum officinale *(Common Hound's-tongue)* N2B — 1 — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 75% Moderate (inductive), L 25% Low (inductive)

V - Berteroa incana *(Hoary False-alyssum)* N2B — 1 — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 67% Moderate (inductive), L 33% Low (inductive)

V - Cirsium arvense *(Canada Thistle)* N2B — 5 — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **G5** State: **SNA**
Predictive Models: M 58% Moderate (inductive), L 42% Low (inductive)

V - Linaria vulgaris *(Yellow Toadflax)* N2B — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 42% Moderate (inductive), L 58% Low (inductive)

V - Convolvulus arvensis *(Field Bindweed)* N2B — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 42% Moderate (inductive), L 50% Low (inductive)

V - Acroptilon repens *(Russian Knapweed)* N2B — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: L 83% Low (inductive)

V - Hypericum perforatum *(Common St. John's-wort)* N2B — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: L 8% Low (inductive)

V - Leucanthemum vulgare *(Oxeye Daisy)* N2B — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Noxious Weed: Priority 2B - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: L 8% Low (inductive)

Regulated Weeds: Priority 3

V - Bromus tectorum *(Cheatgrass)* R3 — 2 + — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Regulated Weed: Priority 3 - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 92% Moderate (inductive), L 8% Low (inductive)

V - Elaeagnus angustifolia *(Russian Olive)* R3 — Not Assigned — D

View in Field Guide View Predicted Models View Range Maps
Regulated Weed: Priority 3 - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 25% Moderate (inductive), L 58% Low (inductive)

Biocontrol Species

I - Oberea erythrocephala *(Red-headed Leafy Spurge Stem Borer)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: O 50% Optimal (inductive), M 33% Moderate (inductive), L 17% Low (inductive)

I - Aphthona lacertosa *(Brown-legged Leafy Spurge Flea Beetle)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 92% Moderate (inductive), L 8% Low (inductive)

I - Aphthona nigriscutis *(Black Dot Leafy Spurge Flea Beetle)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive)

I - Mecinus janthiniformis *(Dalmatian Toadflax Stem-boring Weevil)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 83% Moderate (inductive), L 17% Low (inductive)

I - Cyphocleonus achates *(Knapweed Root Weevil)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: M 25% Moderate (inductive), L 75% Low (inductive)

I - Mecinus janthinus *(Yellow Toadflax Stem-boring Weevil)* BIOCNTRL — Not Assigned — R

View in Field Guide View Predicted Models View Range Maps
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**
Predictive Models: L 58% Low (inductive)

I - Agapeta zoegana *(Sulphur Knapweed Moth)* BIOCNTRL — 1 — Not Available — Not Assigned

View in Field Guide
Biocontrol Species - Non-native Species Global: **GNR** State: **SNA**

Introduction to Montana Natural Heritage Program

P.O. Box 201800 • 1515 East Sixth Avenue • Helena, MT 59620-1800 • fax 406.444.0266 • tel 406.444.0241 • mtnhp.org

Introduction

The Montana Natural Heritage Program (MTNHP) is Montana's source for reliable and objective information on Montana's native species and habitats, emphasizing those of conservation concern. MTNHP was created by the Montana legislature in 1983 as part of the Natural Resource Information System (NRIS) at the Montana State Library (MSL). MTNHP is "a program of information acquisition, storage, and retrieval for data relating to the flora, fauna, and biological community types of Montana" (MCA 90-15-102). MTNHP's activities are guided by statute (MCA 90-15) as well as through ongoing interaction with, and feedback from, principal data source agencies such as Montana Fish, Wildlife, and Parks, the Montana Department of Environmental Quality, the Montana Department of Natural Resources and Conservation, the Montana University System, the US Forest Service, and the US Bureau of Land Management. The enabling legislation for MTNHP provides the State Library with the option to contract the operation of the Program. Since 2006, MTNHP has been operated as a program under the Office of the Vice President for Research and Creative Scholarship at the University of Montana (UM) through a renewable 2-year contract with the MSL. Since the first staff was hired in 1985, the Program has logged a long record of success, and developed into a highly respected, service-oriented program. MTNHP is widely recognized as one of the most advanced and effective of over 80 natural heritage programs throughout the Western Hemisphere.

Vision

Our vision is that public agencies, the private sector, the education sector, and the general public will trust and rely upon MTNHP as the source for information and expertise on Montana's species and habitats, especially those of conservation concern. We strive to provide easy access to our information in order for users to save time and money, speed environmental reviews, and inform decision making.

Core Values

- We endeavor to be a single statewide source of accurate and up-to-date information on Montana's plants, animals, and aquatic and terrestrial biological communities.
- We actively listen to our data users and work responsively to meet their information and training needs.
- We strive to provide neutral, trusted, timely, and equitable service to all of our information users.
- We make every effort to be transparent to our data users in setting work priorities and providing data products.

Confidentiality

All information requests made to the Montana Natural Heritage Program are considered library records and are protected from disclosure by the Montana Library Records Confidentiality Act (MCA 22-1-11).

Information Managed

Information managed at the Montana Natural Heritage Program includes: (1) lists of, and basic information on, plant and animal species and biological communities; (2) plant and animal surveys, observations, species occurrences, predictive distribution models, range polygons, and conservation status ranks; and (3) land cover and wetland and riparian mapping and the conservation status of these and other biological communities.

Data Use Terms and Conditions

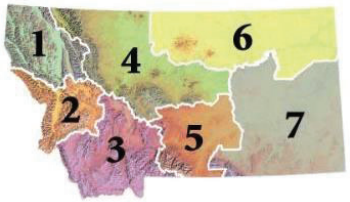
- Montana Natural Heritage Program (MTNHP) products and services are based on biological data and the objective interpretation of those data by professional scientists. MTNHP does not advocate any particular philosophy of natural resource protection, management, development, or public policy.
- MTNHP has no natural resource management or regulatory authority. Products, statements, and services from MTNHP are intended to inform parties as to the state of scientific knowledge about certain natural resources, and to further develop that knowledge. The information is not intended as natural resource management guidelines or prescriptions or a determination of environmental impacts. MTNHP recommends consultation with appropriate state, federal, and tribal resource management agencies and authorities in the area where your project is located.
- Information on the status and spatial distribution of biological resources produced by MTNHP are intended to inform parties of the state-wide status, known occurrence, or the likelihood of the presence of those resources. **These products are not intended to substitute for field-collected data, nor are they intended to be the sole basis for natural resource management decisions.**
- MTNHP does not portray its data as exhaustive or comprehensive inventories of rare species or biological communities. **Field verification of the absence or presence of sensitive species and biological communities will always be an important obligation of users of our data.**
- MTNHP responds equally to all requests for products and services, regardless of the purpose or identity of the requester.
- Because MTNHP constantly updates and revises its databases with new data and information, products will become outdated over time. Interested parties are encouraged to obtain the most current information possible from MTNHP, rather than using older products. We add, review, update, and delete records on a daily basis. Consequently, we strongly advise that you update your MTNHP data sets at a minimum of every three months for most applications of our information.
- MTNHP data require a certain degree of biological expertise for proper analysis, interpretation, and application. Our staff is available to advise you on questions regarding the interpretation or appropriate use of the data that we provide. Contact information for MTNHP staff is posted at: http://mtnhp.org/contact.asp
- The information provided to you by MTNHP may include sensitive data that if publicly released might jeopardize the welfare of threatened, endangered, or sensitive species or biological communities. This information is intended for distribution or use only within your department, agency, or business. Subcontractors may have access to the data during the course of any given project, but should not be given a copy for their use on subsequent, unrelated work.
- MTNHP data are made freely available. Duplication of hard-copy or digital MTNHP products with the intent to sell is prohibited without written consent by MTNHP. Should you be asked by individuals outside your organization for the type of data that we provide, please refer them to MTNHP.
- MTNHP and appropriate staff members should be appropriately acknowledged as an information source in any third-party product involving MTNHP data, reports, papers, publications, or in maps that incorporate MTNHP graphic elements.
- Sources of our data include museum specimens, published and unpublished scientific literature, field surveys by state and federal agencies and private contractors, and reports from knowledgeable individuals. MTNHP actively solicits and encourages additions, corrections and updates, new observations or collections, and comments on any of the data we provide.
- MTNHP staff and contractors do not cross or survey privately-owned lands without express permission from the landowner. However, the program cannot guarantee that information provided to us by others was obtained under adherence to this policy.

Suggested Contacts for Natural Resource Agencies

As required by Montana statute (MCA 90-15), the Montana Natural Heritage Program works with state, federal, tribal, nongovernmental organizations, and private partners to ensure that the latest animal and plant distribution and status information is incorporated into our databases so that it can be used to inform a variety of planning processes and management decisions. In addition to the information you receive from us, we encourage you to contact state, federal, and tribal resource management agencies in the area where your project is located. They may have additional data or management guidelines relevant to your efforts. In particular, we encourage you to contact the Montana Department of Fish, Wildlife, and Parks for the latest data and management information regarding hunted and high-profile management species and to use the U.S. Fish and Wildlife Service's Information Planning and Conservation (IPAC) website http://ecos.fws.gov/ipac/ regarding U.S. Endangered Species Act listed Threatened, Endangered, or Candidate species.

