Gunnison County Land Use Identification and Designation,

Strategic Result B-1, Phase I, Analysis and Recommendations

Summary:

> **"**Identify by 2012 and designate by 2013 appropriate areas for habitat protection, agricultural production, and industrial, commercial, and residential development."
>
> Strategic Result B-1, *Gunnison County Strategic Plan, 2011*

The Gunnison County Board of Commissioners included Strategic Result B-1 in the *Gunnison County Strategic Plan* as one of four strategic results intended to protect the environment.

A team that included representatives from Gunnison County's Geographic Information Systems, Public Works and Community Development Departments, and the County Wildlife Conservation Coordinator, was charged with the task of analyzing and developing recommendations to accomplish this strategic result. This Report is the first of two steps required to complete that task. Board direction that results from the data and analysis provided in this Report will inform the second step, that of designating specific areas appropriate for [wildlife] habitat protection, agricultural production, and industrial, commercial and residential development.

Data and analysis necessary to identify those areas are presented within the body of this Report, included within the following sections:

1. Background
2. Residential
3. Infrastructure Constraints
4. Wildlife Habitat
5. Agricultural Production
6. Land Use Regulations
7. Commercial and Industrial

Recommendations:

The following recommendations are intended to guide this strategic result's second phase—that of designating areas for specific categories of land protection, production and development:

1. Areas adjacent to existing population centers or areas that can be feasibly be annexed to existing water and sanitation districts are appropriate for higher residential densities.
2. Incentive-based policies and programs to encourage reduced density in areas that are not or cannot feasibly be served by central systems should be strengthened.

3. Gunnison County should propose that development within the City of Gunnison Three Mile Area be excluded from strict limitations imposed upon sage-grouse priority habitat.
4. Staff recommends that the County continue to support current locations for agricultural production, support the conservation of existing ranchland through the use of conservation easements and protect the continued viability of ranching through the opportunity of the Ranchland Process. However, designation of agricultural areas is not recommended.
5. Municipalities can provide incentives for commercial and industrial development by provision of proximity to transportation and utility infrastructure. Staff recommends that the County work with municipalities to encourage retail commercial development to locate within existing municipalities by improving and increasing infrastructure.
6. Heavy industrial uses in Gunnison County are generally extractive uses and need to be located near the resource. However, four locations are identified for their heavy industrial potential and the issues with each site are discussed.

With regard to residential development, the analysis within this document shows that currently there are 10,614 developed residential parcels in Gunnison County and 5,684 vacant residential parcels. The percentage of vacant lots varies by areas as follows: 49% outside the three main municipalities, 35% countywide, 20% within sewer districts, and 11% within the three main municipalities.

The City of Gunnison and Mt. Crested Butte have created plans for 3,781 new residential units (Crested Butte's annexation plans are on hold) within areas such as Gunnison Rising and North Village. These municipal plans are consistent with County policies to encourage development toward population centers. The County's growth policies were instituted to help maintain the desired land use pattern and to manage funding for public infrastructure.

The above vacant parcel percentages translate to a 40 year supply of growth outside the three main municipalities when using the 20 year average growth rate. Using the same methodology but adding in the above planned units, results in a 74 year supply for the City of Gunnison and 52 year supply for Mt. Crested Butte.

Based on this information, areas adjacent to existing population centers or areas that can be feasibly included into existing water and sanitation districts are appropriate for higher residential densities. In areas outside population centers we recommend that the County work to strengthen incentive based policies and programs for reduced density. This may include increased funding for conservation easement programs, modifications to current density transfer regulations, more effective use of clustering to reduce density in key areas, and continued support for the Ranchland Process.

These recommendations align with new findings associated with Gunnison Sage-grouse conservation. The sage-grouse subcommittee's recently completed habitat prioritization tool provides assistance to ongoing parcel specific habitat assessments and the BLM has begun work to incorporate it into their management plans.

Additionally, the tool also provides a means to estimate compliance with the Gunnison Sage-grouse Rangewide Conservation Plan (RCP). The analysis within the document provides a reasonable assessment that Gunnison County can meet the goals of the RCP via current regulations and a strengthened effort to conserve land in key high priority habitat areas. It also shows that the RCP goals can be met without protecting the relatively small amount of priority habitat located within designation population centers.

In addition, Gunnison County should propose to the USFWS that development within the City of Gunnison Three-Mile Plan be excluded from strict consideration of priority habitat due to the proximity to existing urban development. The County will still employ standard mitigation measures as practicable in these area, but with the realization that some habitat will be removed. Given the analysis in this document that shows sufficient habitat exists elsewhere to meet the 90% requirement from the Rangewide Plan, it is clear that directing growth within the City of Gunnison Three-Mile Plan best minimizes disturbance to sage-grouse, especially if development within the Three-Mile Plan contributes to conservation efforts further from urban areas.

With regard to commercial and industrial, the municipalities are incentivized, due to the sales tax benefits, to attract and accommodate commercial development due to sales tax revenues and have planned for its growth. Potential locations for heavy industrial uses are more difficult to accommodate in or near municipalities due to impacts to neighboring properties and because extractive uses must locate where the resource occurs. Heavy industrial uses include: concrete and asphalt batch plants, mill sites, pellet plants, etc.

Several criteria were analyzed for determining appropriate areas to consider for heavy industrial designation. Criteria include transportation infrastructure, access to utilities (water, sewer, electricity), existing industrial use, resource (i.e. gravel) location, sage grouse habitat, and adjacent uses. The document describes the issues associated with four areas: Signal Peak Industrial Park, Gold Basin Area, Riverland Industrial Park, and the County Landfill.

Background

In 2011 the Gunnison County Board of County Commissioners included Strategic Result B-1 as one of four in a desired strategy to protect the environment. A team that included Mike Pelletier, GIS Manager; Joanne Williams, Community Development Director; Neal Starkebaum, Community Development Assistant Director; Cathie Pagano, Community Development Planner; Jim Cochran, Wildlife Conservation Coordinator; and Allen Moores, Assistant Director of Public Works. In addition, David Baumgarten County Attorney provided legal counsel.

The team collected and analyzed data related to developed and undeveloped land within the unincorporated County and its municipalities. The analysis is included as part of this recommendation and is critical in identifying appropriate areas for habitat protection, agricultural production, and industrial, commercial, and residential development.

Table 1 shows how population has changed over time and projections of future growth from the state demographer. The annual population growth rate has averaged 1% over the last 10 years, 2.5% over the last 20 years, 1.4% over the last 30 years, and 2.6% over the last 40 years.

Table 1: Gunnison County Population

Population	Total Population	Annual population growth rate
State Demographer		
2040	21900	0.9%
2030	20163	1.2%
2020	17924	1.7%
Census Year		
2010	15324	1.0%
2000	13956	3.6%
1990	10273	-0.4%
1980	10689	4.1%
1970	7578	3.8%
1960	5477	-0.4%
1950	5716	-0.8%
1940	6192	1.2%
1930	5527	-0.1%
1920	5590	-0.5%
1910	5897	1.1%
1900	5331	2.2%
1890	4359	-4.7%
1880	8235	
1870	0	

Table 2 shows the total assessed value over time, which is a fraction of total value based on the assessment rates. While these rates have changed over time, it still gives a sense of the tax base, which is an indicator of the state of the economy. On a percentage basis, the largest growth periods are the 1970's and 1990's, while the 2000's show the largest growth in total dollars.

Table 2. Gunnison County Valuation History

Year	Total Assessed Value	10 year % Change
2011	700,809,690	95%
2001	358,546,310	174%
1991	130,729,690	69%
1981	77,275,460	318%
1971	18,500,020	57%
1961	11,781,330	12%
1951	10,562,140	23%
1941	8,618,380	-41%
1931	14,528,380	NA

Table 3 is a breakdown of land ownership categories by acres in Gunnison County. Federal land represents about 80% of Gunnison County, which is a similar percentage to many nearby counties such as Pitkin (91%), Hinsdale (94%), Summit (80%), Eagle (78%), and Montrose (68%).

