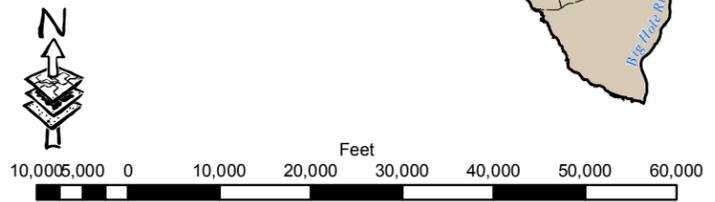


Legend

- Mines
- Mining Districts**
- WISE RIVER
- SILVER LAKE
- ORO FINO
- LOST CREEK
- HEBER
- GEORGETOWN
- FRENCH GULCH
- BLUE EYED NELLIE
- County





*Water &
Environmental
Technologies
GIS*

Anaconda Deer Lodge County

2008 Growth Policy
Mining Districts

11/01/2008	AedDeerLodge	
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B. Gravel Resources

Aggregate rock, such as sand and gravel, is an important construction and road maintenance resource for the County. At the same time, mining sand and gravel have environmental impacts and it is important to develop this resource without comprising the quality of the life in the County. Common issues with the locating of gravel quarries include:

- Traffic
- Noise
- Dust
- Water quality
- Restricting river, stream, and flood plain functions
- Visual buffers
- Impact on adjacent or nearby residential uses

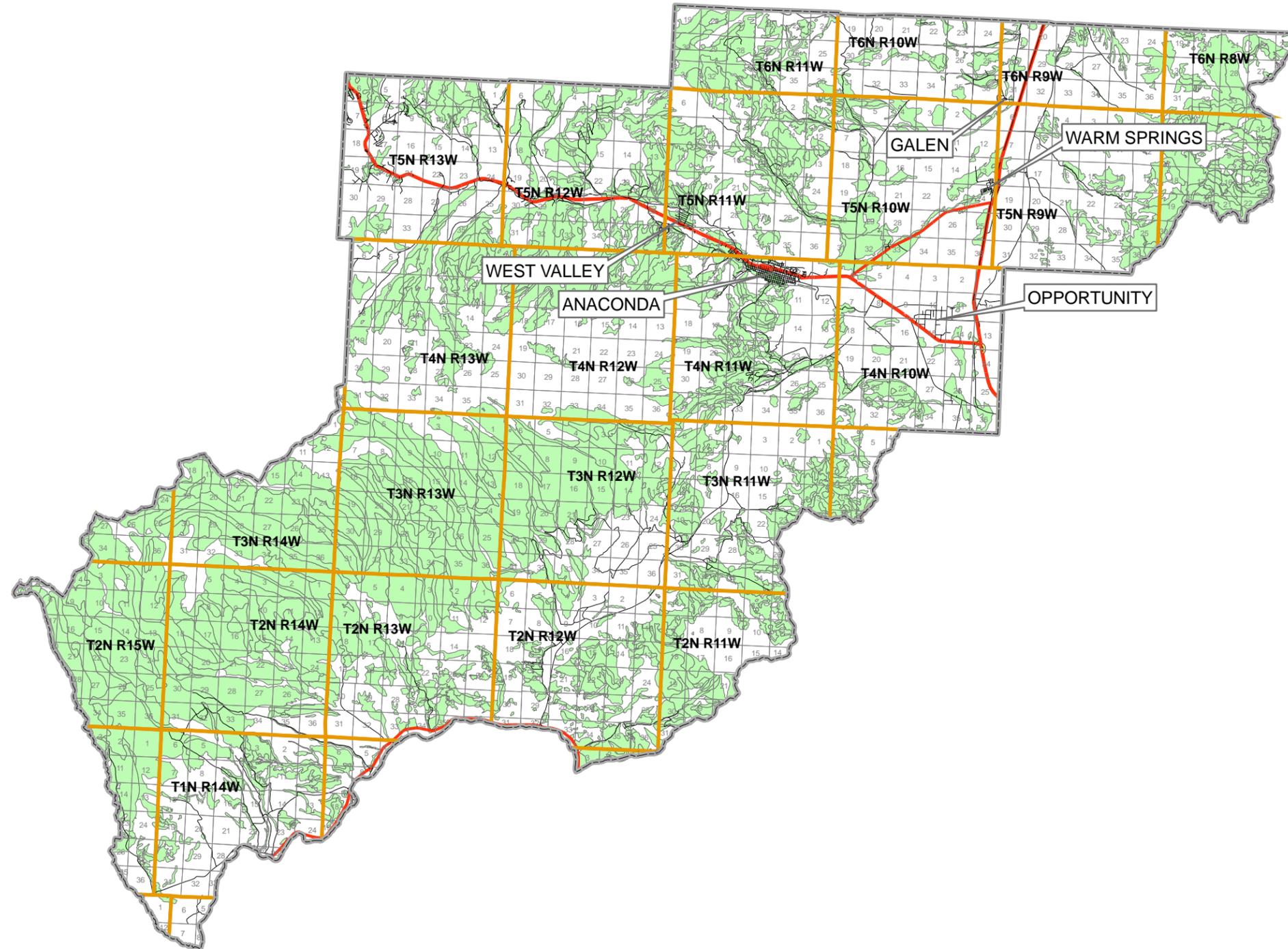
Because gravel mining is often controversial, Montana law now requires that gravel resources be addressed in the growth policy. The U.S. Department of Agriculture (USDA) Soil Survey rates soils as a potential gravel resource based on the following criteria.

"Gravel consists of natural aggregates (2 to 75 millimeters in diameter) suitable for commercial use with a minimum of processing. It is used in many kinds of construction. Specifications for each use vary widely. The properties used to evaluate the soil as a source of gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the bottom layer of the soil contains gravel, the soil is considered a likely source regardless of thickness. The assumption is that the gravel layer below the depth of observation exceeds the minimum thickness. The ratings are for the whole soil, from the surface to a depth of about 6 feet. Coarse fragments of soft bedrock, such as shale and siltstone, are not considered to be gravel. The soils are rated "good," "fair," or "poor" as potential sources of gravel. A rating of "good" or "fair" means that the source material is likely to be in or below the soil."

Source: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>

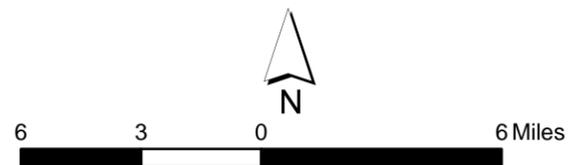
The following map indicates the location of existing gravel resources in the county.