For your convenience, we have compiled a list of relevant agency contacts and links below:

Montana Fish, Wildlife, and Parks

Fish Species	Zachary Shattuck zshattuck@mt.gov (406) 444-1231 or Eric Roberts eroberts@mt.gov (406) 444-5334
American Bison Black-footed Ferret Black-tailed Prairie Dog Bald Eagle Golden Eagle Common Loon Least Tern Piping Plover Whooping Crane	Lauri Hanauska-Brown LHanauska-Brown@mt.gov (406) 444-5209
Grizzly Bear Greater Sage Grouse Trumpeter Swan Big Game Upland Game Birds Furbearers	John Vore jvore@mt.gov (406) 444-3940
Managed Terrestrial Game and Nongame Animal Data	Smith Wells – MFWP Data Analyst smith.wells@mt.gov (406) 444-3759
Fisheries Data	Ryan Alger – MFWP Data Analyst ryan.alger@mt.gov (406) 444-5365
Wildlife and Fisheries Scientific Collector's Permits	http://fwp.mt.gov/doingBusiness/licenses/scientificWildlife/ Kammi McClain for Wildlife Kammi.McClain@mt.gov (406) 444-2612 Kim Wedde for Fisheries kim.wedde@mt.gov (406) 444-5594
Fish and Wildlife Recommendations for Subdivision Development	Renee Lemon RLemon@mt.gov (406) 444-3738 and see http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/buildingWithWildlife/subdivisionRecommendations/
Regional Contacts  	Region 1 (Kalispell) (406) 752-5501 Region 2 (Missoula) (406) 542-5500 Region 3 (Bozeman) (406) 994-4042 Region 4 (Great Falls) (406) 454-5840 Region 5 (Billings) (406) 247-2940 Region 6 (Glasgow) (406) 228-3700 Region 7 (Miles City) (406) 234-0900

United States Fish and Wildlife Service:
Information Planning and Conservation (IPAC) website: http://ecos.fws.gov/ipac/
Montana Ecological Services Field Office: http://www.fws.gov/montanafieldoffice/ (406) 449-5225

Bureau of Land Management

Montana Field Office Contacts:

Billings	(406) 896-5013
Butte	(406) 533-7600
Dillon	(406) 683-8000
Glasgow	(406) 228-3750
Havre	(406) 262-2820
Lewistown	(406) 538-1900
Malta	(406) 654-5100
Miles City	(406) 233-2800
Missoula	(406) 329-3914

United States Forest Service

Regional Office – Missoula, Montana Contacts

Wildlife Program Leader	Tammy Fletcher	tammyfletcher@fs.fed.us	(406) 329-3588
Wildlife Ecologist	Cara Staab	cstaab@fs.fed.us	(406) 329-3677
Fish Program Leader	Scott Spaulding	scottspaulding@fs.fed.us	(406) 329-3287
Fish Ecologist	Cameron Thomas	cathomas@fs.fed.us	(406) 329-3087
TES Program	Lydia Allen	lrallen@fs.fed.us	(406) 329-3558
Interagency Grizzly Bear Coordinator	Scott Jackson	sjackson03@fs.fed.us	(406) 329-3664
Regional Botanist	Steve Shelly	sshelly@fs.fed.us	(406) 329-3041
Invasive Species Program Manager	Michelle Cox	michelle.cox2@usda.gov	(406) 329-3669

Tribal Nations

Assiniboine & Gros Ventre Tribes – Fort Belknap Reservation
Assiniboine & Sioux Tribes – Fort Peck Reservation
Blackfeet Tribe - Blackfeet Reservation
Chippewa Creek Tribe - Rocky Boy's Reservation
Crow Tribe – Crow Reservation
Little Shell Chippewa Tribe
Northern Cheyenne Tribe – Northern Cheyenne Reservation
Salish & Kootenai Tribes - Flathead Reservation

Natural Heritage Programs and Conservation Data Centers in Surrounding States and Provinces
Alberta Conservation Information Management System
British Columbia Conservation Data Centre
Idaho Natural Heritage Program
North Dakota Natural Heritage Program
Saskatchewan Conservation Data Centre
South Dakota Natural Heritage Program
Wyoming Natural Diversity Database

Invasive Species Management Contacts and Information

Aquatic Invasive Species

Montana Fish, Wildlife, and Parks Aquatic Invasive Species staff
Montana Department of Natural Resources and Conservation's Aquatic Invasive Species Grant Program
Montana Invasive Species Council (MISC)
Upper Columbia Conservation Commission (UC3)

Noxious Weeds

Montana Weed Control Association Contacts Webpage
Montana Biological Weed Control Coordination Project
Montana Department of Agriculture - Noxious Weeds
Montana Weed Control Association
Montana Fish, Wildlife, and Parks - Noxious Weeds
Montana State University Integrated Pest Management Extension
Integrated Noxious Weed Management after Wildfires

Introduction to Native Species

Within the report area you have requested, separate summaries are provided for: (1) Species Occurrences (SO) for plant and animal Species of Concern, Special Status Species (SSS), Important Animal Habitat (IAH) and some Potential Plant Species of Concern; (2) other observed non Species of Concern or Species of Concern without suitable documentation to create Species Occurrence polygons; and (3) other non-documented species that are potentially present based on their range, predicted suitable habitat model output, or presence of associated habitats. Each of these summaries provides the following information when present for a species: (1) the number of Species Occurrences and associated delineation criteria for construction of these polygons that have long been used for considerations of documented Species of Concern in environmental reviews; (2) the number of observations of each species; (3) the geographic range polygons for each species that the report area overlaps; (4) predicted relative habitat suitability classes that are present if a predicted suitable habitat model has been created; (5) the percent of the report area that is mapped as commonly associated or occasionally associated habitat as listed for each species in the Montana Field Guide; and (6) a variety of conservation status ranks and links to species accounts in the Montana Field Guide. Details on each of these information categories are included under relevant section headers below or are defined on our Species Status Codes page. In presenting this information, the Montana Natural Heritage Program (MTNHP) is working towards assisting the user with rapidly determining what species have been documented and what species are potentially present in the report area. We remind users that this information is likely incomplete as surveys to document native and introduced species are lacking in many areas of the state, information on introduced species has only been tracked relatively recently, the MTNHP's staff and resources are restricted by declining budgets, and information is constantly being added and updated in our databases. **Thus, field verification by professional biologists of the absence or presence of species and biological communities will always be an important obligation of users of our data.**

If you are aware of observation datasets that the MTNHP is missing, please report them to the Program Botanist apipp@mt.gov or Senior Zoologist dbachen@mt.gov. If you have observations that you would like to contribute, you can submit animal observations using our online data entry system at http://mtnhp.org/AddObs/, plant and animal observations via Excel spreadsheets posted at http://mtnhp.org/observations.asp , or to the Program Botanist or Senior Zoologist.

Observations

The MTNHP manages information on more than 1.8 million animal and plant observations that have been reported by professional biologists and private citizens from across Montana. The majority of these observations are submitted in digital format from standardized databases associated with research or monitoring efforts and spreadsheets of incidental observations submitted by professional biologists and amateur naturalists. At a minimum, accepted observation records must contain a credible species identification (i.e. appropriate geographic range, date, and habitat and, if species are difficult to identify, a photograph and notes on key identifying features), a date or date range, observer name, locational information (ideally with latitude and longitude in decimal degrees), notes on numbers observed, and species behavior or habitat use (e.g., is the observation likely associated with reproduction). Bird records are also required to have information associated with date-appropriate breeding or overwintering status of the species observed. MTNHP reviews observation records to ensure that they are mapped correctly, occur within date ranges when the species is known to be present or detectable, occur within the known seasonal geographic range of the species, and occur in appropriate habitats. MTNHP also assigns each record a locational uncertainty value in meters to indicate the spatial precision associated with the record's mapped coordinates. Only records with locational uncertainty values of 10,000 meters or less are included in environmental summary reports and number summaries are only provided for records with locational uncertainty values of 1,000 meters or less.

Species Occurrences

The MTNHP evaluates plant and animal observation records for species of higher conservation concern to determine whether they are worthy of inclusion in the Species Occurrence (SO) layer for use in environmental reviews; observations not worthy of inclusion in this layer include long distance dispersal events, migrants observed away from key migratory stopover habitats, and winter observations. An SO is a polygon depicting what is known about a species occupancy from direct observation with a defined level of locational uncertainty and any inference that can be made about adjacent habitat use from the latest peer-reviewed science. If an observation can be associated with a map feature that can be tracked (e.g., a wetland boundary for a wetland associated plant) then this polygon feature is used to represent the SO. Areas that can be inferred as probable occupied habitat based on direct observation of a species location and what is known about the foraging area or home range size of the species may be incorporated into the SO. Species Occurrences generally belong to one of the following categories:

Plant Species Occurrences

A documented location of a specimen collection or observed plant population. In some instances, adjacent, spatially separated clusters are considered subpopulations and are grouped as one occurrence (e.g., the subpopulations occur in ecologically similar habitats, and their spatial proximity likely allows them to interbreed). Tabular information for multiple observations at the same SO location is generally linked to a single polygon. Plant SO's are only created for Species of Concern and Potential Species of Concern.

Animal Species Occurrences

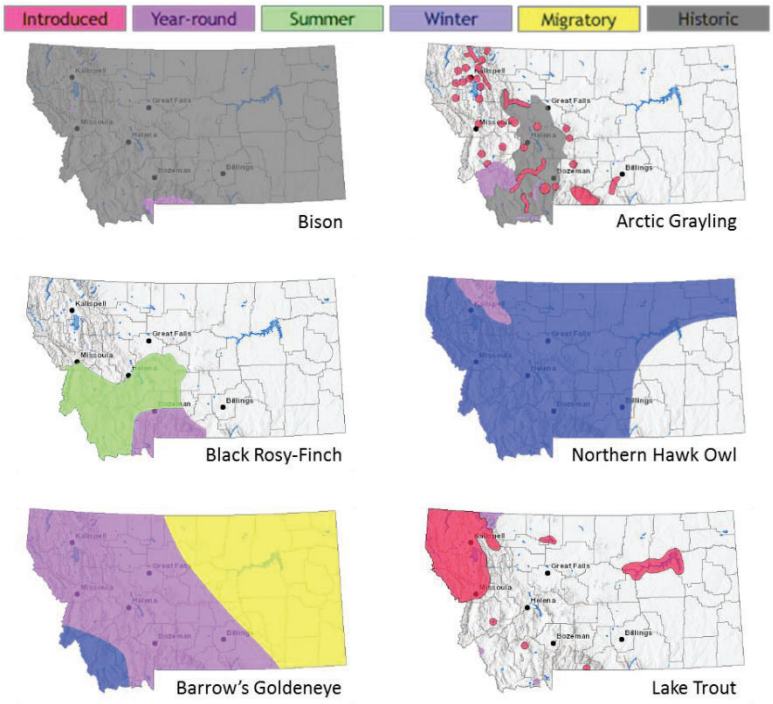
The location of a verified observation or specimen record typically known or assumed to represent a breeding population or a portion of a breeding population. Animal SO's are generally: (1) buffers of terrestrial point observations based on documented species' home range sizes; (2) buffers of stream segments to encompass occupied streams and immediate adjacent riparian habitats; (3) polygonal features encompassing known or likely breeding populations (e.g., a wetland for some amphibians or a forested portion of a mountain range for some wide ranging carnivores); or (4) combinations of the above. Tabular information for multiple observations at the same SO location is generally linked to a single polygon. Species Occurrence polygons may encompass some unsuitable habitat in some instances in order to avoid heavy data processing associated with clipping out habitats that are readily assessed as unsuitable by the data user (e.g., a point buffer of a terrestrial species may overlap into a portion of a lake that is obviously inappropriate habitat for the species). Animal SO's are only created for Species of Concern and Special Status Species (e.g., Bald Eagle).