The primary residential locational standard of the County, in Article 10 of the *Land Use Resolution*, requires that residential development be located adjacent to existing population centers, which are defined as the municipalities (including their Three-Mile Plan areas) of Gunnison, Crested Butte, Mt. Crested Butte, Marble, and Pitkin and the unincorporated areas of Crested Butte South, Ohio City, Almont, and Somerset. Currently 4.2% of the county or nearly three-quarters of the residentially assessed land area is located in population centers.

Table 3: Land Ownership

	Acres	Percent
Gunnison County (3259 square miles)	2,085,788	100.0%
Total Public	1,707,993	81.9%
Total Federal land	1,675,059	80.3%
State Land	21,774	1.0%
County	2,246	0.1%
Towns	1,646	0.1%
Other Exempt	1,651	0.1%
Right-of-way*	5,617	0.3%
	1,707,993	81.9%
Total Private**	377,246	18.1%
Residential	119,015	5.7%
Agriculture:	279,806	13.4%
Commercial:	3532	0.2%
Industrial:	12	0.0%
Private open spaces***	62,203	3.0%

* Includes some privately held right-of-way

** Based on classification for the highest assessed value

*** 52,236 acres in conservation easement.

Residential

Table 4 provides the number of developed and vacant (undeveloped) parcels within various areas of the County. A review of the population center information shown in Table 4, concludes that 60% of all parcels are located within population centers. Areas within sewer districts contain nearly 53% of all parcels. If seasonal access parcels (primarily second homes) are removed from consideration then almost 74% of all parcels are located with population centers.

Nearly half of all developed parcels are located within the three main municipalities; 65% are located within sewer districts, and the percentage rises to74% for all population centers. The three main municipalities and the Dos Rios Sewer District are all approximately 90% developed, while the Crested Butte South Metropolitan and the East River Sewer Districts are 61% and 48% developed respectively.

Thirty-five percent of parcels in the County are vacant (undeveloped). That number decreases to 22% within population centers, and to 11% for the three main municipalities. The vacant percentage rises to nearly half of all parcels outside the three main municipalities. The vacant percentage is also roughly half of all parcels in the East River Sewer District and about 39% in Crested Butte South Metropolitan District. The Three Mile Area around Gunnison has a lower vacant percentage of 10% overall, with a 33% rate in the North Gunnison Sewer District.

Values in Table 4 are approximate given normal parcel-mapping discrepancies. This table was derived from the Assessor database using the estimated predominant land use for each parcel and by using each parcels calculated center point to determine its location within the designated areas. The predominant land use was achieved by summing accounts for each land use type and then using the highest dollar value to determine the predominant land use.

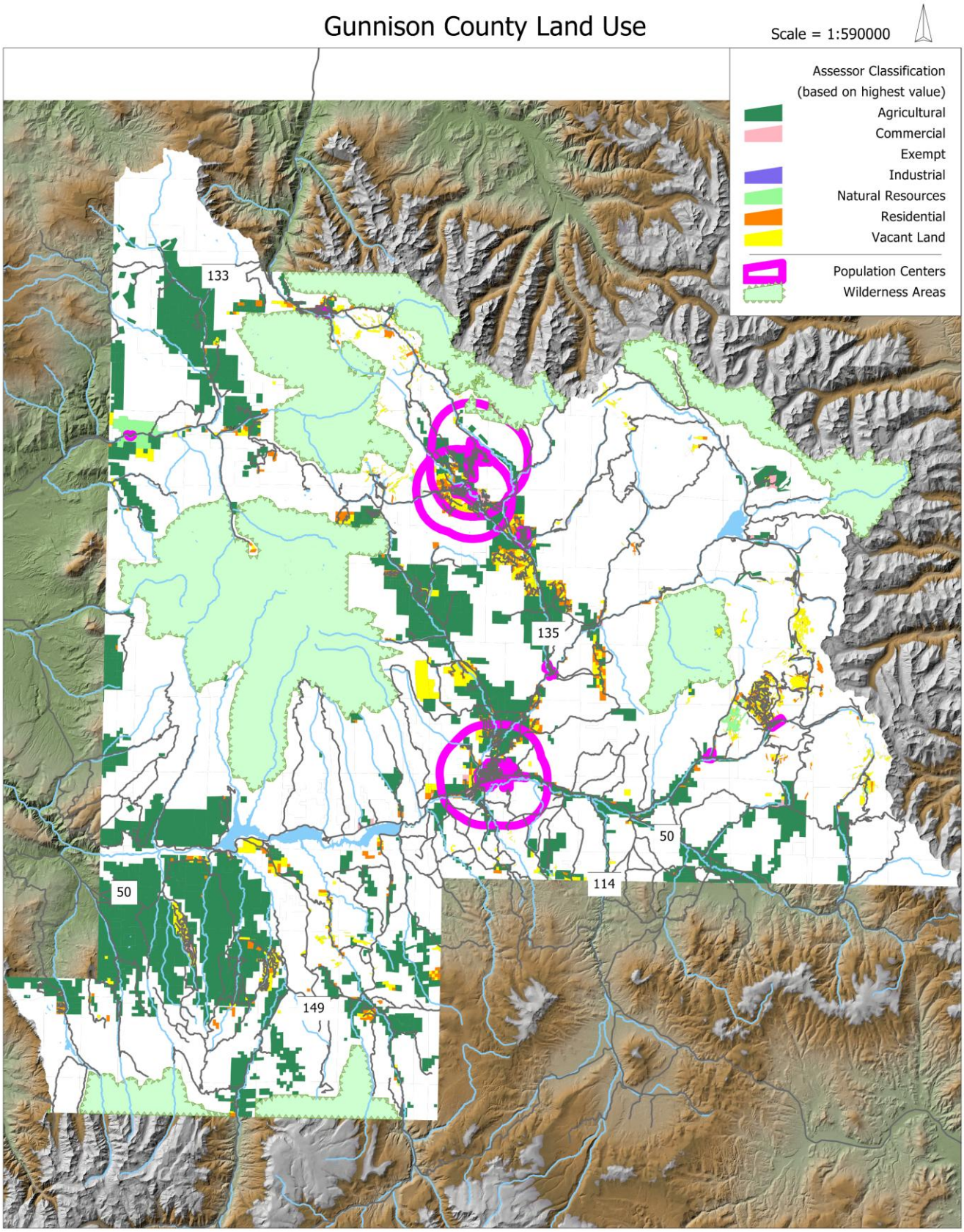
There are 547 agricultural properties that include residence in Gunnison County and these have been added to the developed residential column in Table 4. Note that the figures in Table 4 do not include