Anaconda-Deer Lodge County Gravel Resources



Legend

 Fair Quality Gravel Resource



DATA SOURCES:
Montana Natural Resource Information System (NRIS)
Montana Cadastral Mapping Project
Natural Resources Conservation Service



Printed: 11.30.2009
Gravel Resources.mxd

8. Soils

A. Overview

Soil surveys can help public officials make decisions regarding building permits, septic permits, road alignments, and design of public infrastructure. Zoning areas for housing, recreation, commercial, and other kinds of development should take account of the suitability and limitations of soils for such uses. Soil surveys typically describe the activities and land development types for which soils are best suited, and describe limitations for other uses. Some specific applications for soil surveys include:

- Planners and other authorities can use soil maps and soil data to identify sources of sediment and to develop plans for controlling erosion and sedimentation.
- Septic tank absorption fields do not work in wet or impermeable soils. Slow permeability may be caused by high clay content or the presence of a high water table. Excessive permeability may allow effluent to pollute ground water.
- The properties that affect road and building construction include depth to bedrock, depth to a water table, ponding, flooding, the amount of large stones, slope, subsidence, shrink-swell potential, and the potential for frost action.

B. Opportunity

Within the Opportunity area, soils are characterized by high groundwater and underlying hardpan clay. This clay layer impedes percolation of wastewater through the soil. The Montana Department of Environmental Quality (DEQ) requires four feet of suitable soils between the bottom of drainfield trenches and the depth of seasonally high groundwater. When this criterion is not met, inadequately treated wastewater may reach individual domestic wells in the area and contaminate the water.

C. Soils Remediation

The Community Soils Record of Decision (ROD) addresses soil contamination and remediation throughout the entire Anaconda Smelter Site, including the Anaconda urban area and the community of Opportunity. Soils in surrounding residential areas such as Crackerville, Aspen Hills, West Galen, and Antelope Springs, along with railroad beds in Anaconda, are also included in the Community Soils ROD.

The EPA's 1996 clean-up decision specified that all residential soils exceeding an arsenic concentration of 250 parts per million (ppm) must be remediated. The action level for commercial and industrial areas is 500 and 1,000 ppm respectively. Although EPA's Human Health Risk Assessment (1996) indicated that Anaconda, as a whole, was not significantly at risk, individual areas having elevated arsenic levels in soils could still pose a risk to residents. The County is currently working with EPA and ARCO to establish and action level for lead.

The EPA identified "focus areas" within the operating unit that have a potential to exceed the 250 ppm action level. It has been determined that systematic yard-by-yard sampling in the focus areas was the most effective way to find and remediate any hot spots. From 2002 to 2009, ARCO sampled more than 1,500 residential yards, and remediated over 300 yards in Anaconda and 50 in the nearby communities.

Capping of the active railroad line through Anaconda is continuing through 2010. Remediation of commercial areas adjacent to active and abandoned railroads is expected to be completed in 2011.

Also in 2009, ADLC instituted a system of integrating development permitting with remediation. A series of amendments to the Development Permit System (DPS) now requires that, unless a property has previously had contaminants removed, or unless ARCO has remediation work planned in the area, the County will test the soil in conjunction with a development permit application. If remediation is necessary, the County may assist the property owner in some cases by having the contaminated material hauled to a repository and providing clean replacement material. This procedure is conducted according to a "work program" in accordance with the Interim Institutional Controls Program (IICP). This new system is a potential benefit to property owners who desire to undertake smaller projects as they no longer have to wait for ARCO to conduct a soil sample and remediate the site if necessary. The County is reimbursed for the costs of material hauling and replacement through the EPA.

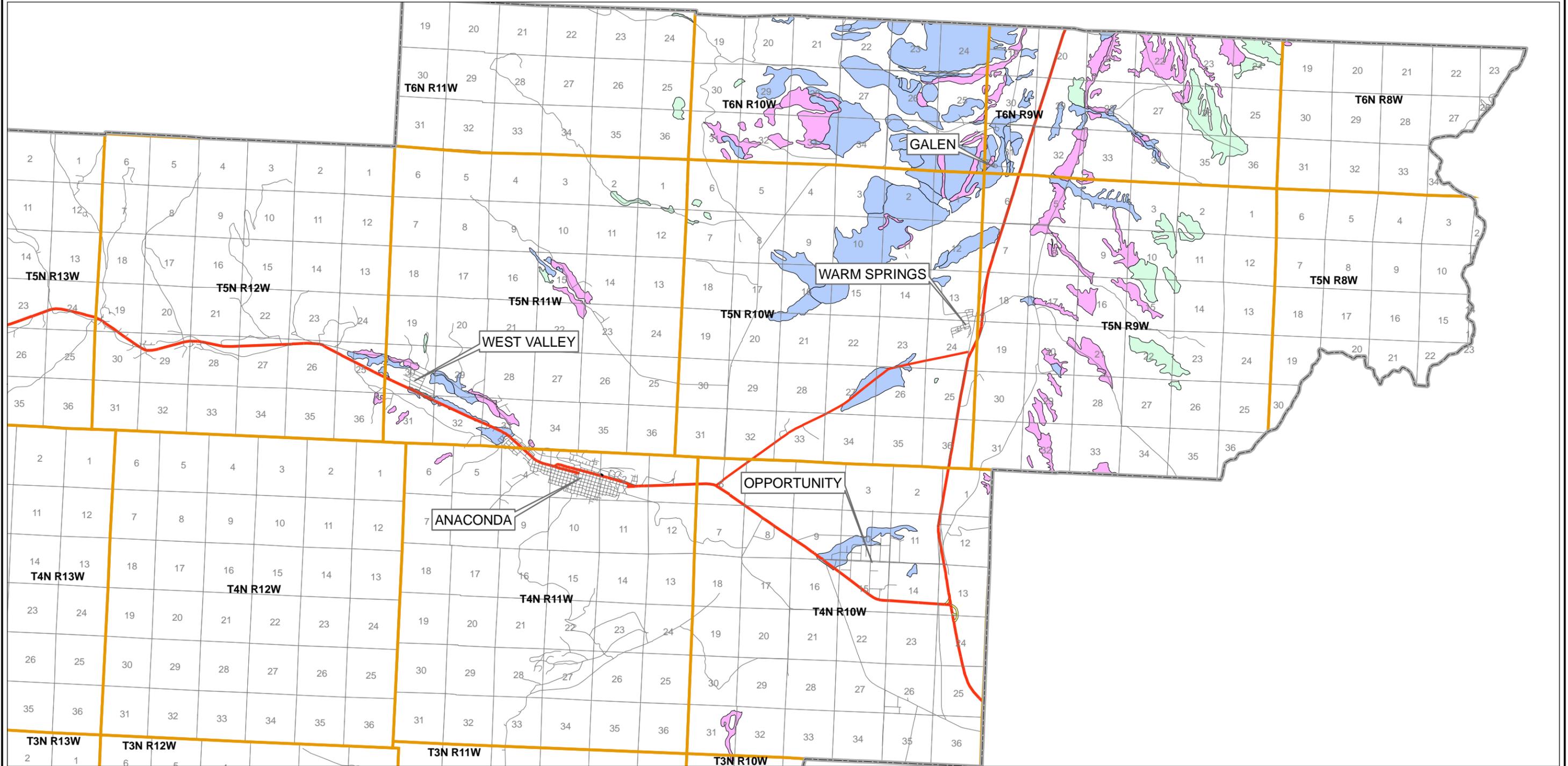
D. Farmland

The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply. A summary of farmland definitions from the USDA follows:

- **Prime farmland** - Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.
- **Farmland of statewide importance** - These are determined by the appropriate State agencies. Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods.
- **Farmland of local importance** - This farmland is identified by the appropriate local agencies for the "production of food, feed, fiber, forage, and oilseed crops.."