Other Occurrence Polygons

These include significant biological features not included in the above categories, such as Important Animal Habitats like bird rookeries and bat roosts, and peatlands or other wetland and riparian communities that support diverse plant and animal communities.

Geographic Range Polygons

Geographic range polygons have not yet been defined for most plant species. Native year-round, summer, winter, migratory and historic geographic range polygons as well as polygons for introduced populations have been defined for most animal species for which there are enough observations, surveys, and knowledge of appropriate seasonal habitat use to define them (see examples to left). These native or introduced range polygons bound the extent of known or likely occupied habitats for non-migratory and relative sedentary species and the regular extent of known or likely occupied habitats for migratory and long-distance dispersing species; polygons may include unsuitable intervening habitats. For most species, a single polygon can represent the year-round or seasonal range, but breeding ranges of some colonial nesting water birds and some introduced species are represented more patchily when supported by data. Some ranges are mapped more broadly than actual distributions in order to be visible on statewide maps (e.g., fish).



Predicted Suitable Habitat Models

Recent predicted suitable habitat suitability models have not yet been created for most plant species. For animal species for which models have been completed, the environmental summary report includes simple, rule-based, associations with streams for fish and other aquatic species and mathematically complex Maximum Entropy models (Phillips et al. 2006, Ecological Modeling 190:231-259) constructed from a variety of statewide biotic and abiotic layers and presence only data for individual species contributed to Montana Natural Heritage Program databases for most terrestrial species. For the Maximum Entropy models, we reclassified 90 x 90-meter continuous model output into suitability classes (unsuitable, low, moderate, and optimal) then aggregated that into the one square mile hexagons used in the environmental summary report; this is the finest spatial scale we suggest using this information in management decisions and survey planning. Full model write ups for individual species that discuss model goals, inputs, outputs, and evaluation in much greater detail are posted on the MTNHP's Predicted Suitable Habitat Models page. Evaluations of predictive accuracy and specific limitations are included with the metadata for models of individual species. **Model outputs should not be used in place of on-the-ground surveys for species. Instead model outputs should be used in conjunction with habitat evaluations to determine the need for on-the-ground surveys for species.** We suggest that the percentage of predicted optimal and moderate suitable habitat within the report area be used in conjunction with geographic range polygons and the percentage of commonly associated habitats to generate lists of potential species that may occupy broader landscapes for the purposes of landscape-level planning.

Associated Habitats

Within the boundary of the intersected hexagons, we provide the approximate percentage of commonly or occasionally associated habitat for vertebrate animal species that regularly breed, overwinter, or migrate through the state; a detailed list of commonly and occasionally associated habitats is provided in individual species accounts in the Montana Field Guide. We assigned common or occasional use of each of the 82 ecological systems mapped in Montana by: (1) using personal knowledge and reviewing literature that

summarizes the breeding, overwintering, or migratory habitat requirements of each species; (2) evaluating structural characteristics and distribution of each ecological system relative to the species' range and habitat requirements; (3) examining the observation records for each species in the state-wide point observation database associated with each ecological system; and (4) calculating the percentage of observations associated with each ecological system relative to the percent of Montana covered by each ecological system to get a measure of numbers of observations versus availability of habitat. Species that breed in Montana were only evaluated for breeding habitat use, species that only overwinter in Montana were only evaluated for overwintering habitat use, and species that only migrate through Montana were only evaluated for migratory habitat use. In general, species were listed as associated with an ecological system if structural characteristics of used habitat documented in the literature were present in the ecological system or large numbers of point observations were associated with the ecological system. However, species were not listed as associated with an ecological system if there was no support in the literature for use of structural characteristics in an ecological system, even if point observations were associated with that system. Common versus occasional association with an ecological system was assigned based on the degree to which the structural characteristics of an ecological system matched the preferred structural habitat characteristics for each species as represented in the scientific literature. The percentage of observations associated with each ecological system relative to the percent of Montana covered by each ecological system was also used to guide assignment of common versus occasional association.

We suggest that the percentage of commonly associated habitat within the report area be used in conjunction with geographic range polygons and the percentage of predicted optimal and moderate suitable habitat from predictive models to generate lists of potential species that may occupy broader landscapes for the purposes of landscape-level planning. Users of this information should be aware that land cover mapping accuracy is particularly problematic when the systems occur as small patches or where the land cover types have been altered over the past decade. Thus, particular caution should be used when using the associations in assessments of smaller areas (e.g., evaluations of public land survey sections).

Introduction to Land Cover

Land Use/Land Cover is one of 15 Montana Spatial Data Infrastructure framework layers considered vital for making statewide maps of Montana and understanding its geography. The layer records all Montana natural vegetation, land cover and land use, classified from satellite and aerial imagery, mapped at a scale of 1:100000, and interpreted with supporting ground-level data. The baseline map is adapted from the Northwest ReGAP (NWGAP) project land cover classification, which used 30m resolution multi-spectral Landsat imagery acquired between 1999 and 2001. Vegetation classes were drawn from the Ecological System Classification developed by NatureServe (Comer et al. 2003). The land cover classes were developed by Anderson et al. (1976). The NWGAP effort encompasses 12 map zones. Montana overlaps seven of these zones. The two NWGAP teams responsible for the initial land cover mapping effort in Montana were Sanborn and NWGAP at the University of Idaho. Both Sanborn and NWGAP employed a similar modeling approach in which Classification and Regression Tree (CART) models were applied to Landsat ETM+ scenes. The Spatial Analysis Lab within the Montana Natural Heritage Program was responsible for developing a seamless Montana land cover map with a consistent statewide legend from these two separate products. Additionally, the Montana land cover layer incorporates several other land cover and land use products (e.g., MSDI Structures and Transportation themes and the Montana Department of Revenue Final Land Unit classification) and reclassifications based on plot-level data and the latest NAIP imagery to improve accuracy and enhance the usability of the theme. Updates are done as partner support and funding allow, or when other MSDI datasets can be incorporated. Recent updates include fire perimeters and agricultural land use (annually), energy developments such as wind, oil and gas installations (2014), roads, structures and other impervious surfaces (various years): and local updates/improvements to specific ecological systems (e.g., central Montana grassland and sagebrush ecosystems). Current and previous versions of the Land Use/Land Cover layer with full metadata are available for download at the Montana State Library's Geographic Information Clearinghouse.

Within the report area you have requested, land cover is summarized by acres of Level 1, Level 2, and Level 3 Ecological Systems.

Literature Cited

Anderson, J.R. E.E. Hardy, J.T. Roach, and R.E. Witmer. 1976. A land use and land cover classification system for use with remote sensor data. U.S. Geological Survey Professional Paper 964.

Comer, P., D. Faber-Langendoen, R. Evans, S. Gawler, C. Josse, G. Kittel, S. Menard, M. Pyne, M. Reid, K. Schulz, K. Snow, and J. Teague. 2003. Ecological systems of the United States: A working classification of U.S. terrestrial systems. NatureServe, Arlington, VA.

Introduction to Wetland and Riparian

Within the report area you have requested, wetland and riparian mapping is summarized by acres of each classification present. Summaries are only provided for modern MTNHP wetland and riparian mapping and not for outdated (NWI Legacy) or incomplete (NWI Scalable) mapping efforts; described here. MTNHP has made all three of these datasets and associated metadata available for separate download on the Montana Wetland and Riparian Framework MSDI download page.

Wetland and Riparian mapping is one of 15 Montana Spatial Data Infrastructure framework layers considered vital for making statewide maps of Montana and understanding its geography. The wetland and riparian framework layer consists of spatial data representing the extent, type, and approximate location of wetlands, riparian areas, and deepwater habitats in Montana.

Wetland and riparian mapping is completed through photointerpretation of 1-m resolution color infrared aerial imagery acquired from 2005 or later. A coding convention using letters and numbers is assigned to each mapped wetland. These letters and numbers describe the broad landscape context of the wetland, its vegetation type, its water regime, and the kind of alterations that may have occurred. Ancillary data layers such as topographic maps, digital elevation models, soils data, and other aerial imagery sources are also used to improve mapping accuracy. Wetland mapping follows the federal Wetland Mapping Standard and classifies wetlands according to the Cowardin classification system of the National Wetlands Inventory (NWI) (Cowardin et al. 1979, FGDC Wetlands Subcommittee 2013). Federal, State, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands differently than the NWI. Similar coding, based on U.S. Fish and Wildlife Service conventions, is applied to riparian areas (U.S. Fish and Wildlife Service 2009). These are mapped areas where vegetation composition and growth is influenced by nearby water bodies, but where soils, plant communities, and hydrology do not display true wetland characteristics. **These data are intended for use in publications at a scale of 1:12,000 or smaller. Mapped wetland and riparian areas do not represent precise boundaries and digital wetland data cannot substitute for an on-site determination of jurisdictional wetlands.**

A detailed overview, with examples, of both wetland and riparian classification systems and associated codes can be found at: http://mtnhp.org/help/MapViewer/WetRip_Classification.asp

Literature Cited

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service, FWS/OBS-79/31. Washington, D.C. 103pp.

Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, D.C.

U.S. Fish and Wildlife Services. 2009. A system for mapping riparian areas in the western United States. Division of Habitat and Resource Conservation, Branch of Resource and Mapping Support, Arlington, Virginia.

Introduction to Land Management

Within the report area you have requested, land management information is summarized by acres of federal, state, and local government lands, tribal reservation boundaries, private conservation lands, and federal, state, local, and private conservation easements. Acreage for "Owned", "Tribal", or "Easement" categories represents non-overlapping areas that may be totaled. However, "Other Boundaries" represents managed areas such as National Forest boundaries containing private inholdings and other mixed ownership which may cause boundaries to overlap (e.g. a wilderness area within a forest). Therefore, acreages may not total in a straight-forward manner.