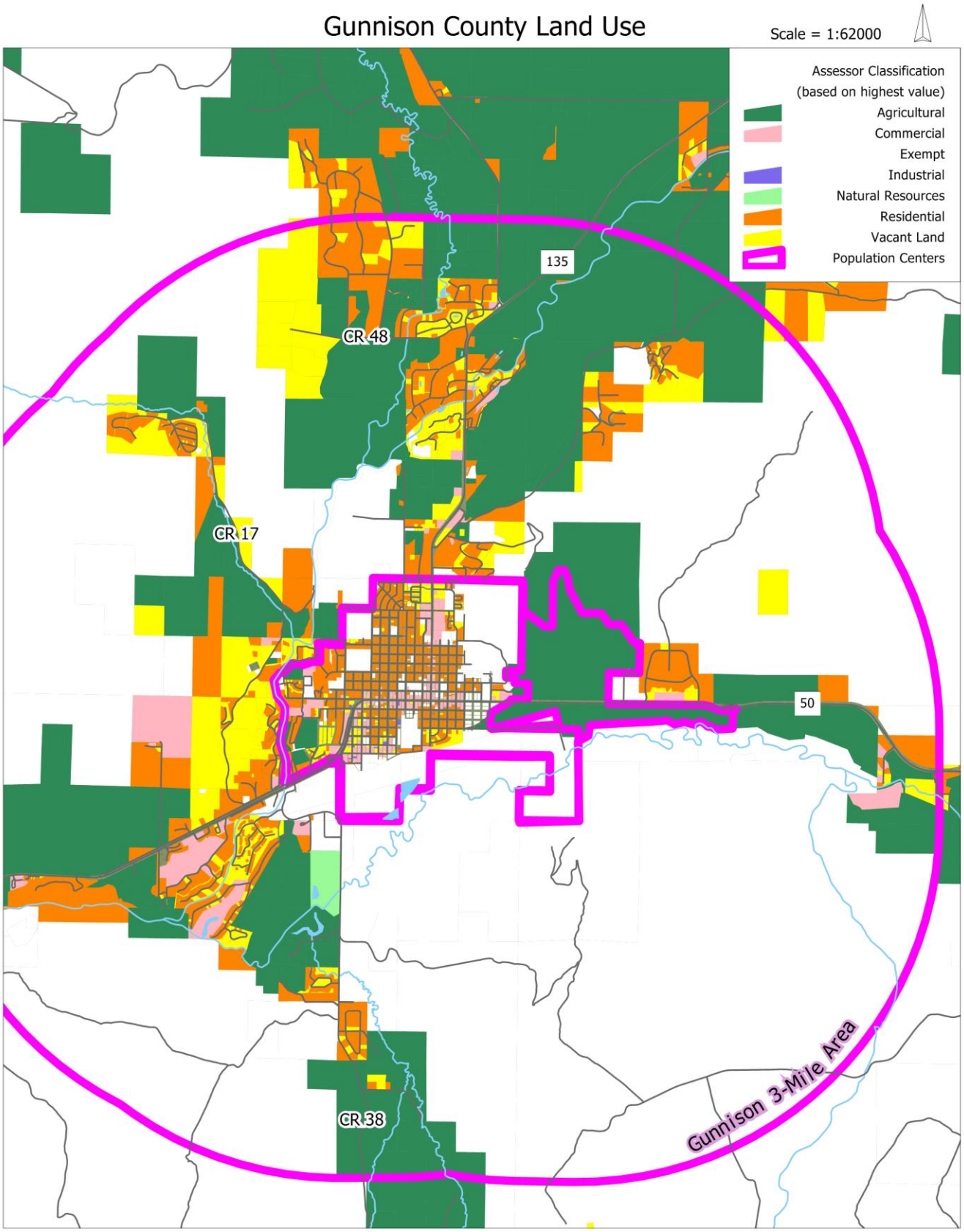
the number of units for apartments. However each condominium is counted as a separate parcel. Also it's important to recognize that many areas in the table overlap. Also, the three-mile area around Crested Butte does not include the portion of Mt. Crested Butte that lies within it and vice versa.

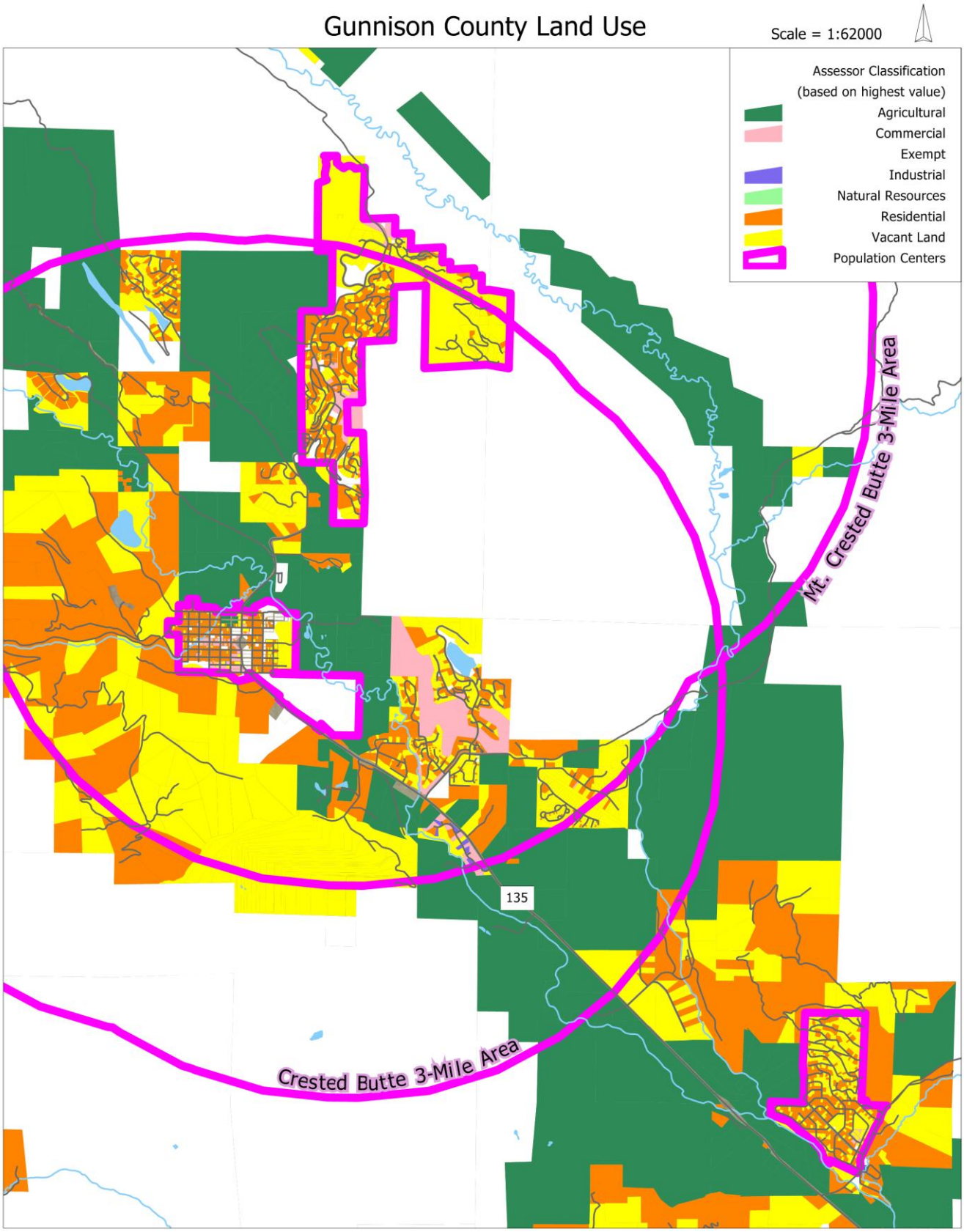
Table 4: Residential Parcels

Areas (some overlap)	Developed Parcels	% of Total Developed Parcels	Vacant Parcels	% of Total Vacant Parcels	Total Parcels	% Developed of Total Parcels	% Vacant of Total Parcels
Gunnison County	10,414	100%	5,684	100%	16,098	65%	35%
Within 3 Largest Municipalities	4,598	44%	542	10%	5,140	89%	11%
Within Sewer Districts	6,756	65%	1,721	30%	8,477	80%	20%
Outside 3 Largest Municipalities	5,269	51%	5,142	90%	10,411	51%	49%
Seasonal Access Parcels	1,128	11%	1,757	31%	2,885	39%	61%
Population Centers	7,570	73%	2,151	38%	9,721	78%	22%
3 Mile - Gunnison	2,859	27%	331	6%	3,190	90%	10%
Gunnison Urban Growth Boundary	2,123	20%	269	5%	2,392	89%	11%
City of Gunnison	1,567	15%	165	3%	1,732	90%	10%
Dos Rios Sewer District	656	6%	78	1%	734	89%	11%
North Sewer District	333	3%	167	3%	500	67%	33%
City Service Extension Area	58	1%	5	0%	63	92%	8%
3 Mile - Crested Butte	1,625	16%	821	14%	2,446	66%	34%
Crested Butte	898	9%	93	2%	991	91%	9%
CB Sewer District	909	9%	96	2%	1,005	90%	10%
Crested Butte 201 Boundary	924	9%	100	2%	1,024	90%	10%
3 Mile - Mt Crested Butte	2,850	27%	955	17%	3,805	75%	25%
Mt Crested Butte	2,137	21%	284	5%	2,421	88%	12%
Mt CB Sewer District	2,247	22%	362	6%	2,609	86%	14%
Mt. Crested Butte 201 Boundary	2,249	22%	387	7%	2,636	85%	15%
CB South	491	5%	305	5%	796	62%	38%
CB South Sewer District	497	5%	312	5%	809	61%	39%
CB South 201 Boundary	612	6%	389	7%	1,001	61%	39%
East River Sewer District	489	5%	536	9%	1,025	48%	52%
East River 201 Boundary	470	5%	492	9%	962	49%	51%

The following maps provide a visual of the overall land use within Gunnison County and around the three main towns. The first map shows the large amount of exempt and agricultural lands as well as the location of population centers. The second and third maps provide sufficient detail to view most of the parcel specific land uses around the three main towns.