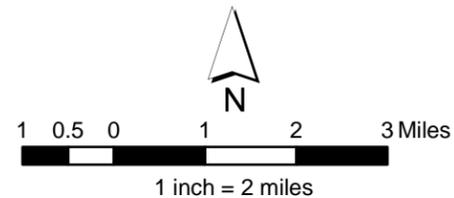
(Source: USDA, Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>)

Anaconda-Deer Lodge County Prime Farmlands



Legend

-  All areas are prime farmland ~ 1,782 Ac.
-  Prime farmland if irrigated ~ 8,809 Ac.
-  Farmland of statewide importance ~ 4,126 Ac.



DATA SOURCES:
 Montana Natural Resource Information System (NRIS)
 Montana Cadastral Mapping Project
 Natural Resources Conservation Service

Printed: 11.30.2009
 Prime Farmland.mxd

9. Critical Areas

A. Floodplains

Floodplains are lowlands adjacent to water bodies such as rivers, streams, and lakes that have been or may be inundated with water. The size of the floodplain depends largely on topography with flat terrain along major rivers resulting in wide floodplains, and mountainous and hilly areas having narrow or more confined floodways. Riverine flooding that occurs after prolonged periods of rain or rapid snowmelt are the most common source of flooding in ADLC. Ice jams may also result in flooding, as they often do on the Clark Fork and Big Hole rivers.

Floodplains perform valuable functions including groundwater recharge, water quality maintenance, and sediment control, as well as meeting needs for wildlife habitat, recreation, aesthetics, open space and scientific study. Development in flood plains usually reduces, modifies, or eliminates their ecological functions.

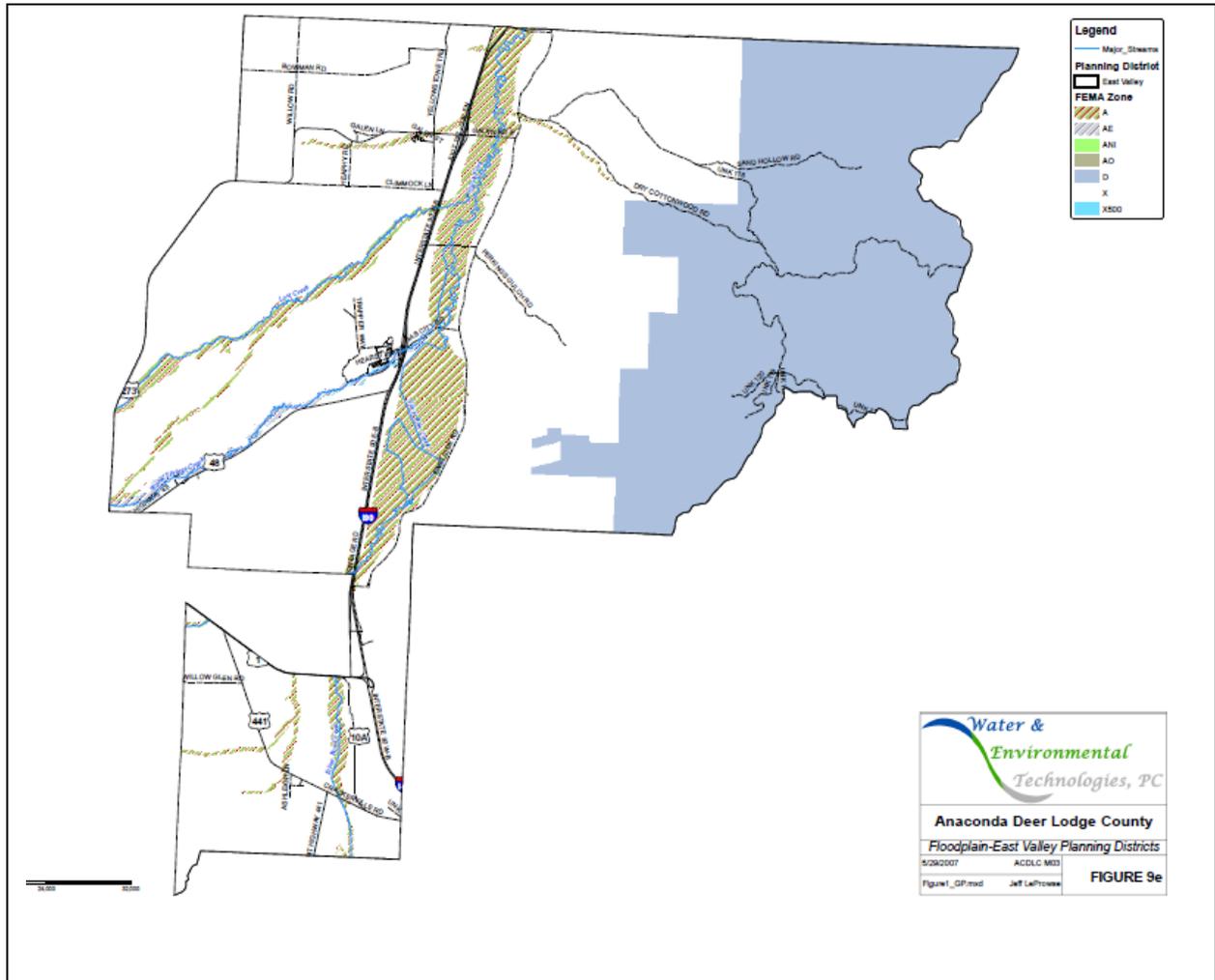
Past Federal Emergency Management Agency (FEMA) floodplain policies focused on reducing flooding through structural measures to redirect flood waters and on reducing danger and property loss by imposing minimum building requirements in floodplains. Although the minimum standards provide a great deal of flood protection, damage can still result when floods exceed the predicted 100-year level or estimates are inaccurate. Urbanization, filling, and other development can alter flood hazards and increase risks of flooding.

In response to these issues, in the late 1990's, FEMA shifted its emphasis to protect the natural resources and functions of floodplains. FEMA now has a voluntary Community Rating System (CRS) that offers incentives in the form of discounts on flood insurance in localities that go beyond the minimum floodplain management requirements. Activities related to development that can result in CRS credits include open space preservation, land development criteria, and higher regulatory standards.