Because information on land stewardship is critical to effective land management, the Montana Natural Heritage Program (MTNHP) began compiling ownership and management data in 1997. The goal of the Montana Land Management Database is to manage a single, statewide digital data set that incorporates information from both public and private entities. The database assembles information on public lands, private conservation lands, and conservation easements held by state and federal agencies and land trusts and is updated on a regular basis. Since 2011, the Information Management group in the Montana State Library's Digital Library Division has taken an increasingly active role in managing layers of the Montana Land Management Database in partnership with the MTNHP.

Public and private conservation land polygons are attributed with the name of the entity that owns it. The data are derived from the statewide Montana Cadastral Parcel layer. Conservation easement data shows land parcels on which a public agency or qualified land trust has placed a conservation easement in cooperation with the land owner. The dataset contains no information about ownership or status of the mineral estate. For questions about the dataset or to report errors, please contact the Montana Natural Heritage Program at (406) 444-5363 or mtnhp@mt.gov. You can download various components of the Land Management Database and view associated metadata at the Montana State Library's GIS Data List at the following links:

Public Lands
Conservation Easements
Private Conservation Lands
Managed Areas

Map features in the Montana Land Management Database or summaries provided in this report are not intended as a legal depiction of public or private surface land ownership boundaries and should not be used in place of a survey conducted by a licensed land surveyor. Similarly, map features do not imply public access to any lands. The Montana Natural Heritage Program makes no representations or warranties whatsoever with respect to the accuracy or completeness of this data and assumes no responsibility for the suitability of the data for a particular purpose. The Montana Natural Heritage Program will not be liable for any damages incurred as a result of errors displayed here. Consumers of this information should review or consult the primary data and information sources to ascertain the viability of the information for their purposes.

Introduction to Invasive and Pest Species

Within the report area you have requested, separate summaries are provided for: Aquatic Invasive Species, Noxious Weeds, Agricultural Pests, and Forest Pests that have been documented or potentially occur there based on their known distribution in the state. Definitions for each of these invasive and pest species categories can be found on our Species Status Codes page.

Each of these summaries provides the following information when present for a species: (1) the number of observations of each species; (2) the geographic range polygons for each species, if developed, that the report area overlaps; (3) predicted relative habitat suitability classes that are present if a predicted suitable habitat model has been created; (4) the percent of the report area that is mapped as commonly associated or occasionally associated habitat as listed for each species in the Montana Field Guide; and (5) and links to species accounts in the Montana Field Guide. Details on each of these information categories are included under relevant section headers under the Introduction to Native Species above or are defined on our Species Status Codes page. In presenting this information, the Montana Natural Heritage Program (MTNHP) is working towards assisting the user with rapidly determining what invasive and pest species have been documented and what species are potentially present in the report area. We remind users that this information is likely incomplete as surveys to document introduced species are lacking in many areas of the state, information on introduced species has only been tracked relatively recently, the MTNHP's staff and resources are restricted by declining budgets, and information is constantly being added and updated in our databases. **Thus, field verification by professional biologists of the absence or presence of species will always be an important obligation of users of our data.**

If you are aware of observation or survey datasets for invasive or pest species that the MTNHP is missing, please report them to the Program Coordinator bmaxell@mt.gov Program Botanist apipp@mt.gov or Senior Zoologist dbachen@mt.gov. If you have observations that you would like to contribute, you can submit animal observations using our online data entry system at http://mtnhp.org/AddObs/, plant and animal observations via Excel spreadsheets posted at http://mtnhp.org/observations.asp , or to the Program Botanist or Senior Zoologist.

Additional Information Resources

Home Page for Montana Natural Heritage Program (MTNHP)

MTNHP Staff Contact Information

Montana Field Guide

MTNHP Species of Concern Report - Animals and Plants

MTNHP Species Status Codes - Explanation

MTNHP Predicted Suitable Habitat Models (for select Animals and Plants)

MTNHP Request Information page

Montana Cadastral

Montana Code Annotated

Montana Department of Environmental Quality

Montana Fisheries Information System

Montana Fish, Wildlife, and Parks Subdivision Recommendations

Montana GIS Data Layers

Montana GIS Data Bundler

Montana Greater Sage-Grouse Project Submittal Site

Montana Ground Water Information Center

Montana Legislative Environmental Policy Office Publications
(Including Index of Environmental Permits required in Montana and Guide to the Montana Environmental Policy Act)

Montana Environmental Policy Act (MEPA)

MEPA Analysis Resource List

Laws, Treaties, Regulations, and Permits on Animals and Plants

Montana Spatial Data Infrastructure Layers

Montana State Historic Preservation Office Review and Compliance

Montana Water Information System

Montana Web Map Services

National Environmental Policy Act

Penalties for Misuse of Fish and Wildlife Location Data (MCA 87-6-222)

U.S. Fish and Wildlife Service Information for Planning and Conservation (Section 7 Consultation)

Web Soil Survey Tool

APPENDIX F
Agency Correspondence

AGENCY LETTERS

Company	Department	Address	City	State	Zip	Response
Spectrum	New Construction	951 W. Custer Ave	Helena	MT	59602	
Qwest (Century Link)	Brent Bushell	P.O. Box 1716	Helena	MT	59624	
NorthWestern Energy	New Construction	P.O. Box 5329	Helena	MT	59604	
Helena Post Office	Post Master	2300 N. Harrison St.	Helena	MT	59601	
Helena Public Schools	Dr. Tyler Ream, Superintendent	55 S. Rodney St.	Helena	MT	59601	
City of Helena Solid Waste & Transfer	Pete Anderson	1975 N. Benton Ave	Helena	MT	59601	
Helena Valley Irrigation District	Jim Foster	3840 N. Montana Ave	Helena	MT	59602	
Helena Regional Airport	Jeff Wadenkemper, Dirctor	2850 Mercer Loop	Helena	MT	59602	
Helena Citizen's Council		316 N. Park Ave	Helena	MT	59601	
City of Helena Non Motorized Transportation Advisory Committee		316 N. Park Ave	Helena	MT	59623	
ADA Compliance Committee		316 Park Ave	Helena	MT	59623	
City-County Heritage Tourism Council	Pam Attardo	316 Park Ave	Helena	MT	59623	
St. Peter's Hospital & Ambulance Service		2475 E. Broadway St.	Helena	MT	59601	
Lewis & Clark Sheriff's Office		221 Brenkenridge	Helena	MT	59601	
Lewis & Clark County Staff & Commissioners	City-County Building	316 N. Park Ave	Helena	MT	59623	
Lewis & Clark Water Quality Protection District	City-County Building Rm. 412	316 N. Park Ave	Helena	MT	59623	
Lewis & Clark Conservation District-Soil Conservatio	Chris Evans	790 Colleen St.	Helena	MT	59601	
Yellowstone Pipeline Co.		3180 U.S. Highway 12 E.	Helena	MT	59601	
Montana Fish, Wildlife & Parks	Gayle Joslin	1420 E. Sixth St./P.O. Box 200701	Helena	MT	59620	
Fort Harrison	Public Affairs	1956 Mt. Majo P.O. Box 4789	Fort Harrison	MT	59636-4789	
Jefferson County	Planning Department	P.O. Box H	Boulder	MT	59632	
Montana DEQ	Permitting & Compliance Division	P.O. Box 200901	Helena	MT	59620-0901	
Montana DNRC		P.O. Box 201601	Helena	MT	59620-1601	
MDT		P.O. Box 201001	Helena	MT	59620-1001	
Montana Land Reliance		324 Fuller Ave #2	Helena	MT	59601	
Montana Natural Heritage Program		1515 E 6th Ave	Helena	MT	59620	
Department of Commerce	Census & Economic Information Center	P.O. Box 200505	Helena	MT	59620-0505	
USGS Water Resources Division		3162 Bozeman Ave	Helena	MT	59601	
State Historic Preservation Office	Email request 8-26-2020	P.O. Box 201202	Helena	MT	59620-1202	
Bureau of Land Management		5001 Southgate Dr.	Billings	MT	59101	
Federal Aviation Administration		2725 Skyway Dr.	Helena	MT	59602	
National Resource Conservation Service		10 E. Babcock St	Bozeman	MT	59771	
US Army Corps of Engineers		10 W. 15th St. Ste 2200	Helena	MT	59626	
US Department of Transporation		585 Shephard Way	Helena	MT	59601	
US Environmental Protection Agency	Montana Office Federal Building	10 W. 15th St. Ste 3200	Helena	MT	59625	
US Fish & Wildlife Services	Ecological Services	585 Shephard Way	Helena	MT	59601	
US Forest Service	Region 1	26 Fort Missoula Rd	Missoula	MT	59804	

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Spectrum
New Construction
951 W. Custer Ave
Helena, MT 59602

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Qwest (Century Link)
Brent Bushell
P.O. Box 1716
Helena, MT 59624

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

NorthWestern Energy
New Construction
P.O. Box 5329
Helena, MT 59604

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Helena Post Office
Post Master
2300 N. Harrison St.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Helena Public Schools
Dr. Tyler Ream, Superintendent
55 S. Rodney St.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Dr. Tyler Ream:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

City of Helena Solid Waste & Transfer
Pete Anderson
1975 N. Benton Ave
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Mr. Anderson:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Helena Valley Irrigation District
Jim Foster
3840 N. Montana Ave
Helena, MT 59602

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Mr. Foster:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Helena Regional Airport
Jeff Wadenkemper, Dirctor
2850 Mercer Loop
Helena, MT 59602

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Mr. Wadenkemper:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Helena Citizen's Council
316 N. Park Ave
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

City of Helena Non Motorized Transportation Advisory Committee
316 N. Park Ave
Helena, MT 59623

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

ADA Compliance Committee
316 Park Ave
Helena, MT 59623

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

City-County Heritage Tourism Council
Pam Attardo
316 Park Ave
Helena, MT 59623

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Ms. Attardo:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