Gunnison County Land Use
Scale = 1:590000
Assessor Classification
(based on highest value)
Agricultural
Commercial
Exempt
Industrial
Natural Resources
Residential
Vacant Land
Population Centers
Wilderness Areas
133
135
50
114
50
149


Gunnison County Land Use
Scale = 1:62000
Assessor Classification
(based on highest value)
Agricultural
Commercial
Exempt
Industrial
Natural Resources
Residential
Vacant Land
Population Centers
135
CR 48
CR 17
50
CR 38
Gunnison 3-Mile Area


Gunnison County Land Use
Scale = 1:62000
Assessor Classification
(based on highest value)
Agricultural
Commercial
Exempt
Industrial
Natural Resources
Residential
Vacant Land
Population Centers
Mt. Crested Butte 3-Mile Area
Crested Butte 3-Mile Area
135

The Gunnison County *Land Use Resolution* allows for secondary residences on legal parcels. Integrated or detached secondary residences are permitted through an Administrative Review Land Use Change application. Standards for approval include: the secondary residence is subordinate to the primary residence; the two residences shall be located in close proximity; identification of a building envelope; adequate parking; shared water supply and wastewater treatment system, to the maximum extent feasible; compliance with deed restrictions and protective covenants. The possibility of secondary residences was not included in the following analysis.

Table 5 shows the planned expansion within the City of Gunnison and Mt. Crested Butte. These future planned residential units are in various stages of approval and the majority are not available for construction.

Table 5: Approved Plans for New Residential Units in Towns	
City of Gunnison	
Infill – from 2007 master plan	200+ residential – conservative estimate
West Gunnison plan	900 + residential units
Gunnison Rising plan	734 residential units
Mt. Crested Butte	1947 units in North Village and other Planned Unit Developments
Total	3781 units
Crested Butte*	The northeast area annexation is not included in this analysis because it's not approved or in process. However, the town planner John Hess expects there may be 200 new units with infill and the northeast annexation.

Table 6 uses the Assessor's actual year built data to establish the average annual number of residential homes built in the last 20 years by region. This value is then divided into the number of current vacant parcels for that area to determine an estimate for current supply. However, this ignores the planned lots in the three main towns. While Table 6 is in parcels rather than units (as in Table 5), if the two categories are combined, the years of supply values increase significantly, as shown in the last column. This table shows that a majority of the current vacant residential lot supply is in unincorporated areas and that the planned residential developments in the three main towns will provide decades of supply.

Table 6: Residential Units per Year and Supply				
Areas (some areas overlap)	**Homes built per year (20 year avg.)**	**Current vacant parcels**	**Current years of supply**	**Years of supply with current vacant and planned lots from Table 5**
Gunnison County	215	5,684	26	44
Outside 3 Largest Municipalities	130	5,142	40	40
Population centers	157	2,151	14	38
City of Gunnison	27	165	6	74
City of Gunnison 3 Mile Area	50	331	7	43
Crested Butte Sewer District	18	96	5	Not estimated
Mt. Crested Butte Sewer District	44	362	8	52
East River Sewer District	17	536	32	32
CB South Sewer District	19	312	16	16

There is a significant amount of undeveloped land near and within population centers that may be developed in the future. While there may be some infrastructure challenges, there is significant land within population centers for residential development. For example, there are approximately 15,104 acres of agriculturally assessed land within population centers that is not under a conservation easement. This agriculturally assessed land represents 44% of the 34,087 acres within population centers that is private land.

Infrastructure Constraints

Infrastructure can be a critical constraint to any type of new development. Water supply, wastewater treatment, access and road capacity are significant considerations when identifying new locations for development. Staff reviewed and analyzed infrastructure constraints and identified how they may impact industrial, commercial and residential development.

Water

Water supply is a critical constraint to new development. The Gunnison County *Land Use Resolution* requires that all new development provide a water supply that is legally and physically adequate in terms of quality, quantity, dependability and pressure for the proposed development. Water availability is determined by physical and legal constraints. Physical constraints refer to the water supply available from natural stream flows and tributary aquifers. Legal constraints refer to the amount of water already appropriated by senior river water rights on a stream and the amount of water the state must allow to flow downstream in order to full interstate water compacts.

The Gunnison River, the Crystal River and Lake Fork of the Gunnison and their tributaries are over-appropriated, meaning that all water, including surface water and groundwater is subject to administration by the Office of the State Engineer, Division of Water Resources, Department of Natural Resources.

The policy of Gunnison County is to encourage land use changes to use existing water supply systems, especially those paid for in whole or in part by the sale of municipal, county, special district, or other political subdivision bonds.

When existing water systems are not accessible, evidence of adequacy of individual supplies is required for new development. This may require an “Augmentation Plan”, which is a court-approved document designed to protect existing water rights via replacing water depleted by a new project. Currently, contracts for augmentation water are available through the Upper Gunnison River Water Conservancy District, in areas of the upper East River Valley and the lower Gunnison Basin. Sources of augmentation water include the Aspinall Unit (Blue Mesa Lake) and Meridian Lake. However, those supply sources are not able to provide augmentation water for all areas. According to Frank Kugel, Manager, Upper Gunnison River Water Conservancy District, several areas (including their tributaries) of the County are without a source of augmentation water, including Ohio Creek, Tomichi Creek (above the Biebel Ditch 1 and 2 near the Signal Peak Industrial Park), Taylor River (above Lottis Creek), East River (above the Slate River confluence), the Crystal River and many smaller tributaries to the Gunnison River.

According to Mr. Kugel, the City of Gunnison’s long-term water supply is considered good, especially when the water rights acquired with the Gunnison Rising annexation are included. Also, the County’s

Dos Rios water plant water supply is considered good. According to Mark Templeton, the plant operator, the plant is currently designed for 0.5 million gallons per day (mgd). However, the plant is a modular design allowing for expansion and they have water rights sufficient for 2 mgd.

Sewer Capacity

The City of Gunnison's wastewater treatment plant (WWTP) is rated for 17,140 people and a total contribution infiltration from sewer leaks and surface runoff inflow not to exceed 2.5 million gallons per day (mgd). The City and County have lowered the amount of infiltration and inflow for their respective collection systems and are well below the 2.5 mgd level. According to the City Engineer, Terry Zerger, new State regulations may soon be adopted that could decrease the plant's capacity. The City will be performing a study to determine the effect of these new regulations on the plant's capacity. Expansion of the plant is also a possibility that would involve an additional oxidation basin and clarifier.

The 2010 census estimated population level in areas currently served by Gunnison's WWTP is 7,164 people. This includes the City of Gunnison, Dos Rios, Antelope Hills, the area between Antelope Hills and Highway 50, and the North Gunnison Sewer District. The estimated population level for planned expansion areas within the City of Gunnison is 6,983, as derived from this formula: 2.38 people * (734 Gunnison Rising + 900 West Gunnison Plan + 1300 city remainder from 2007 master plan). These planned areas increase the number to 14,147 people or 83% of capacity for the WWTP. According to the City Engineer, the sewer plant is maxed out with the current users and the planned growth areas.

Mike Billingsley manages the Skyland Metropolitan District which supplies water to the Skyland community. They are approximately 50% build out and are in the process of securing additional water rights to meet their expected build out needs. They have no plans to expand the system. Mike also manages the East River Sanitation District which supplies sewer to subdivisions in the area, such as Skyland, Larkspur, and Buckhorn. They completed an upgrade 3 years ago and have plans for larger upgrades after 50-100 new taps come on line. Their system is expandable to meet the growth within their area and they are not contemplating any changes to the potential service area identified in the 201 service boundary intergovernmental agreement.