Flooding in the County normally occurs during periods of excessive rainfall or snowmelt. FEMA maps distinguish floodplains, floodways and floodway fringes. The floodway is the highest risk area consisting of stream channels and banks where the most damage and destruction occurs. Residential and commercial development, mobile homes and septic systems are prohibited in this area. The floodway fringe is a lower hazard area that would be inundated by a 100 year flood. Construction is allowed in the floodway fringe by special permit and must meet established regulations. FEMA Flood Insurance Study analyzed 23.5 miles of Warm Springs Creek from its confluence with the Clark Fork River, one mile east of Warm Springs to ten miles west of Anaconda. The floodway fringe (Zone A) is primarily located along Warm Springs Creek, Lost Creek and Silver Bow Creek with a narrow strip along Mill Creek.

Zone B – Areas lie between the limits of the 100-year flood and 500 year flood, or areas subject to 100 year flooding with average depth of less than (1) foot. A large portion of Anaconda is in Zone B. According to the “Deer Lodge County Hazard Mitigation Plan” the FEMA study determined that Anaconda sits on an alluvial fan and generally floods from gulches on the southern end of the City, namely the Sheep, Glover, Fifer, and three smaller gulches. Typically, the Sheep Gulch floods onto Oak Street, Glover Gulch onto Poplar Street, and Fifer Gulch onto Evergreen Street. The smaller gulches flood onto Birch, Larch, and Spruce Streets. The flooding from these gulches generally results in shallow street, basement, and first floor flooding of downtown Anaconda.

Map 10: East Valley Flood Map



Map 11: Anaconda Urban Area – Flood Map



Map 13: Opportunity Flood Map



B. Wetlands

Once, wetlands were considered wastelands that should be drained and filled. Today, wetlands are valued for providing wildlife habitat, improving water quality, recharging aquifers, and storing potential flood waters. In ADLC wetlands are limited, but the most common type is associated with swamps or bogs. Wetlands are defined as follows:

"Wetlands are those areas that are inundated or saturated by surface or groundwater 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.

Source: Army Corps of Engineers (ACOE) and Environmental Protection Agency (EPA), in "The Wetlands Delineation Manual of 1987"

Table 6: Wetlands at Risk in Anaconda-Deer Lodge County

Wetland Type	Acres	% of Total
Palustrine (marsh, swamp, bog, or tundra)	191.61	83.8%
Reverie (feed by water flowing through a channel)	20.07	8.8%
Lacustrine (associated with a lake)	17.06	7.5%

Source: Montana Natural Information Resource System

The federal Clean Water Act (CWA) administered by the Environmental Protection Agency (EPA), the Army Corps of Engineers, and state agencies, regulates activities regarding wetlands. States review and certify permits that may result in pollution or fill discharges to surface waters and wetlands and established a permit system for this process. Section 404 of the CWA is jointly administered by the ACOE and EPA and governs dredging and filling of land. The Montana Environmental Policy Act (MEPA) and the Endangered Species Act also have provisions regarding wetlands.

The Montana Department of Environmental Quality (DEQ) Technical & Financial Assistance Bureau is responsible for coordinating wetland conservation activities state-wide, including staffing the Montana Wetland Council. The Council acts as a forum for all stakeholders to participate in wetland issues. The Council developed Priceless Resources: Strategic Framework for Wetland and Riparian Area Conservation and Restoration in Montana 2008-2012, to guides the Council in pursuing wetland conservation activities.

At this time, ADLC has no critical areas ordinance (CAO), and has no specific requirement for the buffering and/or protection of wetlands except in the Georgetown Lake Development District. Even in the GLDD, current language in the Development Permit System (DPS) defers to "state and federal wetlands requirements". However, the trend at the federal level has been for **less** wetland protection. Generally, non-tributary wetlands, or palustrine wetlands, are not considered to be "jurisdictional" wetlands and are not protected by the federal government as they once were. But in Montana, these wetlands account for some of the most productive wildlife habitat, and as Table 7 above shows, these are by far the most prevalent type of wetland in the County. At this time, it appears as though this valuable resource can only be protected through local action.

C. Streambank and Lakeshore Protection

Some Montana cities and counties have adopted critical area ordinances (CAO) that establish

streambank setbacks and buffer zones, mainly to protect water quality and fish and wildlife habitat. Setbacks are typically established for buildings and other structures. Within the setback, a buffer area of native vegetation is also set. Together, the setback and buffer help to keep human activity away from the stream, thereby leaving room for wildlife and reducing the introduction of siltation and chemical and organic pollutants into the stream. Stormwater runoff from fertilized lawns, roof tops, and parking areas can put significant amounts of pollutants into streams when allowed to locate in close proximity to the water body. Again, the ADLC Development Permit System only has such regulations in the Georgetown Lake Development District. However, along the Big Hole River, a 150-foot structural setback applies via an ordinance adopted jointly by Deer Lodge, Madison, Beaverhead, and Butte-Silver Bow counties.

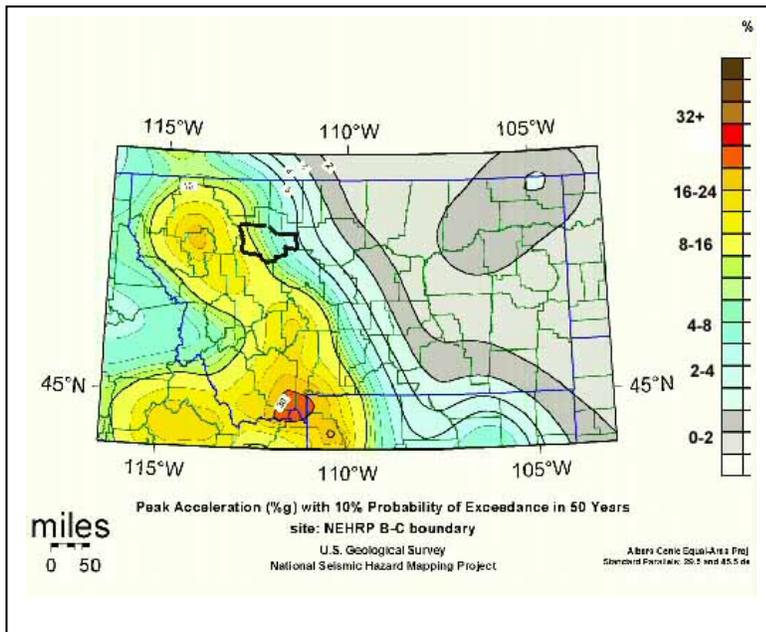
Montana law **requires** that every city and county having a lake of at least 160 acres in size adopt lakeshore protection standards and a permit system to regulate development within 20 feet of mean high water. Development includes dredging and filling, docks, marinas, boat ramps, boat houses, and shore stations. The DPS contains lakeshore standards for Georgetown Lake, but they fall well short of the protection afforded some other major recreational lakes in Montana.