St. Peter's Hospital & Ambulance Service
2475 E. Broadway St.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Lewis & Clark Sheriff's Office
221 Brenkenridge
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Lewis & Clark County Staff & Commissioners
City-County Building
316 N. Park Ave
Helena, MT 59623

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Lewis & Clark Water Quality Protection District
City-County Building Rm. 412
316 N. Park Ave
Helena, MT 59623

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Lewis & Clark Conservation District-Soil Conservation
Chris Evans
790 Colleen St.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Chris:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Yellowstone Pipeline Co.
3180 U.S. Highway 12 E.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Montana Fish, Wildlife & Parks
Gayle Joslin
1420 E. Sixth St./P.O. Box 200701
Helena, MT 59620

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Gayle Joslin:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Fort Harrison
Public Affairs
1956 Mt. Majo P.O. Box 4789
Fort Harrison, MT 59636-4789

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Jefferson County
Planning Department
P.O. Box H
Boulder, MT 59632

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Montana DEQ
Permitting & Compliance Division
P.O. Box 200901
Helena, MT 59620-0901

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Montana DNRC
P.O. Box 201601
Helena, MT 59620-1601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

MDT
P.O. Box 201001
Helena, MT 59620-1001

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Montana Land Reliance
324 Fuller Ave #2
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Montana Natural Heritage Program
1515 E 6th Ave
Helena, MT 59620

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Department of Commerce
Census & Economic Information Center
P.O. Box 200505
Helena, MT 59620-0505

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

USGS Water Resources Division
3162 Bozeman Ave
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Bureau of Land Management
5001 Southgate Dr.
Billings, MT 59101

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Federal Aviation Administration
2725 Skyway Dr.
Helena, MT 59602

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

National Resource Conservation Service
10 E. Babcock St
Bozeman, MT 59771

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

US Army Corps of Engineers
10 W. 15th St. Ste 2200
Helena, MT 59626

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

US Department of Transporation
585 Shephard Way
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

US Environmental Protection Agency
Montana Office Federal Building
10 W. 15th St. Ste 3200
Helena, MT 59625

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

US Fish & Wildlife Services
Ecological Services
585 Shephard Way
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

US Forest Service
Region 1
26 Fort Missoula Rd
Missoula, MT 59804

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

AGENCY REPONSES

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
HELENA REGULATORY OFFICE
10 WEST 15TH STREET, SUITE 2200
HELENA, MONTANA 59626

REPLY TO
ATTENTION OF

September 22, 2020

Regulatory Branch
Montana State Program
Corps No. **NWO-2020-01646-MTH**

Subject: Eco Development, Inc. (WWC Engineering) Develop West Side Subdivision - Unnamed Waterway

Jeremy Fadness
WWC Engineering
1275 Maple Street, Suite F
Helena, Montana 59601

Dear Mr. Fadness:

We are responding to your request regarding the above-referenced project. Specifically, you are proposing to develop 103 single family residential lots, Condo lots and 5 open space lots. Will incorporate natural or landscape features with storm water detention ponds to control storm runoff from the site as well as a bike and pedestrian trails. The project is located at Latitude 46.60467°, Longitude -112.0794°, within Section 23, Township 10 N, Range 4 W, Meridian, Lewis and Clark County, Montana.

The mission of the U.S. Army Corps of Engineers (Corps) Regulatory Program is to protect the Nation's aquatic resources while allowing reasonable development through fair, flexible and balanced permit decisions. In particular, under Section 404 of the Clean Water Act, we work to protect the biological, physical, and chemical integrity of the Nation's aquatic resources. Projects are evaluated on a case-by-case basis to determine the potential benefits and detriments that may occur as a result of the proposal. In all cases an applicant must avoid and minimize impacts to aquatic resources to the greatest extent practicable.

Under the authority of Section 404 of the Clean Water Act (CWA), DA permits are required for the discharge of fill material into waters of the U.S. Waters of the U.S. include the area below the ordinary high water mark of stream channels and lakes or ponds connected to the tributary system, and wetlands adjacent to these waters. Isolated waters and wetlands, as well as man-made channels, may be waters of the U.S. in certain circumstances, which must be determined on a case-by-case basis.

Based on the information provided in your submittal, we are unable to ascertain if regulated activities are proposed or if jurisdictional waters of the U.S. are present within the project area. If your final design includes the placement of fill material in any jurisdictional area described above, or otherwise requires authorization by a DA permit,

please submit an Approved Jurisdictional Determination Request (AJD) to this office prior to starting any work. After a review of the materials submitted we will determine what type of permit, if any, will be required.

Note that this letter is not a DA authorization to proceed. It only informs you of your need to obtain a DA permit if waters of the U.S. will be affected. If waters of the U.S. will not be affected by a jurisdictional activity a DA permit will not be required for the project.

Please refer to identification number NWO-2020-01646-MTH in any correspondence concerning this project. If you have any questions, please contact Timothy McNew at Helena Regulatory Office 10 West 15 Street, Suite 2200 Helena, Montana 59626, by email at Timothy.M.McNew@usace.army.mil, or telephone at (406) 441-1378.

Sincerely,

MCNEW.TIMOTHY.M.1282229745

Digitally signed by MCNEW.TIMOTHY.M.1282229745
Date: 2020.09.22 09:48:42 -06'00'

Timothy M. McNew
Senior Regulatory Project Manager

Enclosures:

Approved Jurisdictional Request Form

Marina Hagenbuch

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Wednesday, August 26, 2020 3:52 PM
To: Jeremy Fadness
Cc: Marina Hagenbuch
Subject: RE: West Side Subdivision File Search
Attachments: Reports.pdf; Sites.pdf; 2020082605.pdf

Big Sky. Big Land. Big History.
Montana
Historical Society

August 26, 2020

Jeremy Fadness
WWC Engineering
1275 Maple Street, Suite F
Helena MT 59601

RE: WEST SIDE SUBDIVISION, HELENA SHPO Project #: 2020082605

Dear Mr. Fadness:

I have conducted a cultural resource file search for the above-cited project located in Sections 23, 26, T10N R4W. According to our records there have been a few previously recorded sites within the designated search locales. In addition to the sites there have been a few previously conducted cultural resource inventories done in the areas. I've attached a list of these sites and reports. If you would like any further information regarding these sites or reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

As long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project, we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

Marina Hagenbuch

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Thursday, August 27, 2020 4:26 PM
To: Jeremy Fadness
Cc: Marina Hagenbuch
Subject: RE: West Side Subdivision File Search

Hi Jeremy,

I am not able to provide copies of information on sites and reports to those who do not meet the Secretary of Interior Standards for Archaeology and Historic Preservation. This information is confidential under the National Historic Preservation Act, and the Montana State Antiquities Act.
However, I am able to answer whether or not a particular site or inventory report is within your proposed project area. None of the sites that are on this list are within the proposed subdivision area, but most of them aren't confidential either. I've explained a few of them.
24LC0789 is the old Western Clay Brickworks(Archie Bray).
24LC0794 and 24LC1255 are a couple of Appleton Houses East of Kessler School.
24LC1293 is the Mount Helena Historic District, which encompasses the Mount Helena City park. 24LC1771 which was a historic water supply main that ran South of Le Grande Cannon Blvd. This wood-stave system was converted to pipe and buried sometime in the 60's.
24LC1258 is the old Helena to Deer Lodge Stage Road, which came from out by the fort and up Country Club Avenue and into town.

None of the inventory reports are within your project area either.
Report XX 6 25362 is an Archaeology in Montana Article.
Report LC 6 28063 was done for a proposed subdivision located between the Fort and Archie Bray. This area has since been donated to PPLT and consists of their Tenmile Creek Park.
Report LC 6 37669 was done for the City of Helena and FEMA for fuels reduction on Mount Helena and the South Hills.

Please let me know if you have further questions.

Thanks,

From: Jeremy Fadness <jfadness@wwcengineering.com>
Sent: Wednesday, August 26, 2020 4:05 PM
To: Murdo, Damon <dmurdo@mt.gov>
Cc: Marina Hagenbuch <mhagenbuch@wwcengineering.com>
Subject: [EXTERNAL] RE: West Side Subdivision File Search

Damon,

Can we get more info on the sites highlighted in the attached pdf? Also can we get the highlighted reports?

Thanks
Jeremy

WWC ENGINEERING
Jeremy Fadness, P.E., AICP
Project Manager / Senior Planner
1275 Maple Street, Suite F | Helena, MT 59601
Tel 406-443-3962
Cell 406-439-0069
www.WWCengineering.com [wwcengineering.com]

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Wednesday, August 26, 2020 3:52 PM
To: Jeremy Fadness <jfadness@wwcengineering.com>
Cc: Marina Hagenbuch <mhagenbuch@wwcengineering.com>
Subject: RE: West Side Subdivision File Search

Big Sky. Big Land. Big History.
Montana
Historical Society

August 26, 2020

Jeremy Fadness
WWC Engineering
1275 Maple Street, Suite F
Helena MT 59601

RE: WEST SIDE SUBDIVISION, HELENA SHPO Project #: 2020082605

Dear Mr. Fadness:

I have conducted a cultural resource file search for the above-cited project located in Sections 23, 26, T10N R4W. According to our records there have been a few previously recorded sites within the designated search locales. In addition to the sites there have been a few previously conducted cultural resource inventories done in the areas. I've attached a list of these sites and reports. If you would like any further information regarding these sites or reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

As long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project, we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: LOCAL/SUBDIVISIONS/2020

STATE HISTORIC PRESERVATION OFFICE
Montana Cultural Resource Database
CRABS Township,Range,Section Results
Report Date:8/26/2020

Township:10 N Range:4 W Section: 23

SCHWAB DAVID C.

5/1/1986 HELENA SAND & GRAVEL

CRABS Document Number: LC 5 4548 Agency Document Number:

Township:10 N Range:4 W Section: 26

MALOUF CARLING I.

1/1/1950 THE ARCHAEOLOGY OF THE CANYON FERRY REGION, MONTANA

CRABS Document Number: BW 6 13739 Agency Document Number: ANTH AND SOC PAPERS #11

Township:10 N Range:4 W Section: 23

PASSMANN DORI

3/19/1999 SPRING MEADOW LAKE SEWER LINE AND ROAD PROJECT

CRABS Document Number: LC 6 22015 Agency Document Number:

Township:10 N Range:4 W Section: 23

AXLINE JON A.