Jack Dietrich manages the Crested Butte South Metro District which supplies water and sewer services to the Crested Butte South Area. His analysis shows that this area includes 780 lots, of which 355 are developed and 425 are vacant. He says they have sufficient water rights for 900 gallons per minute (gpm) which will cover build out but are currently making only 530 gpm. They have plans to drill a new well for expansion of their system. All but 2 lots have service currently available and those 2 lots can easily be served. The wastewater plant was expanded a few years ago and currently serves 542 units but could serve twice that and likely the whole district.

Town of Crested Butte Public Works manager, Rodney Due, says the town's 1.2 mgd water system is currently at capacity but they have plans for an expansion to be completed this summer. They have sufficient water rights for future expansion if needed. The town's 0.6 mgd wastewater plant is at roughly 50% of capacity and the plant has room for more expansion. Also, they are currently processing sludge trucked in from Mt. Crested Butte treatment plant.

Mt. Crested Butte Water and Sanitation District Manager, Frank Glick, says the district sewer plant is approximately at 50% of its capacity of 1.2 mgd and that the plant is readily expandable to 1.8 mgd.

This is roughly close to meeting expected build out. Space for further expansion is limited. The water plant can generate 1 mgd and store 1.2 mgd. The water system is also roughly close to meeting expected build out. They have plans to expand the system in the coming years. Future additions to the district would have to be able to bring sufficient new water rights to the district.

Road System - Level of Service

Overall Gunnison County has far less traffic than more densely populated regions of Colorado. However, the Colorado Department of Transportation (CDOT) has commented to Allen Moores, Assistant Public Works Director, that the following roads could require major intersection improvements including acceleration/deceleration lanes, to the highway if significant additional traffic is to be added. The County should further identify these problem areas and consider how they can be funded without impacting the County budget.

1. CR 17 Antelope Creek
2. CR 32 McCabe's Lane
3. CR 42 Landfill Road
4. CR 48 Seneca
5. CR 738 Brush Creek

When considering the larger traffic pattern, it is important to understand that mountain valley development is mostly dependent on highways traversing valleys and converging like spokes on a wheel, with few road connections to disperse traffic. The analysis of existing vacant parcels and municipal planned units support more than a doubling of population when built out. According to Alisa Babler, CDOT engineer, doubling the population will roughly double the average annual daily traffic (AADT) volumes.

Table 7. CDOT Traffic Counts 2010

Location	Annual Average Daily Traffic
Hwy 50 Blue Mesa Dam	2,900
Hwy 50 west of Gunnison	6,600
Hwy 50/Main St. Gunnison	12,000
Hwy 50 east of Gunnison	4,400
Hwy 50 Doyleville	2,600
Hwy 135/Tomichi	11,000
Hwy 135 CR 10	7,500
Hwy 135 Ohio Creek Rd	3,900
Hwy 135 Almont	3,600
Hwy 135 Crested Butte	6,100

Peak hour traffic is the actual point of concern because that is when delays making left turns on/off the highways and pedestrian crossing become more difficult. CDOT says that peak hour traffic correlates closely to 10% of AADT in most all parts of the state and country, so it is possible to use CDOT's published AADT figures, shown in Table 7, to predict future peak hour traffic and various points along highways in Gunnison County.

The state demographer predicts roughly a 1.5% growth rate for the next 20 years (Table 1). At this rate it would take 46 years to double the population. Predictions of future growth rates are highly speculative. Gunnison County growth rate over the past 20 years has averaged 2.5%. Using this growth rate, it would take only 28 years to double the population.

Wildlife Habitat

The Gunnison County *Land Use Resolution* (LUR) has the following provision to preserve wildlife habitat: "To protect and preserve lands from land use activities and patterns of development that would cause significant net adverse effects to sensitive wildlife habitat and to discourage land uses that will impair or destroy such habitats, or their utilization by wildlife species, or that would endanger a wildlife species. It is the intent of this *Resolution* that private landowners do not lose reasonable use of their land or, when appropriate, receive fair compensation because of owning sensitive wildlife habitat."

The US Fish and Wildlife Service lists the species shown in Table 8 below as either candidates for listing, or threatened or endangered under the Federal Endangered Species Act (ESA), with a range that includes all or part of Gunnison County.

Table 8: Threatened and Endangered Species in Gunnison County	
Birds	
Gunnison sage-grouse (*Centrocercus minimus*), Population: entire	Candidate
Yellow-Billed Cuckoo (*Coccyzus americanus*), Population: Western U.S. DPS	Candidate
Fishes	
Greenback Cutthroat trout (*Oncorhynchus clarki ssp. stomias*)	Threatened
Insects	
Uncompahgre Fritillary butterfly (*Boloria acrocnema*)	Endangered
Mammals	
Canada Lynx (*Lynx canadensis*), Population: (Contiguous U.S. DPS)	Threatened
North American wolverine (*Gulo gulo luscus*)	Candidate

County regulations and efforts to date have been found by the USFWS to be insufficient to preclude listing of the Gunnison Sage-grouse, as evidenced by USFWS status review of September 2010. Therefore an umbrella Habitat Conservation Plan will likely require regulations and funding mechanisms that conserve more Gunnison Sage-grouse habitat than is occurring today. This plan could allow those creating a species "take" to avoid the need for individual Federal authorizations and individually defined specific mitigation measures.

Gunnison Sage-grouse Occupied Habitat includes most of Gunnison County below 9,200 feet in the Upper Gunnison River Basin. The Gunnison Sage-grouse is a large-landscape species that is most likely to impact private property use and development in that portion of the County. If listed, the US Fish and Wildlife Service will require those projects on private lands that may result in a "take" of the species to mitigate for that take. "Take," under the ESA, includes destruction, loss or fragmentation of habitat. This will likely result in additional landowner costs for analysis, environmental assessment and mitigation.

The 2005 Gunnison Sage-grouse Rangewide Conservation Plan (RCP) is the current guiding document in the context of the listing process or any subsequent planning/regulatory documents developed by the USFWS. Within the Rangewide Plan the Gunnison Basin strategies that seem most important to address are:

> *HABITAT PROTECTION*
> ***Strategy 1:*** *Maintain 90% of seasonally important habitats (combined public and private, as mapped), by protecting the necessary proportion of those private lands that are at risk of development from conversion to unsuitable housing densities (see "Spatially Explicit Analysis of Impacts of Additional Housing Units", pg. 154 and Appendix F).*
>
> *HABITAT IMPROVEMENT*
> ***Strategy 4:*** *Minimize GUSG habitat fragmentation and degradation*
> 1. *Implement recommendations from rangewide "Human Infrastructure: Power lines, Other Utility Corridors, Wind Turbines, Communication Towers, fences and Roads Strategy (pg. 225).*
> 2. *Implement recommendations from rangewide strategy on "Noxious and Invasive Weeds" (pg. 232)*

A key missing component in meeting the strategies of the RCP is the identification of priority habitat and several efforts are underway by wildlife researchers as well as the Technical Subcommittee to the Gunnison Basin Sage-grouse Strategic Committee (GBSGSC). The latter has created a soils based habitat prioritization tool that provides a means to create an overall or seasonal habitat score throughout sage-grouse occupied habitat. Early indications are that the tool provides a good initial assessment, but development projects will still require on-site ground truthing.

The GBSGSC has made a draft recommendation that Gunnison County use scores 15 and above as priority habitat with regards to development. Following the Rangewide Conservation Plan, 90% of priority habitat (as scored >= 15), equates to over 313,000 acres on private and public land. A reasonable approach to quantifying this policy on private land is to assume that priority habitat on public land is protected and that Gunnison and Saguache Counties should protect their proportional share of private land

Table 9. Gunnison Sage-grouse Habitat Prioritization Tool

Total Acres	>= 15 score area	>= 15 score % of total	Description
NA	41,308	NA	Gunnison County proportional share of private land
30,037	17,339	58%	Private land with conservation easements in Gunnison County
NA	23,969	NA	Gunnison County share minus existing conservation easements
99,479	47,130	47%	Gunnison County private land without conservation easement
68,540	37,671	55%	Gunnison Co. private without CE, > 70 ac parcels assessed agr. or vacant
12,941	3,233	25%	Private land without CE within City of Gunnison 3 mile outside City limits

Based on those assumptions, Table 9 provides analysis of the Rangewide Plan's 90% strategy. Gunnison County would need to protect about 41,308 acres of private land. This amount maybe

reduced to approximately 24,000 acres if subtracting existing conservation easements is allowed. While protection does not necessarily require conservation easements, it is useful to understand that Gunnison County has roughly 47,000 acres of private land without conservation easements of which about 37,671 acres is located on parcels greater than 70 acres in size and assessed agriculturally or vacant. Thus much of this area is on larger parcels where conservation easements might be possible if landowners are willing and funding is available.