D. Earthquake Hazards

An area of seismicity known as the Intermountain Seismic Belt extends through western Montana, from the Flathead Lake region in the northwest corner of the state to Yellowstone National Park. In western Montana, the Intermountain Seismic Belt is up to 100 km wide. The County is on the western edge of this belt and is located in an area generally rated in the low to mid range for earthquake hazards.

According to the “Deer Lodge County Hazard Mitigation Plan” there are no active faults in the region. However, significant earthquakes from as far away as Challis, ID and Hebgen Lake have been felt in Anaconda. For purposes of administering building codes, the county is located in Seismic Zone 3.

Figure 1: Earthquake Hazards in Montana



Source: Deer Lodge County Hazard Mitigation Plan

D. Slopes

There are more than just engineering issues involved with the development of steep slopes. Building in steep slope areas has potential environmental impacts such as impairing water quality and the loss and/or fragmentation of wildlife habitat. It raises public safety concerns including landslide hazard, slope failure, access, provision of emergency services, and wildfire hazards.

Landslide hazard areas include slopes that are underlain by weak, fine grained unconsolidated sediments, jointed or bedded bedrock, or landslide deposits, including the top and toe of such areas. It is often necessary to conduct a geotechnical analysis to assess potential danger from landslides. However, even when it is determined that a slope is stable, conditions may change due to road cuts, grading, excavation for foundations, or increased runoff and/or seepage into the soil as a result of increased development.

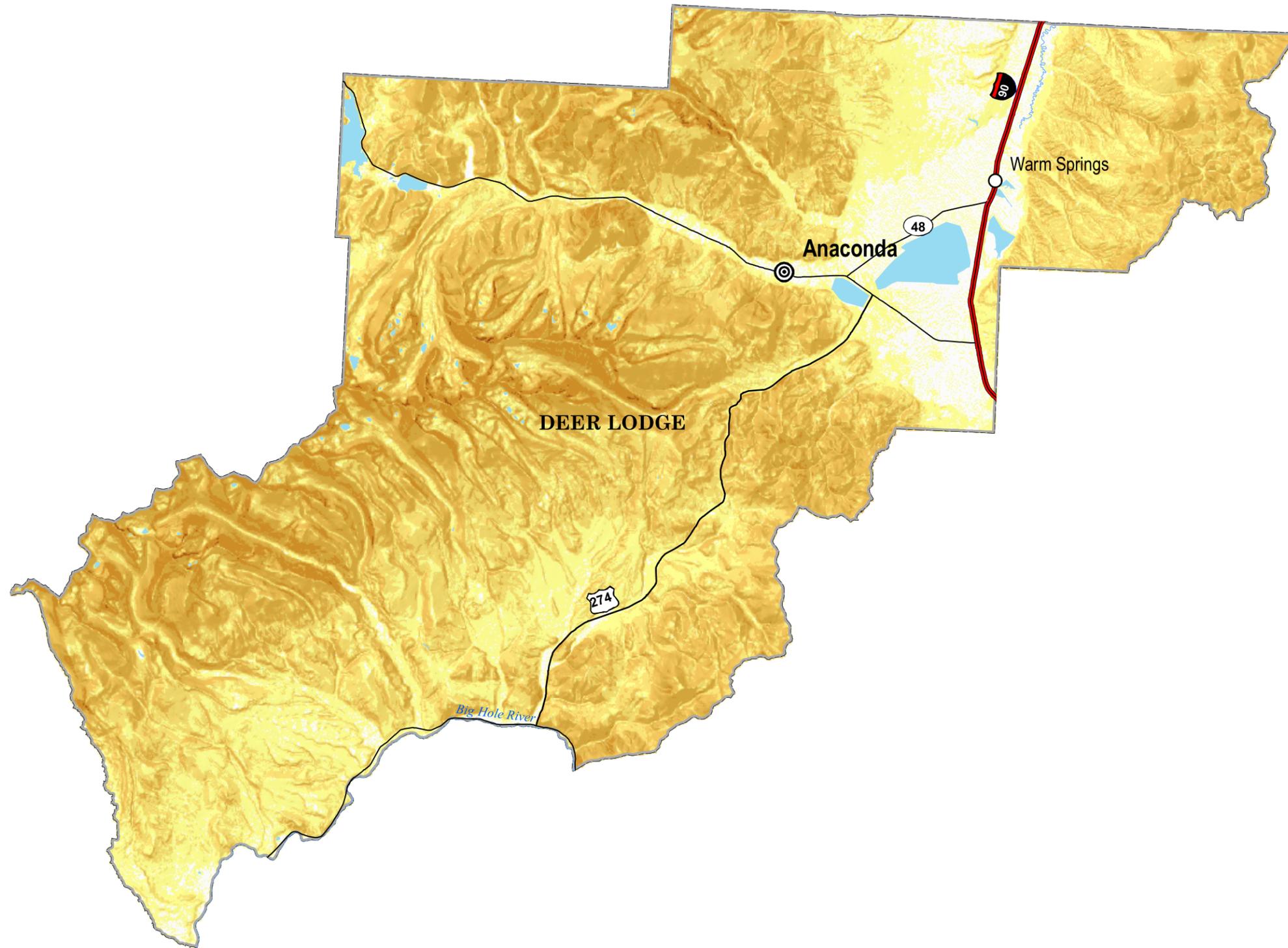
The relationship between slope and water quality has been thoroughly documented. When rain falls on flat ground, it either sinks into the ground or it ponds until it finally does sink in and/or evaporate. When rain falls or snow melts on slopes, the water that does not percolate into the ground will run downhill. When water runs down a steep slope, its velocity increases and it can pick up loose soil particles eventually causing erosion, and sedimentation. When natural terrain is disturbed, for development or other reasons, erosion and sedimentation can be accelerated dramatically.

Development on steep slopes in the wildland-urban interface (WUI) poses several public safety concerns. Access for firefighting equipment can be difficult on roads or driveways with steep grades. During adverse weather conditions, fire vehicles may not be able to travel steep slopes at all. Because fire travels in the direction of the ambient wind, which usually flows uphill, fires will travel uphill much faster than downhill. The steeper the slope, the faster the fire travels. Additionally, the fire is able to preheat the fuel farther up the hill because the smoke and heat are rising in that direction. Due to these fire characteristics, building on steep slopes in the WUI is highly discouraged.

Once again, the only slope standard found in the ADLC Development Permit System applies only to the Georgetown Lake area. That standard allows development on slopes in excess of 25% only if a geotechnical investigation indicates no significant hazard of slope failure. Of course, this is only one criterion, and it ignores the environmental and other public safety concerns with hillside development. Lot standards found in the Subdivision Regulations do not reference any slope limitations at all. Several Montana communities, and even more communities and counties throughout the Rocky Mountain West and Pacific Northwest, have enacted hillside development standards that take public safety, environmental factors, and even views and vistas into account.