2/26/2002 BRADY STREET/JOSLYN STREET - HELENA - LEWIS AND CLARK COUNTY, MONTANA

CRABS Document Number: LC 4 24428 Agency Document Number: CM5899(20)

Township:10 N Range:4 W Section: 26

RENNIE PATRICK J.

1/1/2001 THE INTERPRETIVE VALUE OF FIRE-CRACKED ROCK

CRABS Document Number: XX 6 25362 Agency Document Number: AIM 42 (1): 65-90

Township:10 N Range:4 W Section: 23

AXLINE JON

9/9/2003 CULTURAL RESOURCE INVENTORY OF THE PEDESTRIAN TUNNEL, HELENA, IN LEWIS AND CLARK COUNTY MONTANA

CRABS Document Number: LC 4 26326 Agency Document Number: NH8-2(58)41

Township:10 N Range:4 W Section: 23

ROSSILLON MITZI AND MARY MCCORMICK

4/7/2005 CULTURAL RESOURCES INVENTORY OF SPRING MEADOW LAKE SITE, LEWIS AND CLARK COUNTY, MONTANA

CRABS Document Number: LC 6 27831 Agency Document Number:

Township:10 N Range:4 W Section: 23

FERGUSON DAVID

8/16/2005 CLASS III CULTURAL RESOURCE INVENTORY OF THE PROPOSED ARTISAN MAJOR SUBDIVISION, LEWIS AND CLARK COUNTY, MONTANA

CRABS Document Number: LC 6 28063 Agency Document Number:

Township:10 N Range:4 W Section: 23

WOOD GARVEY C.

11/1/2007 WEST HELENA FAIRGROUNDS CELL TOWER

CRABS Document Number: LC 6 32523 Agency Document Number:

Township:10 N Range:4 W Section: 26

O'BOYLE ROBERT C.

1/1/2000 CULTURAL RESOURCE MANAGEMENT REPORT FEMA PDM PROJECT, HELENA OPEN LANDS FUEL REDUCTION 2010

CRABS Document Number: LC 6 37669 Agency Document Number:

Township:10 N Range:4 W Section: 23

ROSSILLON MITZI

5/18/2015 GEORGE PROPERTY, SPRING MEADOW, HELENA, MONTANA: OWNER/OPERATOR AND CULTURAL RESOURCE REPORT

CRABS Document Number: LC 5 37820 Agency Document Number:

STATE HISTORIC PRESERVATION OFFICE
Cultural Resource Information Systems

CRIS Township, Range, Section Report

Report Date:8/26/2020

Site #	Twp	Rng	Sec	Qs	Site Type 1	Site Type 2	Time Period	Owner	NR Status
24LC0140	10N	4W	26		Rock Shelter or Cave		No Data	No Data	Undetermined*
24LC0789	10N	4W	23		Historic Architecture		Historic More Than One Decade	Private	NR Listed
24LC0794	10N	4W	23		Historic Architecture		1890-1899	Private	NR Listed
24LC1139	10N	4W	23	NE	Historic Railroad		Historic More Than One Decade	Other	Eligible
24LC1255	10N	4W	23	SE	Historic Residence		1890-1899	Private	NR Listed
24LC1273	10N	4W	23	SW	Historic Industrial Development		Historic More Than One Decade	State Owned	NR Listed
24LC1292	10N	4W	23	SW	Historic Railroad		1910-1919	Private	Eligible
24LC1293	10N	4W	26	NE	Historic District		Historic More Than One Decade	Other	NR Listed
24LC1771	10N	4W	26	Comb	Historic Irrigation System		1940-1949	Private	Undetermined*
24LC1972	10N	4W	23	SW	Historic Trash Dump		Historic More Than One Decade	State Owned	Ineligible
24LC1258	10N	4W	23		Historic Road/Trail		Historic Period	State Owned	Unresolved
24LC1258	10N	4W	23	Comb	Historic Road/Trail		Historic Period	State Owned	Unresolved

Jeremy Fadness

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Thursday, August 27, 2020 4:26 PM
To: Jeremy Fadness
Cc: Marina Hagenbuch
Subject: RE: West Side Subdivision File Search

Hi Jeremy,

I am not able to provide copies of information on sites and reports to those who do not meet the Secretary of Interior Standards for Archaeology and Historic Preservation. This information is confidential under the National Historic Preservation Act, and the Montana State Antiquities Act.
However, I am able to answer whether or not a particular site or inventory report is within your proposed project area. None of the sites that are on this list are within the proposed subdivision area, but most of them aren't confidential either. I've explained a few of them.
24LC0789 is the old Western Clay Brickworks(Archie Bray).
24LC0794 and 24LC1255 are a couple of Appleton Houses East of Kessler School.
24LC1293 is the Mount Helena Historic District, which encompasses the Mount Helena City park. 24LC1771 which was a historic water supply main that ran South of Le Grande Cannon Blvd. This wood-stave system was converted to pipe and buried sometime in the 60's.
24LC1258 is the old Helena to Deer Lodge Stage Road, which came from out by the fort and up Country Club Avenue and into town.

None of the inventory reports are within your project area either.
Report XX 6 25362 is an Archaeology in Montana Article.
Report LC 6 28063 was done for a proposed subdivision located between the Fort and Archie Bray. This area has since been donated to PPLT and consists of their Tenmile Creek Park.
Report LC 6 37669 was done for the City of Helena and FEMA for fuels reduction on Mount Helena and the South Hills.

Please let me know if you have further questions.

Thanks,

From: Jeremy Fadness <jfadness@wwcengineering.com>
Sent: Wednesday, August 26, 2020 4:05 PM
To: Murdo, Damon <dmurdo@mt.gov>
Cc: Marina Hagenbuch <mhagenbuch@wwcengineering.com>
Subject: [EXTERNAL] RE: West Side Subdivision File Search

Damon,

Can we get more info on the sites highlighted in the attached pdf? Also can we get the highlighted reports?

Thanks
Jeremy

WWC ENGINEERING
Jeremy Fadness, P.E., AICP
Project Manager / Senior Planner
1275 Maple Street, Suite F | Helena, MT 59601
Tel 406-443-3962
Cell 406-439-0069
www.WWCengineering.com [wwcengineering.com]

From: Murdo, Damon <dmurdo@mt.gov>
Sent: Wednesday, August 26, 2020 3:52 PM
To: Jeremy Fadness <jfadness@wwcengineering.com>
Cc: Marina Hagenbuch <mhagenbuch@wwcengineering.com>
Subject: RE: West Side Subdivision File Search

Big Sky. Big Land. Big History.
Montana
Historical Society

August 26, 2020

Jeremy Fadness
WWC Engineering
1275 Maple Street, Suite F
Helena MT 59601

RE: WEST SIDE SUBDIVISION, HELENA SHPO Project #: 2020082605

Dear Mr. Fadness:

I have conducted a cultural resource file search for the above-cited project located in Sections 23, 26, T10N R4W. According to our records there have been a few previously recorded sites within the designated search locales. In addition to the sites there have been a few previously conducted cultural resource inventories done in the areas. I've attached a list of these sites and reports. If you would like any further information regarding these sites or reports, you may contact me at the number listed below.

It is SHPO's position that any structure over fifty years of age is considered historic and is potentially eligible for listing on the National Register of Historic Places. If any structures are to be altered and are over fifty years old, we would recommend that they be recorded, and a determination of their eligibility be made prior to any disturbance taking place.

As long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural properties will be impacted. We, therefore, feel that a recommendation for a cultural resource inventory is unwarranted at this time. However, should structures need to be altered or if cultural materials be inadvertently discovered during this project, we would ask that our office be contacted, and the site investigated.

If you have any further questions or comments, you may contact me at (406) 444-7767 or by e-mail at dmurdo@mt.gov. I have attached an invoice for the file search. Thank you for consulting with us.

Sincerely,

Damon Murdo
Cultural Records Manager
State Historic Preservation Office

File: LOCAL/SUBDIVISIONS/2020

Marina Hagenbuch

From: Martin, Jacob <jacob_martin@fws.gov>
Sent: Monday, September 14, 2020 3:03 PM
To: Jeremy Fadness
Cc: Newlon, Karen R
Subject: West Side Subdivision-Helena
Attachments: 20200914_LTR_Bush_Fadness_WestSideSubdivisionHelena.pdf

Dear Mr. Fadness:

Thank you for your letter dated August 26, 2020, and received in this office on September 2, 2020, requesting U.S. Fish and Wildlife Service (Service) comments regarding the proposed residential development of a 59-acre property in Helena, Lewis and Clark County, Montana. The proposed development consists of 103 residential lots, 3 condo lots with 72 condo units, and 5 open space lots. Our comments are detailed in the attached letter. If you have further questions related to this letter, please do not hesitate to contact Karen Newlon at: karen_newlon@fws.gov or 406-449-5225, extension 209.

Sincerely,

Jacob M. (Jake) Martin
Assistant Field Supervisor
Montana Ecological Services Office
585 Shephard Way, Suite 1
Helena, Montana 59601
(406) 422-8524 (cell, preferred I'm teleworking)
(406) 449-5225x215 (office)
jacob_martin@fws.gov

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Montana Ecological Services Field Office
585 Shephard Way, Suite 1
Helena, Montana 59601–6287

In Reply Refer to:
File: M.29 Public
06E11000-2020-TA-0650; 06E11000-2020-CPA-0025

September 14, 2020

Jeremy Fadness
Project Manager
WWC Engineering
1275 Maple Street, Suite F
Helena, Montana 59601

Dear Mr. Fadness:

Thank you for your letter dated August 26, 2020, and received in this office on September 2, 2020, requesting U.S. Fish and Wildlife Service (Service) comments regarding the proposed residential development of a 59-acre property in Helena, Lewis and Clark County, Montana. The proposed development consists of 103 residential lots, 3 condo lots with 72 condo units, and 5 open space lots.

Our comments are prepared under the authority of, and in accordance with, the provisions of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), and the Endangered Species Act (16 U.S.C. 1531 et. seq.) (ESA). We offer the following comments for your consideration.