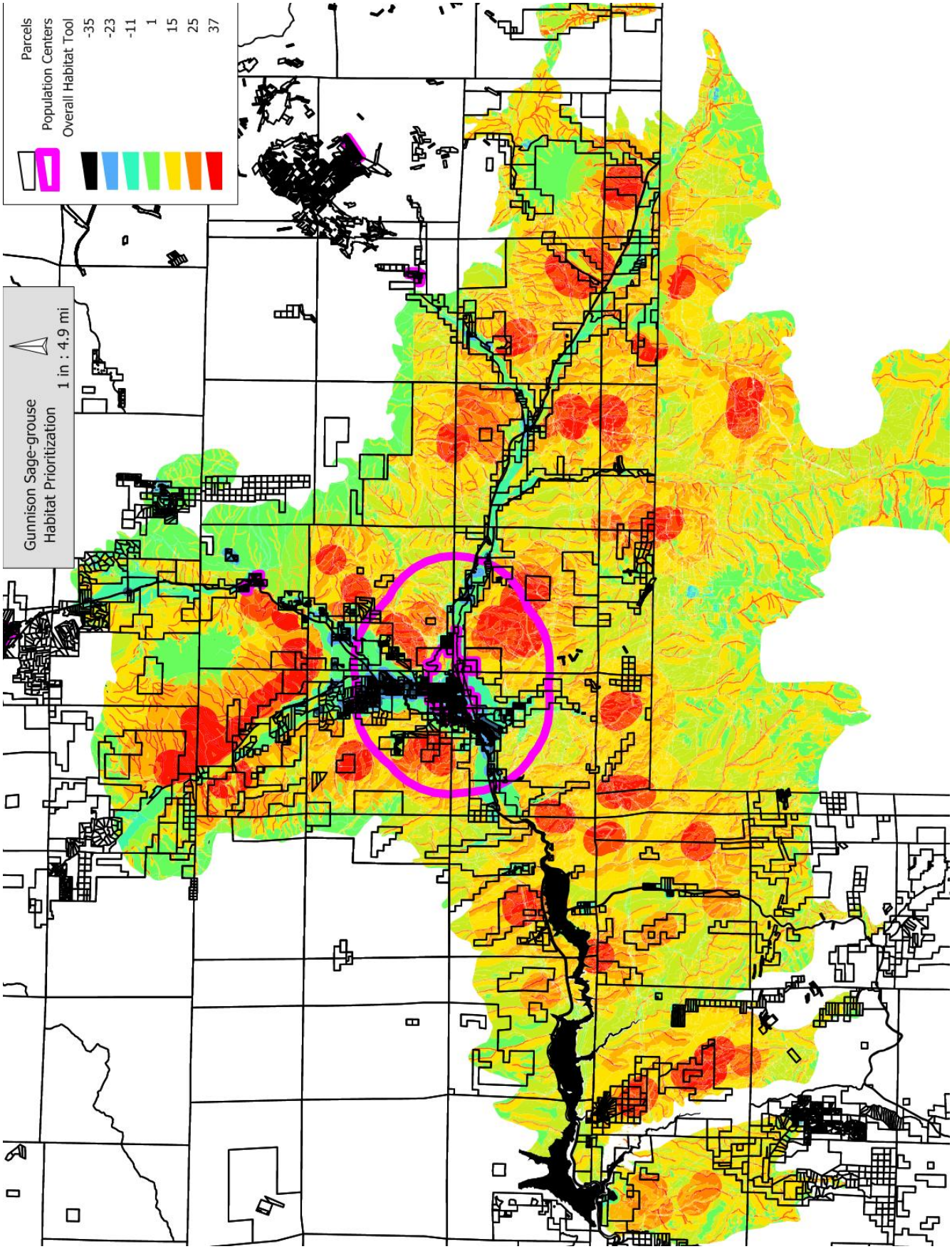
Based on the analysis, more priority habitat land is available for protection than is required by the 24,000 acre requirement calculated above. In addition, only 3,504 acres of priority habitat are within population centers.

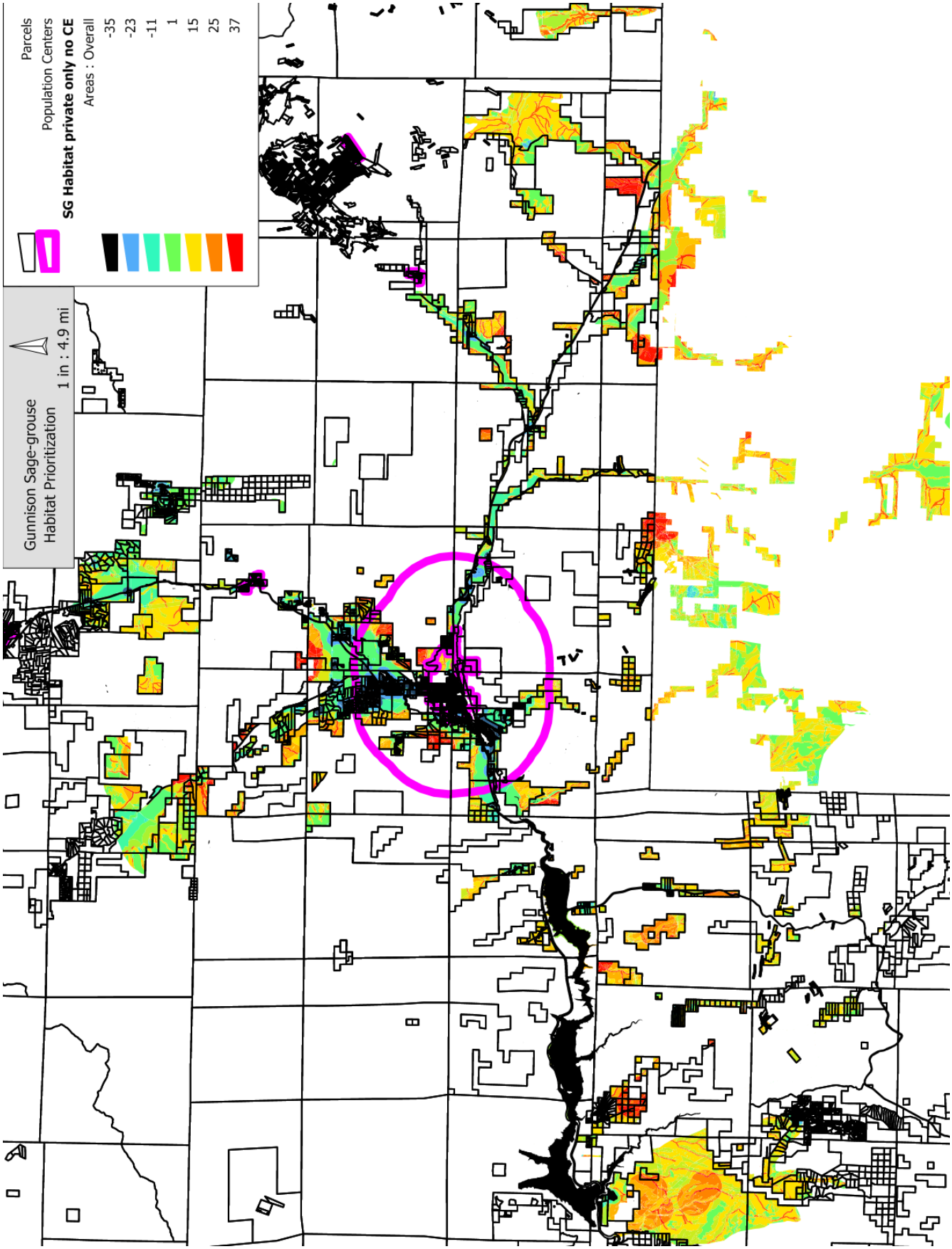
The first map below shows the sage-grouse priority map on public and private lands. The second map shows just the priority habitat on private lands without a conservation easement. The third map is the same as the second map but zoomed into the Gunnison 3-Mile boundary. The third map provides enough detail to see specific habitat scores within parcels. It should be noted that an agreement has been finalized on how to treat the habitat in Gunnison Rising area that includes conservation of a portion of the land north of annexation area shown as higher priority habitat.