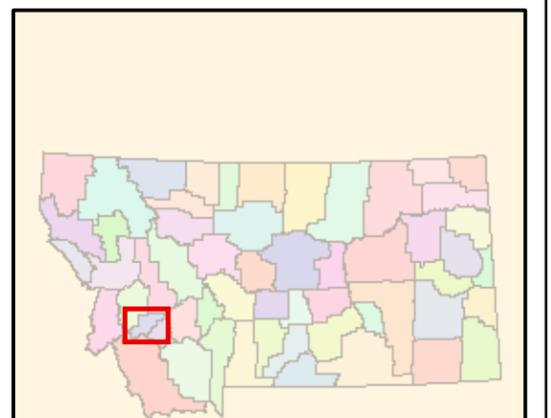
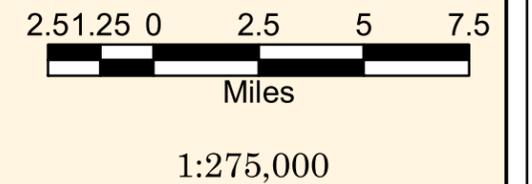
DEER LODGE

Slopes Derived from USGS NED



Population	Degree of Slope
○ Under 50	0 < X ≤ 4
○ 51 - 1000	4 < X ≤ 10
○ 1001 - 2500	10 < X ≤ 30
⊙ 2501 - 10000	30 < X ≤ 45
⊙ Over 10,000	45 < X ≤ 60
— Interstate	60 < X ≤ 90
— U.S. Route	Flat
— Secondary	
— Montana Ro	
— Rivers	
— Lake or Reservoir	

The USGS National Elevation Dataset (NED) has been developed by merging the highest-resolution, best-quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US.



10. Wildlife

Wildlife is dependent on the environment for food, water, shelter, and nesting and breeding areas. Wildlife in turn, provides an economic, aesthetic, educational, ecological, and recreational resource for the region. Anaconda-Deer Lodge County (ADLC) contains high quality habitat for a wide variety of animals, birds, and fish.

Generally, public lands in ADLC are managed to meet a multitude of objectives, including habitat for fish and wildlife and recreational opportunities for people. Some areas will provide reference landscapes as well as large, relatively undisturbed blocks of important aquatic and terrestrial habitat. However, public lands do not provide all the habitats required by wildlife. Some of the County’s signature wildlife species depend on low elevation wetland/riparian areas (moose), rivers and streams (bull trout), or forested foothill private lands (big game winter range). While wildlife management areas in the county meet some of the habitat requirements of the wildlife they support, new management strategies must contain additional measures for managing habitats at a much broader scale, including on private lands. These biodiversity and ecosystem management strategies have evolved to a point where they are now being incorporated into planning for public lands and in local land use planning all across the country.

A. Wildlife Management Areas

Montana Fish Wildlife and Parks (FWP) manages the following Wildlife Management Areas in the County:

Table 7: Montana FWP Wildlife Management Areas in ADLC

Name	Location	Acres	Management Goals
Mt. Haggin	Ten miles south of Anaconda	51,188	To provide year-round habitat for wildlife, emphasizing elk, moose, mule deer, and to provide public outdoor recreational opportunities.
Lost Creek	Lost Creek Rd. – four miles north of Anaconda	1,403	To provide winter range for elk, mule deer and bighorn sheep and to provide outdoor recreational opportunities.
Warm Springs	Interstate 90 at exit 201	4,839	To improve the waterfowl production potential of the land and to provide recreational opportunities. It also provides habitat for non-game species.
Garrity Mountain	Eight miles west of Anaconda	5,909	To manage the land for highly productive, diverse vegetative communities that will provide high quality forage and cover for native wildlife species, with an emphasis on bighorn sheep, elk, mule deer, and white-tail deer, winter/spring forage supplies, and manage for hunting and other recreational opportunities for the public and access to National Forest Lands.
Blue Eyed Nellie	Four miles west of Anaconda	164	To provide winter range for bighorn sheep and opportunities for wildlife observation.

Source: Montana Department of Fish Wildlife and Parks (www.fwp.mt.gov)

B. Human –Wildlife Conflicts

Many species of wildlife can become attracted to development, especially residential development with its attendant garbage cans, bird feeders, and pet and livestock food bins. For this reason, ADLC always requires that Montana Fish, Wildlife, and Parks' "Living with Wildlife" principles be incorporated into the Covenants, Conditions & Restrictions (CC&Rs) of rural and Wildland Urban Interface (WUI) subdivisions. Common measures include requiring bear-proof refuse and pet food containers, and landscaping that does not attract deer. Bears can actually break into a home or cabin, and once habituated to a food source associated with humans, these animals are usually removed from the population.