Threatened and Endangered Species

Threatened and endangered species that may be present in Lewis and Clark County include the threatened Canada lynx (*Lynx canadensis*), threatened grizzly bear (*Ursus arctos horribilis*), and proposed threatened North American wolverine (*Gulo gulo luscus*). Given the information described in your letter and the project's scope and location adjacent to existing residential development, we do not anticipate adverse effects to threatened, endangered, proposed, or candidate species or critical habitat to result from implementation of the proposed project.

This project should be re-analyzed if new information reveals effects of the action that may affect listed or proposed species or designated or proposed critical habitat in a manner or to an extent not considered; if the action is subsequently modified in a manner that causes an effect to

a listed or proposed species or designated or proposed critical habitat that was not considered; if the project will not be implemented as described in your letter, and/or if a new species is listed or critical habitat is designated that may be affected by this project.

Migratory Birds

The MBTA prohibits the purposeful taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted. If work is proposed to take place in migratory bird habitats that may result in take of migratory birds, their eggs, or active nests, the Service recommends that the project proponent take all practicable measures to avoid and minimize take, such as maintaining adequate buffers, to protect the birds until the young have fledged. Active nests may not be removed. The Service has developed, and continues to revise and develop, general and industry-specific conservation measures for avoiding and minimizing impacts to birds (https://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php). We recommend that the proposed project consider and incorporate these measures into project design, construction, and documentation as appropriate.

Bald and Golden Eagles

The Service is not aware of any occupied eagle nests within several miles of the proposed project area. However, we offer the following information, and the Service can provide technical assistance regarding avoidance of eagle nest disturbance should active nests occur in the project area. Eagles are protected from a variety of harmful actions via take prohibitions in both the MBTA[1] (16 U.S.C. 703-712) and the BGEPA.

The BGEPA, enacted in 1940 and amended several times, prohibits take of bald eagles and golden eagles, including their parts, nests, young or eggs, except where otherwise permitted pursuant to Federal regulations. Incidental take of eagles from actions such as electrocutions from power lines or wind turbine strikes are prohibited unless specifically authorized via an eagle incidental take permit from the Service. BGEPA provides penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof."

The BGEPA defines take to include the following actions: "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." The Service expanded this definition by

[1] On December 22, 2017, the Department of the Interior's (DOI) Office of the Solicitor Memorandum M-37050 titled The Migratory Bird Treaty Act Does Not Prohibit Incidental Take https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf) concludes that the MBTA's prohibitions on pursuing, hunting, taking, capturing, killing, or attempting to do the same apply only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs. The MBTA list of protected species includes bald and golden eagles, and the law has been an effective tool to pursue incidental take cases involving eagles. However, the primary law protecting eagles is the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S. Code § 668), since the bald eagle was delisted under the Endangered Species Act in 2007. Memorandum-37050 does not affect the ability of the Service to refer entities for prosecution that have violated the take prohibitions for eagles established by the BGEPA.

regulation to include the term "destroy" to ensure that "take" also encompasses destruction of eagle nests. Also the Service defined the term disturb which means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

The Service has developed guidance for the public regarding means to avoid take of bald and golden eagles:

- The 2007 National Bald Eagle Management Guidelines serve to advise landowners, land managers, and others who share public and private lands with bald eagles when and under what circumstances the protective provisions of BGEPA may apply. They provide conservation recommendations to help people avoid and/or minimize such impacts to bald eagles, particularly where they may constitute "disturbance," which is prohibited by the BGEPA.
  https://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf

The Service's Office of Law Enforcement carries out its mission to protect eagles through investigations and enforcement, as well as by fostering relationships with individuals, companies, industries and agencies that have taken effective steps to avoid take, including incidental take of these species, and encouraging others to implement measures to avoid take. The Office of Law Enforcement focuses its resources on investigating individuals and entities that take eagles without identifying and implementing all reasonable, prudent and effective measures to avoid that take. Those individuals and entities are encouraged to work closely with Service biologists to identify available protective measures, and to implement those measures during all activities or situations where their action or inaction may result in the take of an eagle(s).

In addition to the above guidance, the 2010 Montana Bald Eagle Management Guidelines: An Addendum to Montana Bald Eagle Management Plan (1994) developed by Montana Fish, Wildlife and Parks (FWP) also provides guidance for avoiding and minimizing the risk for bald eagle take (http://fwp.mt.gov/fwpDoc.html?id=44181).

Additional Comments

If wetlands will be affected by the project, the Service recommends keeping wetland disturbances to the minimum extent and duration possible, with as much occurring "in the dry" as possible. This would reduce impacts to aquatic species relative to disturbance and sediment inputs. We also recommend that appropriate erosion and sediment control efforts and measures be implemented during and following construction to avoid introducing sediments or other contaminants to adjacent waters.

In addition to coordination with the Service, we recommend coordination with FWP and the Montana Natural Heritage Program. These agencies may be able to provide updated, site-

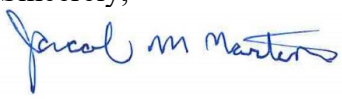
specific information regarding fish, wildlife, and sensitive plant resources occurring in the proposed project area. Contact information for these two agencies is below:

Montana Fish, Wildlife and Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, Montana 59620-0701
Phone: (406) 444-2535

Montana Natural Heritage Program
1515 East 6th Avenue, Box 201800
Helena, Montana 59620-1800
Phone: (406) 444-5354

If you have further questions related to this letter, please do not hesitate to contact Karen Newlon at: karen_newlon@fws.gov or 406-449-5225, extension 209.

Sincerely,



for Jodi L. Bush
Office Supervisor

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

[X] I have reviewed the enclosed proposal and have no comments.

Sharon K Foss

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

Marina Hagenbuch

From: LaDana Hintz <lhintz@jeffersoncounty-mt.gov>
Sent: Wednesday, September 2, 2020 11:43 AM
To: Jeremy Fadness
Subject: West Side Subdivision
Attachments: doc02610120200902114051.pdf

Hi Jeremy,
I have no comments regarding the West Side Subdivision.
Have a great day!

LaDana

LaDana Hintz
Planner
Jefferson County
PO Box H
Boulder, MT 59632
Ph: 406-225-4040

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Jefferson County
Planning Department
P.O. Box H
Boulder, MT 59632

Re: West Side Subdivision - Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☒ I have reviewed the enclosed proposal and have no comments.

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

Jeremy Fadness

From: James Swierc <JSWIERC@lccountymt.gov>
Sent: Wednesday, September 16, 2020 3:12 PM
To: Jeremy Fadness
Cc: Jennifer McBroom
Subject: West Side Subdivision

Hi Jeremy

I've reviewed the information provided on the proposed subdivision for the west side of Helena. Connecting to the Helena Sewer for wastewater, and water supply for potable water help ensure that there are minimal impacts to local water resources from the development, and that drinking water quality will not be an issue. The primary concern then would be stormwater management, and managing sediment and potential discharges to Tenmile Creek or Spring Meadow Lake downgradient from the development – noting the main drainage through the property aligns towards Spring Meadow Lake. I'm sure that you are aware of stormwater management requirements, and your plan does show stormwater ponds in the main draw through the property, so the issues seems to have been addressed, although I'd remind you that grassy swales around the ponds help filter sediment flowing towards the ponds. While you may have already done this, I would recommend contacting the City of Helena to help ensure that your stormwater management plans are consistent with the City's stormwater management plans and programs as you develop the property.

James Swierc, PG
Hydrogeologist
Lewis & Clark County
Water Quality Protection District
(406) 457-8585
jswierc@lccountymt.gov

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

August 26, 2020

Lewis & Clark Sheriff's Office
221 Brenkenridge
Helena, MT 59601

Re: West Side Subdivision - Helena and Lewis and Clark County, Montana

Dear Sir/Madam:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 103 single-family residential lots, 3 condo lots with 72 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We would appreciate a written response by September 11, 2020 to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☒ I have reviewed the enclosed proposal and have no comments.

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\2zdd) EA\AGENCY LETTERS\West Side Subdivision Agency Letter 8-26-2020.docx

Helena Area Resource Office
P.O. Box 200701
930 Custer Ave W
Helena, MT 59620-0701

Tuesday, September 8, 2020

Jeremy Fadness
1275 Maple St Suite F
Helena, MT 59601
406-443-3962
jfadness@wwcengineering.com

RE: West Side Subdivision, Lewis and Clark County

Dear Mr. Fadness,

We received your request to review your proposal and provide any potential impacts associated with the West Side Subdivision (dated 8/26/20). Would you please send additional information about what measures are proposed as part of this development to protect, as well as to minimize and to mitigate impacts to, fish and wildlife and their habitats?

If you have not already done so, please consult FWP's *Recommendations for Subdivision Development in Montana*, available here: http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/buildingWithWildlife/subdivisionRecommendations/.

Also, are you familiar with the Natural Heritage Program's website, where you can get information on fish, wildlife, and plant species? The following websites may be useful to you:

- The Natural Heritage Program (NHP) at http://mtnhp.org/
- NHP Tracker at http://mtnhp.org/Tracker/NHTMap.aspx (also helps in looking up locations)
- NHP Animal Species of Concern Reports at http://mtnhp.org/SpeciesOfConcern/?AorP=a
- NHP Plant Species of Concern Reports at http://mtnhp.org/SpeciesOfConcern/?AorP=p

If you're unable to find the information you need in the web pages above, you'd like the NHP to conduct a Species of Concern Project Review, or you want some other information, you may submit a request for information using the Request Tracker at: http://nris.mt.gov/reqapp/userMain.asp

FWP also recommends the following guides:
"Building with Wildlife" available here:
http://fwp.mt.gov/wildthings/livingWithWildlife/buildingWithWildlife.html
"How to build Fence with Wildlife in Mind" available here:
http://fwpiis.mt.gov/content/getitem.aspx?id=34461

We may provide some additional feedback soon, regarding any key concerns or key resource issues that we're aware of in that area and may provide some recommendations. **However, subdividers are responsible for preparing the Wildlife/Wildlife Habitat portion of an Environmental Analysis, conducting and writing up the assessment of potential impacts and proposed mitigating measures. The legwork to identify what specifically is happening on a particular site and its surrounding area is the subdivider's purview.** We will review the information and analysis that you or your consultant(s) prepare for an EA, and we may make some recommendations as part of such review. We request that you please allow at least 30-60 days for us to do that.