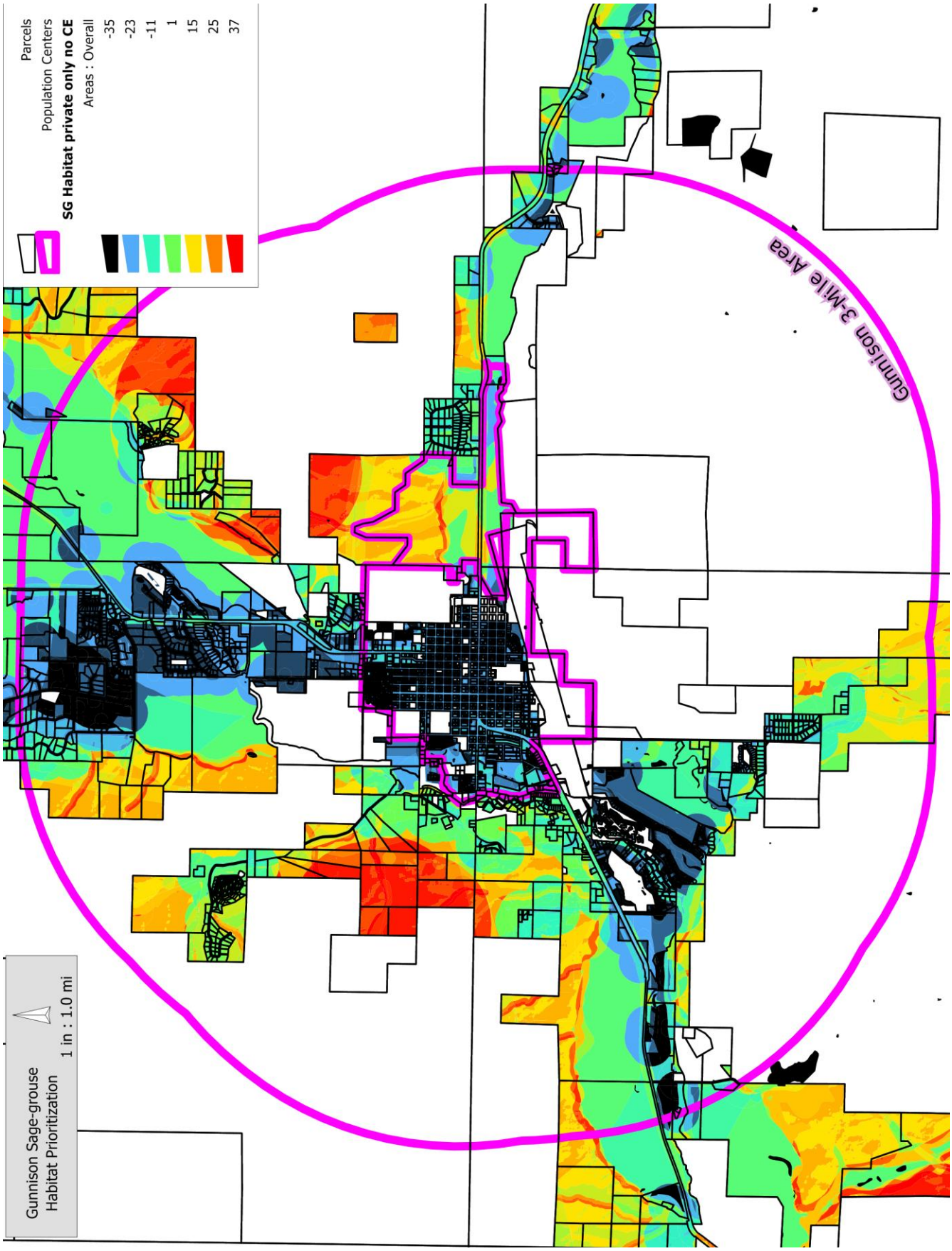
Protection of priority habitat can take the form of conservation easements, agreements (Certificate of Inclusion) with the Colorado Parks and Wildlife under their agreement with USFWS ((known as Candidate Conservation Agreement with Assurances), and/or regulations to mitigate impacts of development/recreation. The GBSGSC recommends that the priority habitat tool be used to inform these three forms of protection. The above analysis can also be used to argue for not listing the bird and for increased use of regional wildlife funds for local conservation easements in priority habitat.

In addition, Gunnison County should propose that development within the City of Gunnison Three-Mile Plan be excluded from strict consideration of priority habitat due to the proximity to existing urban development. The County will still employ standard minimization measures as practicable in these area, but with the realization that some habitat will be removed. Given the analysis above that shows sufficient habitat exists elsewhere to meet the 90% requirement from the Rangewide Plan, it is clear that directing growth within the City of Gunnison Three-Mile Plan best minimizes disturbance to sage-grouse, especially if development within the Three-Mile Plan contributes to conservation efforts further from urban areas.

The USFWS decision whether to list the bird has recently been delayed and now USFWS officials say the decision is due out on or before September 30, 2012. The analysis made possible by the habitat prioritization tool has been made available for consideration in that decision.


Gunnison Sage-grouse
Habitat Prioritization
1 in : 4.9 mi
Parcels
Population Centers
Overall Habitat Tool
-35
-23
-11
1
15
25
37


Gunnison Sage-grouse
Habitat Prioritization
1 in : 4.9 mi
Parcels
Population Centers
SG Habitat private only no CE
Areas : Overall
-35
-23
-11
1
15
25
37


Gunnison Sage-grouse
Habitat Prioritization
1 in : 1.0 mi
Parcels
Population Centers
SG Habitat private only no CE
Areas : Overall
-35
-23
-11
1
15
25
37
Gunnison 3-Mile Area

Historically, conservation easements have been an appropriate and effective tool for conserving wildlife habitat. Table 10 shows the number and acres of conservation easements in relation to County approved subdivisions and the number of parcels within them. The table begins in 1999 because that was the year the Land Preservation Board started funding projects. Since 1999 the acres of land conserved is a bit over twice as much as been put into County approved subdivisions. While there are another 746 parcels with acreage between 34 and 70 that contain 27,304 total acres outside County approved subdivisions, it is difficult to determine the year they were created and were therefore not included in this analysis.

Table 10: Growth of Conservation Easements and Platted Subdivisions

	Conservation Easements		County Approved Subdivisions		
Year	Count	Total Acres	Count	# of parcels within	Total Acres
1999	10	2,808	45	288	1,047
2000	18	8,031	40	680	5,197
2001	7	878	33	270	1,303
2002	10	4,964	31	263	1,079
2003	27	7,432	16	167	433
2004	13	2,369	42	911	1,747
2005	19	2,547	29	490	1,491
2006	23	5,899	36	302	1,541
2007	17	3,235	26	586	1,605
2008	6	704	9	106	3,308
2009	7	4,103	11	60	1,263
2010	7	1,017	1	2	0.3
Total	164	43,987	319	4,125	20,014

Agriculture

Ranching provides food and agricultural products that are essential to the local and national economy and offers a host of indirect benefits, including the following:

1. Keeps water in the community legally and physically.
2. Maintains rural landscapes and amenities.
3. Serves as a foundation of the community's desired development pattern.
4. Benefits other economic sectors such as tourism, real estate, skiing, and hunting
5. Provides important habitat areas for wildlife.
6. Provides irrigation water that recharges aquifers.

Table 11 identifies the amount of private land in Gunnison County that is agriculturally assessed or undeveloped. Approximately 60% (227,991 acres) of the total private land consists of parcels greater than 70 acres assessed as agricultural and on which there is no conservation easement. These lands are generally considered available for dividing into parcels 35-acres or smaller. There are only 839 parcels in Gunnison County assessed as agriculture that are greater than 70 acres in size.