C. Building with Wildlife

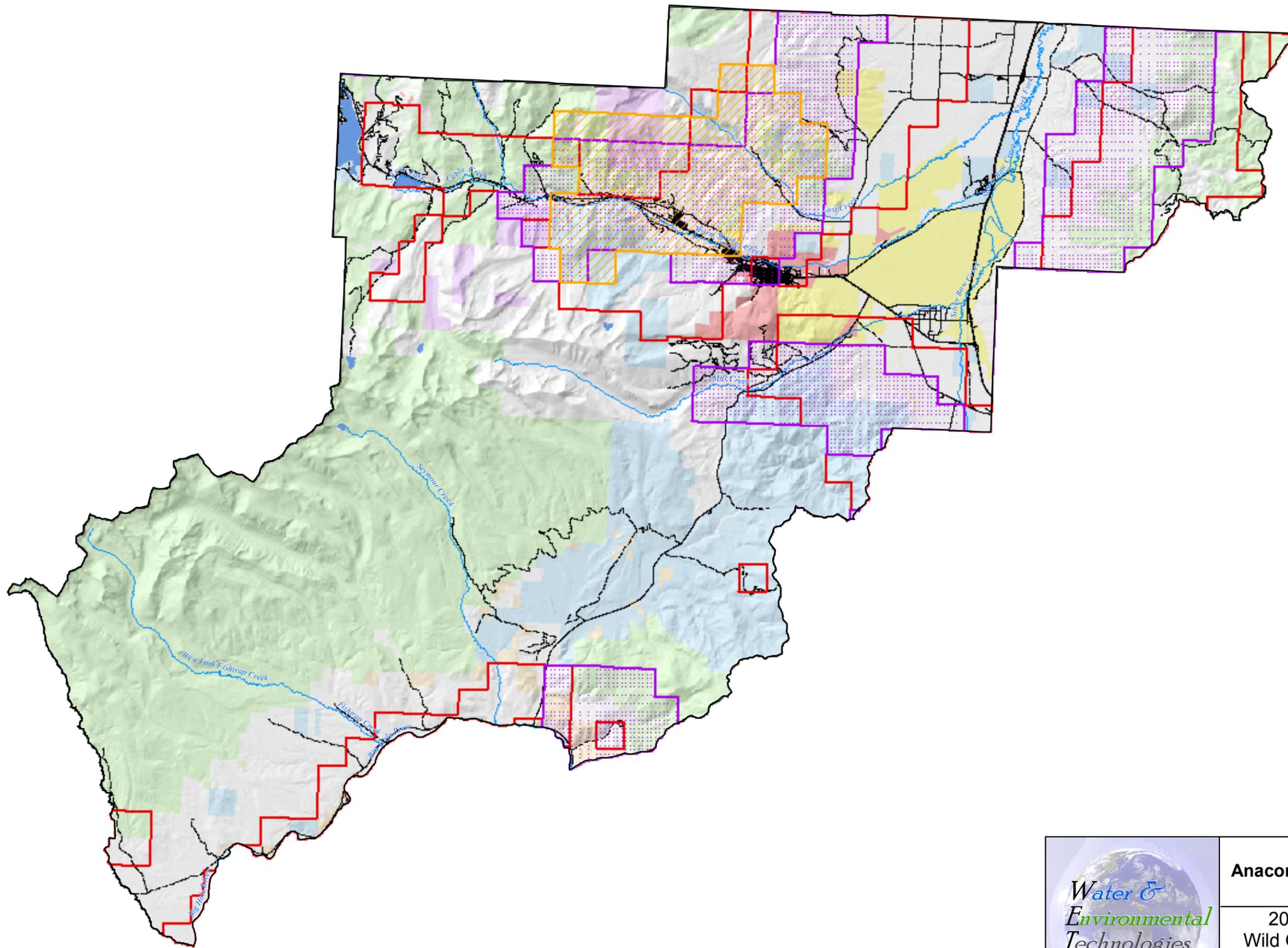
Developments that incorporate ecological principles and build with wildlife in mind are becoming more attractive to home buyers. Consideration of wildlife use and movement through a property should occur in the earliest planning stage, ideally before the proposal is even submitted to the local governing body for review. Both the Montana Subdivision and Platting Act and the ADLC Subdivision Regulations require that impacts to wildlife and wildlife habitat be taken into account in the local subdivision decision making process. The most effective way to minimize adverse impacts on wildlife is to avoid them entirely by clustering development in more appropriate areas. Many of the principles for wildlife consideration are basic conservation practices that also have other environmental benefits. According to the National Science Foundation, "Building with Wildlife: A Guide to Conservation Oriented Development" major principles include:

- Maintain natural habitat patterns.
- Allow natural processes to continue.
- Enable wildlife movement between natural areas.
- Plan development according to the land's capacity.
- Maintain key plants and animals.
- Minimize the extent of disturbance.

Many development techniques that have already been discussed in this element and are effective for protecting water quality and wetlands are also valuable in protecting wildlife habitat. Streamside setbacks provide areas for wildlife cover, movement, and access to water. The same is true of wetlands setbacks and the requirement for wetland buffers, as wetlands comprise some of the most valuable wildlife habitat in Montana. Restricting or prohibiting development on steep slopes can prevent the fragmenting of wildlife habitat and protect critical winter range. As discussed above, clustering and planned unit development options can also preserve valuable open spaces that wildlife use for migration, daily movement, winter range, and even calving.

D. Winter Range

Winter range serves the needs of animals that may migrate from hundreds of square miles from higher elevation "summer" ranges that are not habitable during the harsh winter months. Winter range also provides habitat for many species year round. When critical winter range is of poor quality, or reduced as a result of development or grazing, the result is a diminished capacity to support big game populations. The impact of any single subdivision proposal is typically small, but the cumulative effects of subdivisions over time can be significant if critical winter range is not incorporated into land use planning. The following map indicates the winter range of large game animals in Anaconda-Deer Lodge County.



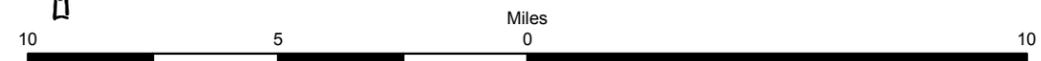
Legend

Winter Range (2008)

- Bighorn Sheep
- Mule Deer
- Elk
- Major Streams
- County

Ownership

- Arco
- Local Government
- Private
- Right of Way
- State Government
- US Government
- USDA Forest Service
- USDI Bureau of Land Management
- Water



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Technologies
GIS*

Anaconda Deer Lodge County

2008 Growth Policy
Wild Game Winter Range

11/01/2008	ACDLC M03
Figure11_GP.mxd	Jeff LeProwse

E. Threatened and/or Endangered Species and Species of Concern

Threatened or endangered species are defined as any species in danger of extinction throughout all or a significant portion of its range. Threatened species are any species that are likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The 1973 Endangered Species Act requires that threatened or endangered species be protected from “taking”, including “harm” and/or “harassment”, wherever they occur, to promote the conservation and recovery of threatened and endangered species and their habitat. Montana Species of Concern are native animals breeding in the state that are considered to be “at risk” due to declining population trends, threats to their habitats, and/or restricted distribution.

Table 8: Endangered/Threatened/Species of Concern in ADLC

Name	Classification	Habitat
Pygmy Rabbit	Species of Concern	Sagebrush
Gray Wolf	Species of Concern	Generalist
Wolverine	Species of Concern	Conifer forest
Canada Lynx	Threatened	Subalpine conifer forest
Fisher - Weasels	Species of Concern	Mixed conifer forest
Fringed Myotis – Bats	Species of Concern	Riparian & mixed dry forests
Dwarf Shrew	Species of Concern	Rocky habitat
Northern Goshawk	Species of Concern	Mixed conifer forests
Golden Eagle	Species of Concern	Grasslands
Great Blue Heron	Species of Concern	Riparian forests
Cassin’s Finch	Species of Concern	Conifer forests
Veery-Thrushes	Species of Concern	Riparian Forests
Greater Sage-Grouse	Species of Concern	Sagebrush
Brown Creeper	Species of Concern	Moist conifer forests
Peregrine Falcon	Species of Concern	Cliffs/canyons
Black Rosy-Finch	Species of Concern	Alpine
Bald Eagle	Threatened	Riparian Forest
Lewis’s Woodpecker	Species of Concern	Riparian Forest
Clark’s Nutcracker	Species of Concern	Conifer Forest
Long-Billed Curlew – Sandpiper	Species of Concern	Grasslands
Brewer’s Sparrow	Species of Concern	Sagebrush
Great Gray Owl	Species of Concern	Conifer Forest
Western Toad	Species of Concern	Wetlands, floodplain pools
Westslope Cutthroat Trout	Species of Concern	Mountain streams, rivers, lakes
Bull Trout	Threatened	Mountain streams, rivers, lakes
Artic Grayling	Species of Concern	Mountain rivers, lakes
Gillette’s Checkerspot Butterfly	Species of Concern	Wet meadows
Boreal Whiteface Dragonfly	Species of Concern	Wetlands
Western Pearlshell mussels	Species of Concern	Mountain streams, rivers

Source: Montana Natural Heritage Program (<http://mtnhp.org/>)

11. Beaverhead – Deer Lodge National Forest

The Beaverhead – Deer Lodge National Forest (BDNF) encompasses 3.38 million acres in Beaverhead, Butte-Silver Bow, Anaconda-Deer Lodge, Granite, Jefferson, Madison, Powell, and Gallatin counties. Approximately 207,503 acres of the forest area is in ADLC. The Forest Supervisor's office is located in Dillon, MT. The BDNF straddles the Continental Divide and provides the headwaters for rivers flowing throughout the western and central United States. The national forest includes patterns of forest lands, meadows, sagebrush, and grasslands, and offers outstanding scenery, wildlife habitat, and recreational activities. Timber harvesting and mineral extraction are traditional uses in the forest.