Thank you in advance for the additional information.

Sincerely,

Jenny Sika
Wildlife Biologist
Helena Area Resource Office
Office Tel.: (406) 495-3268
E-mail: jsika@mt.gov

Cc: Lewis and Clark County

Jeremy Fadness

From: Jeremy Fadness
Sent: Monday, September 14, 2020 5:39 PM
To: Rock, Steven
Cc: Sampson, Patrick
Subject: Re: Northwestern Energy Comments - Westside Subdivision - September 14th 2020

Steven,

This will be a City subdivision and will require curb and gutter and sidewalk. No ditches are proposed. We are still working on the typical section but there should be room behind the curb for utilities.

Jeremy

From: Rock, Steven <Steve.Rock@northwestern.com>
Sent: Monday, September 14, 2020 5:13 PM
To: Jeremy Fadness <jfadness@wwcengineering.com>
Cc: Sampson, Patrick <pat.sampson@northwestern.com>
Subject: Northwestern Energy Comments - Westside Subdivision - September 14th 2020

_____

Jeremy:

I have reviewed the following attachment on the Westside Subdivision and I have no comments.

It appears you are already working with Pat Sampons on relocating the existing gas line that is going through that proposed subdivision.

I do have a question. It appears all easements would be the standard road right of ways along properties. Are there going to be ditches in between the street and property line or will it be curb and gutter. In the County when we have ditches, we typically request a 5 foot by 5 foot easement on the property corners to install our underground equipment such as transformers and of course communication pedestals. If this is standard curb with boulevards and sidewalks this may be sufficient and it also depends where the sidewalk is installed.

Please fill me in on that.

Thanks.

Steve Rock, P.E., MBA
Northwestern Energy
Operations Planning Supervisor
steve.rock@northwestern.com
O 406-443-8956
C 406-438-3340
F 406-443-8965

1315 N. Last Chance Gulch
Helena, MT 59604

ADDITIONAL AGENCY LETTERS & RESPONSES

Jeremy Fadness

From: Jeremy Fadness
Sent: Wednesday, April 7, 2021 10:03 AM
To: LAntonick@helenamt.gov
Cc: Marina Hagenbuch
Subject: West Side Subdivision Agency Comments
Attachments: Helena Fire Department West Side Subdivision Agency Letter 04-4-2021.pdf; 1) West Side Subd Vicinity Map.pdf; 2) West Side Subd Prelim Plat.pdf

Lou,

As you know we are currently working with the City of Helena on a subdivision application for a proposed subdivision on the west side of Helena, West Side Subdivision. We appreciate your assistance working with the applicant on the road grade issues within the subdivision. For the subdivision application we need correspondence from the fire department that the fire department can serve the proposed subdivision and what your anticipated response times are. Also any other impacts the subdivision may have on the fire department. Your prompt reply is greatly appreciated as we are trying to get responses back to the City of Helena as soon as possible. We appreciate your continued assistance with the project and please let me know if you have any questions.

Respectfully,
Jeremy Fadness

WWC ENGINEERING
Jeremy Fadness, P.E., AICP
Project Manager / Senior Planner
1275 Maple Street, Suite F | Helena, MT 59601
Tel 406-443-3962
Cell 406-439-0069
www.WWCengineering.com

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

April 7, 2021

Helena Fire Department
Lou Antonick, Fire Marshal
300 Neill Avenue
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Mr. Antonick:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 94 single-family residential lots, 76 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We need correspondence that indicates that the Helena Fire Department can serve the proposed subdivision and what your anticipated response times are. Please provide any details on potential impacts this subdivision may have on the Helena Fire Department. We would appreciate a written response as soon as possible to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\3RD SUBMITTAL\2zdd) EA\Appendix F - Agency Correspondence\3) 2nd Agency Letters\Helena Fire Department West Side Subdivision Agency Letter 04-4-2021.docx

Jeremy Fadness

From: Jeremy Fadness
Sent: Wednesday, April 7, 2021 10:12 AM
To: Bpetty@helenamt.gov
Cc: Marina Hagenbuch
Subject: West Side Subdivision Agency Comments
Attachments: Helena Police Department West Side Subdivision Agency Letter 04-4-2021.pdf; 1) West Side Subd Vicinity Map.pdf; 2) West Side Subd Prelim Plat.pdf

Brett,

As you know we are currently working with the City of Helena on a subdivision application for a proposed subdivision on the west side of Helena, West Side Subdivision. We appreciate your assistance working with the applicant on the road grade issues within the subdivision. For the subdivision application we need correspondence from the fire department that the fire department can serve the proposed subdivision and what your anticipated response times are. Also any other impacts the subdivision may have on the fire department. Your prompt reply is greatly appreciated as we are trying to get responses back to the City of Helena as soon as possible. We appreciate your continued assistance with the project and please let me know if you have any questions.

Respectfully,
Jeremy Fadness

WWC ENGINEERING
Jeremy Fadness, P.E., AICP
Project Manager / Senior Planner
1275 Maple Street, Suite F | Helena, MT 59601
Tel 406-443-3962
Cell 406-439-0069
www.WWCengineering.com

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

April 7, 2021

Helena Police Department
Brett Petty, Captain
406 Fuller Avenue
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear Mr. Petty:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 94 single-family residential lots, 76 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We need correspondence that indicates that the Helena Police Department can serve the proposed subdivision and what your anticipated response times are. Please provide any details on potential impacts this subdivision may have on the Helena Police Department. We would appreciate a written response as soon as possible to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____

K:\Helena\ECO DEVELOPMENT LLC\2020216 Westside Subdivision\08Reports\PRELIMINARY PLAT APPLICATION\3RD SUBMITTAL\2zdd) EA\Appendix F - Agency Correspondence\3) 2nd Agency Letters\Helena Fire Department West Side Subdivision Agency Letter 04-4-2021.docx

Jeremy Fadness

From: Jeremy Fadness
Sent: Wednesday, April 7, 2021 9:37 AM
To: jmckay@helenaschools.org
Cc: Marina Hagenbuch
Subject: West Side Subdivision Agency Comment Letter
Attachments: Helena Public Schools West Side Subdivision Agency Letter 04-4-2021.pdf; 1) West Side Subd Vicinity Map.pdf; 2) West Side Subd Prelim Plat.pdf

Josh,

We are working on a subdivision application on the west side of Helena, West Side Subdivision. Back in August we had sent a letter to Tyler Ream for comment and did not receive any comments. The City of Helena is requiring feedback on impacts to the school from the proposed project. I have attached a letter to this e-mail and a copy of the preliminary plat layout and vicinity map. I am hoping you can help me with comments from the School District on impacts of the subdivision. As e-mail response is appropriate if that would be easier. We are looking for concurrence on our school children calculation provided in the letter and any feedback on the ability of the School District to accommodate the anticipated kids from the subdivision. Please let me know if you have any questions.

Respectfully,
Jeremy Fadness

WWC ENGINEERING
Jeremy Fadness, P.E., AICP
Project Manager / Senior Planner
1275 Maple Street, Suite F | Helena, MT 59601
Tel 406-443-3962
Cell 406-439-0069
www.WWCengineering.com

WWC ENGINEERING

1275 MAPLE STREET SUITE F, HELENA, MT 59601 | 406.443.3962

April 7, 2021

Helena Public Schools
Josh McKay, Assistant Superintendent
55 S. Rodney St.
Helena, MT 59601

Re: West Side Subdivision – Helena and Lewis and Clark County, Montana

Dear McKay:

WWC Engineering (WWC) is working with Eco Development, Inc. to develop an approximately 59-acre property into single-family residential and condos. WWC is working to complete an Environmental Assessment (EA) for the proposed West Side Subdivision to identify usage needs, utility infrastructure, and determine impacts caused by the proposed development.

WWC is requesting a review by your agency of possible project impacts from the proposed subdivision. The project is located in the northeast corner of Section 26 and the southwest corner of Section 23, Township 10 North, Range 04 West. The proposed development is approximately 59 acres and consists of rural vacant land bordered by residential areas, Highway 12, and City of Helena open space. The attached vicinity map outlines the boundary of the proposed project. The following information is intended to provide a brief history and summary of the proposed project.

The West Side Subdivision is a proposed private project that aims to develop 94 single-family residential lots, 76 condo units, and 5 open space lots within the existing 59-acre lot. The open space will incorporate natural or landscaped features with storm water detention ponds to control storm runoff from the site as well as bike and pedestrian trails. The proposed subdivision will be annexed into the City of Helena. The subdivision will be served by the City of Helena's water and sewer system along with their local services including police, school, fire department, and emergency services.

Based on census data for Helena, Montana, there are 2.14 people per household within the City of Helena. The census also indicates that 19% of household are under 18 years old. Based on this we can calculate that 0.40 people per household are school age. The subdivision proposes 94 single family residential lots with 76 condo units for a total of 170 proposed households. It is anticipated that 68 school age children will be generated at full build-out of the subdivision. The subdivision is planned with 4 phases, Phase 1 in 2021, Phase 2 in 2023, Phase 3 in 2025, and Phase 4 in 2027. The proposed 68 students would be phased in over 6 years.

No dwellings, other buildings, improvements, or commercial buildings exist within the 59-acre lot. There are several recreational trails that border the project on adjacent City of Helena open space land. Access to the subdivision will be through the eastern boundary via Hauser Boulevard and Park Drive. There will be three access points that will provide adequate traffic flow for residents and emergency services; the proposed preliminary plat is attached. Roads will be constructed to meet all requirements of the City of Helena. The proposed project would be complete in four phases starting in 2021 with a new phase being constructed every 2 years thereafter and the final phase completed in 2027.

Please rake a few minutes to review the proposal and provide a response detailing any potential impacts. We need correspondence that indicates that the Helena School District can accommodate the increase in school children and that you concur with the number of school children that has been calculated. Please provide any details on potential impacts this subdivision may have on the School District. We would appreciate a written response as soon as possible to allow us to incorporate your responses into the EA and subdivision application. If you need additional information or would like to discuss the project, please contact me at (406) 443-3962, or email me at jfadness@wwcengineering.com

Sincerely,

Jeremy Fadness, P.E., AICP
Project Manager

☐ I have reviewed the enclosed proposal and have no comments.

_____