A revised "Land and Resource Management Plan" was adopted for the BDNF in 2008. This plan divides the BDNF into management areas with different programmatic objectives and standards for each area. Following summaries are for the management areas that lie wholly or partly within ADLC:

A. Anaconda –Pintler Wilderness

This area is managed to protect wilderness characteristics and provide primitive recreational opportunities. The area was designated as wilderness in 1964 as part of the National Wilderness Preservation System. Vegetation is managed primarily through prescribed and natural fire. Scenic value is rated very high. Motorized vehicles and mountain bikes are prohibited. Timber harvest is not allowed. The Forest Plan recommends additions to this wilderness area.

B. Fishtrap-Mt. Haggin

This area is managed as a transition between the level of activity in the Big Hole Valley and the Anaconda-Pintler wilderness. There are non-motorized and undeveloped lands adjacent to the wilderness area and there is road access and developed recreation sites near the private lands in the valley. Snowmobiling is allowed in the lower terrain. Timber harvest and grazing may take place in the area. Deep Creek watershed is managed to conserve native fish populations along with active watershed restoration.

C. Warm Springs

This area is managed for recreation, wildlife, and native fish conservation. The Pintler Scenic Route goes through the area. Higher elevations are semi-primitive and non-motorized. South facing slopes at lower elevations are closed to winter motorized uses so as to provide winter range for bighorn sheep. Activities include timber production and harvest, grazing, road restoration and recreational residence tracts. Noxious weed management is a priority along the Hwy 1 corridor.

D. Georgetown Lake

This area is managed for developed water based recreation, trail opportunities and winter sports. This area has the highest concentration of recreation development with an alpine ski area, developed campgrounds, fishing, picnic areas, boat launches, interpretive sites, cross-country skiing, and snowmobile trails. Ownership is mixed and includes private and public land. Issues include reducing risk of fire near private lands and managing nutrient input into Georgetown Lake from recreational activities and residential development.

PART 3: GOALS, POLICIES AND ACTIONS

Goal 1: Recognizing that water is an essential resource, and pure surface and ground water is paramount to the physical and economic well-being of the County, ADLC shall preserve and protect surface and ground water resources.

Goal 2: Ensure a clean, safe, and sanitary water supply for all residents, free from the threats of degradation or depletion.

Goal 3: Preserve and protect environmentally sensitive areas that contribute to water quality and/or fish and wildlife habitat.

Goal 4: Avoid risks to life and property associated with development and construction in hazardous areas.

Goal 5: Maintain, and where possible, increase access to public lands, lakes, and streams.

Goal 6: Preserve status as "clean air" community.

Goal 7: Preserve natural resource assets such as scenic vistas, healthy forests, and prime agricultural land.

Policies:

1. ADLC shall continue to promote Montana Highway 1 as a scenic corridor, and will protect the scenic qualities and vistas of this roadway.
2. ADLC shall carefully and thoroughly consider impacts to the natural environment, wildlife, and wildlife habitat when conducting subdivision review as set forth in Sec. 76-3-609, MCA, and in all development permit reviews.
3. ADLC shall continue to partner with the State of Montana, the federal government, and other local jurisdictions on natural resource conservation and preservation programs.
4. As a planning and development policy, ADLC shall not allow any public or private development to adversely impact endangered or threatened species, big game crucial winter range, spawning areas and sport fisheries, waterfowl nesting areas, and diverse riparian and forest habitat.
5. No development along lakes, rivers, streams, and adjacent banks shall be allowed to:
 - Diminish water quality
 - Diminish and/or degrade habitat for fish or wildlife
 - Interfere with navigation or other lawful recreation
 - Create a public nuisance
 - Create a visual impact discordant with predominant natural scenic values, or
 - Alter the physical and environmental characteristics and functions of the shoreline (except as many be permitted by proper regulating and permitting authorities).
6. Allow development of gravel resources consistent with ADLC natural resource goals and policies.

7. As land is developed, ADLC shall maintain historic access to public lands, lakes, and streams.
8. ADLC shall make preservation and enhancement of environmentally sensitive areas a priority in the development and implementation of regulations, programs, and projects, and in capital facility planning and budgeting.

Actions:

1. The County shall formulate and adopt a Planned Unit Development (PUD) provision to the DPS that encourages clustering where appropriate, and protects wildlife habitat, streamside vegetation, steep slopes, and other sensitive areas as open space.
2. Conduct a study of the Warm Springs aquifer in the West Valley area to determine its capacity to provide potable water to existing and future wells and well fields.
3. Work with property owners and developers to provide additional access points to Georgetown Lake.
4. Explore a county-wide critical areas ordinance that accomplishes the following:
 - Sets streamside setbacks and buffer standards.
 - Establishes protection for wetlands and provide for setbacks and buffer areas.
 - Prohibits development on steep slopes and direct building to less critical areas of the site.
 - Requires that critical wildlife habitat and daily and seasonal migration areas be considered in land development.
 - Sets standards for erosion control, stabilization, and revegetation when development must occur in critical areas.
5. Establish drainage criteria requiring that no siltation, parking/drive area runoff, chemicals, or pesticides make their way to rivers, lakes, and streams.
6. Work with the Big Hole Watershed Committee to provide even better protection for the Big Hole River and its riparian areas. Explore a bridge provision and aquatic habitat criteria for Ord. 208.
7. Partner with the Georgetown Lake Homeowners Association to conduct an education campaign on the handling and use of pesticides and fertilizers near the lakeshore.
8. Update the Georgetown Lake Lakeshore Protection Standards to set standards for dock spacing, surface areas of docks allowed, and amount of water-based construction in the protection zone.
9. Incorporate environmental standards into the ADLC floodplain ordinance, and encourage floodplains to be retained in their natural state.
10. Continue to take advantage of natural resource restoration afforded by Superfund, Natural Resource Damage Program, and other programs.
11. Coordinate with existing watershed groups on land use and critical areas planning.