.

Table 11: Agriculture and Undeveloped Lands		
Private Land	**Acres**	**Number of Parcels**
< 35 acre parcels	33,159 (9%)	13,105 (86%)
35 to 70 acre parcels	73,627 (20%)	1,271 (8%)
> 70 acre parcels with an agricultural assessment	270,460 (71%)	839 (6%)
> 70 acre with ag. assessment and no conservation easement	227,991 (60%)	NA
Total	377,246	15,215

Staff recommends that the County continue to support current locations for agricultural production, support the conservation of existing ranchland through the use of conservation easements and protect the continued viability of ranching through the opportunity of the Ranchland Process. Existing agricultural areas are and remain appropriate for agricultural production. However, designation of agricultural areas is not recommended.

Land Use Regulations

The LUR specifies residential locational standards "that are intended to provide planned and orderly use of land and protection of the environment in a manner consistent with constitutional rights, to encourage development in areas closest to existing population centers, to foster growth that is orderly and reasonable in its rate and location, and is compatible with existing uses, and to promote the use of existing infrastructure."

Gunnison County does not utilize standard Euclidean zoning. Colorado State Statute allows landowners the right to divide land into 35-acre parcels without going through the County subdivision review process. However, each 35 acre parcel is subject to all County regulations. Section 1-107 of the LUR states that there shall be a right to have one residence per each existing legal lot, if that residence fully complies with all applicable requirements. Secondary residences are permitted through an Administrative Review Land Use Change permit. Standards for approval include: the secondary residence is subordinate to the primary residence; the two residences shall be located in close proximity; identification of a building envelope; adequate parking; shared water supply and wastewater treatment system, to the maximum extent feasible; compliance with deed restrictions and protective covenants.

The LUR's locational standards in Article 10 provide standards for densities greater than one unit per 35 acres. Higher densities may be justified by demonstrating compliance with the following: 1) municipal three mile plans 2) access to public services 3) clustering 4) substantial similarity to adjacent densities, and 5) no net adverse cumulative impacts. These standards provide guidance as to the appropriate densities in unincorporated areas and are meant to discourage a sprawling land use pattern.

The LUR defines sprawl as "haphazard development located beyond municipal boundaries and generally characterized by:

- Inefficiency, conspicuous consumption of raw land, typically built at low densities resulting in conflict with established rural land use patterns; or
- Failure to use existing infrastructure in favor of new facilities; or

- Location outside existing service areas, disrupting continuity and heightening demand and associated costs for services; and
- Heavy dependence on automobiles as opposed to mass transit or other non-auto related transportation modes."

In addition to inefficiency and poor accessibility to places where people want to go, planning literature defines sprawl as the lack of common open space in developed areas. This open space serves the very important roles of cleaning the environment, bonding the community and providing recreation. This is an important distinction because otherwise open lands near towns would not be considered valuable in the sprawl definition metric. Ultimately, the benefits of avoiding sprawl include agricultural/open space conservation, lower cost of service delivery, as well as less energy and environmental impact from development.

Commercial and Industrial

The City of Gunnison has 126 acres of developed commercial/light industrial property and 36 vacant acres. In addition, there is 202,304 square feet of commercial in the West Gunnison plan and 484,000 square feet of non-residential area in the Gunnison Rising plan. There is also an agreement between the City and County stating that sewer will not be available for commercial use outside the City.

Table 12 shows the amount of existing, vacant, and planned commercial/light industrial within the various towns. The towns are incentivized to attract and accommodate commercial development due to sales tax revenues and have planned for its growth. Staff recommends that the County work with municipalities to encourage retail commercial development to locate within existing municipalities by improving and increasing infrastructure.

Table 12. Commercial/Light Industrial

Location	Existing (acres)	Vacant (acres)	Square feet (planned)
Existing City of Gunnison	126	36	NA
West Gunnison Plan	?	NA	202,304
Gunnison Rising Plan	?	NA	484,000
Mt. Crested Butte	38	34 (planned)	260,860
Crested Butte	15	5.7	NA
Marble, Pitkin, Ohio City	10	NA	NA

Locations for heavy industrial uses are more difficult to accommodate in or near municipalities due to impacts to neighboring properties and that mineral extractive uses must locate where the resource occurs. Heavy industrial uses include: concrete and asphalt batch plants, mill sites, pellet plants, etc.

Several criteria were analyzed for determining appropriate areas to consider for heavy industrial designation. Criteria include access to utilities (water, sewer, electricity), existing industrial use, resource (i.e. gravel) location, sage grouse habitat, and adjacent uses. The following four areas have been identified for consideration for heavy industrial designation. Maps of each area are provided at the end of the document:

1. Signal Peak Industrial Park area.
2. Gold Basin area
3. North and south of Riverland Industrial Park
4. Landfill area

Signal Peak Industrial Park

The Signal Peak Industrial Park is made up of Filings 1 and 2. Filing 1 contains Industrial Park Rd with a mix of commercial and residential uses. Filing 2, located to the east, contains primarily residential uses. Covenants exist that effect land uses.

A Major Impact Land Use Change application has been submitted for the property located between Filing 1 and 2 next to the highway. This application is for a subdivision and an industrial business park. Directly to the south is the Varra (formerly United) gravel pit, which contains asphalt and concrete batch plants that supply much of the community. Further south and to the west are agricultural lands. Water and sewer utilities are not available at the site. The agricultural property to the south has a conservation easement that restricts development, however the gravel pits are not included in the easement. Heavier industrial might be possible on the gravel pits sites as they are further from the highway.

Gold Basin

The area around the United Companies site on Gold Basin Road (County Road 38) has potential for heavy industrial uses. United Companies owns large properties to the west and southwest of their current site. The County's new Public Works building is north of the United parcel; the airport is to the east, and Tomichi Creek Preserve subdivision is to the south. United Companies has indicated that the current mining location is nearly complete and that a 500-year supply lies on the property to the west and southwest. The area around their current batch plant site offers some potential for locating heavy industrial uses. Water and sewer are close to this location.

Gunnison County owns land south of the old haul road and north of the Gunnison Valley Observatory that is not subject to FAA airport restrictions. The remainder of the Airport property is not available for heavy industrial uses due to FAA restrictions. There are significant adjacent residential uses to the west and south of this County property.

Riverland Industrial Park

Riverland Industrial Park is south of the Town of Crested Butte and has been a significant area of industrial development over the past 25 years. The Board of County Commissioners approved Resolution 24-1982, approving Riverland Industrial Park. The Board Resolution also specifically required:

> *"At such time as a use is contemplated within the development, such use shall be reviewed under the provisions of the Gunnison County Land Use Resolution at least as a Development of Minor Impact even though such use is permitted by the declaration of protective covenants. Improvement Agreements required as a result of such review shall, at a minimum, guarantee construction of and the maintenance of landscaping and proper drainage of the affected lot in accordance with a landscape and drainage plan approved by Gunnison County. It is not the*

intent hereby to deny any use permitted by the covenants; but it is the intent hereof that all uses within the development shall comply with assurances and conditions established by the developer of Riverland Industrial Park and with the Gunnison County Land Use Resolution."

Staff recommends that County staff and the Board work with Riverland Industrial Park property owner's association to draft a mutually agreeable resolution that would not require Minor Impact review for new uses within the development. Applicants would need to provide documentation that they comply with the protective covenants, applicable sections of the *LUR* and any other requirements. Gunnison County would still maintain the right to reclassify a project application based on Section 3-111 of the *LUR*.

A portion of the Rozman property south of the Riverland Industrial Park and west of Highway 135 also has potential for heavy industrial use. United Companies now runs the gravel operation across the Slate River. The crusher and batch plant will be moved to a 3-acre site south of Riverland Industrial Park.
A portion of the land containing the gravel pit is under a conservation easement.

Central sewer is available approximately 1,500 feet to the north of the Riverland Industrial Park on the east side of Highway 135. There may be potential for industrial use on the property formerly known as the Whetstone Business Park, located northwest of the Riverland Industrial Park.

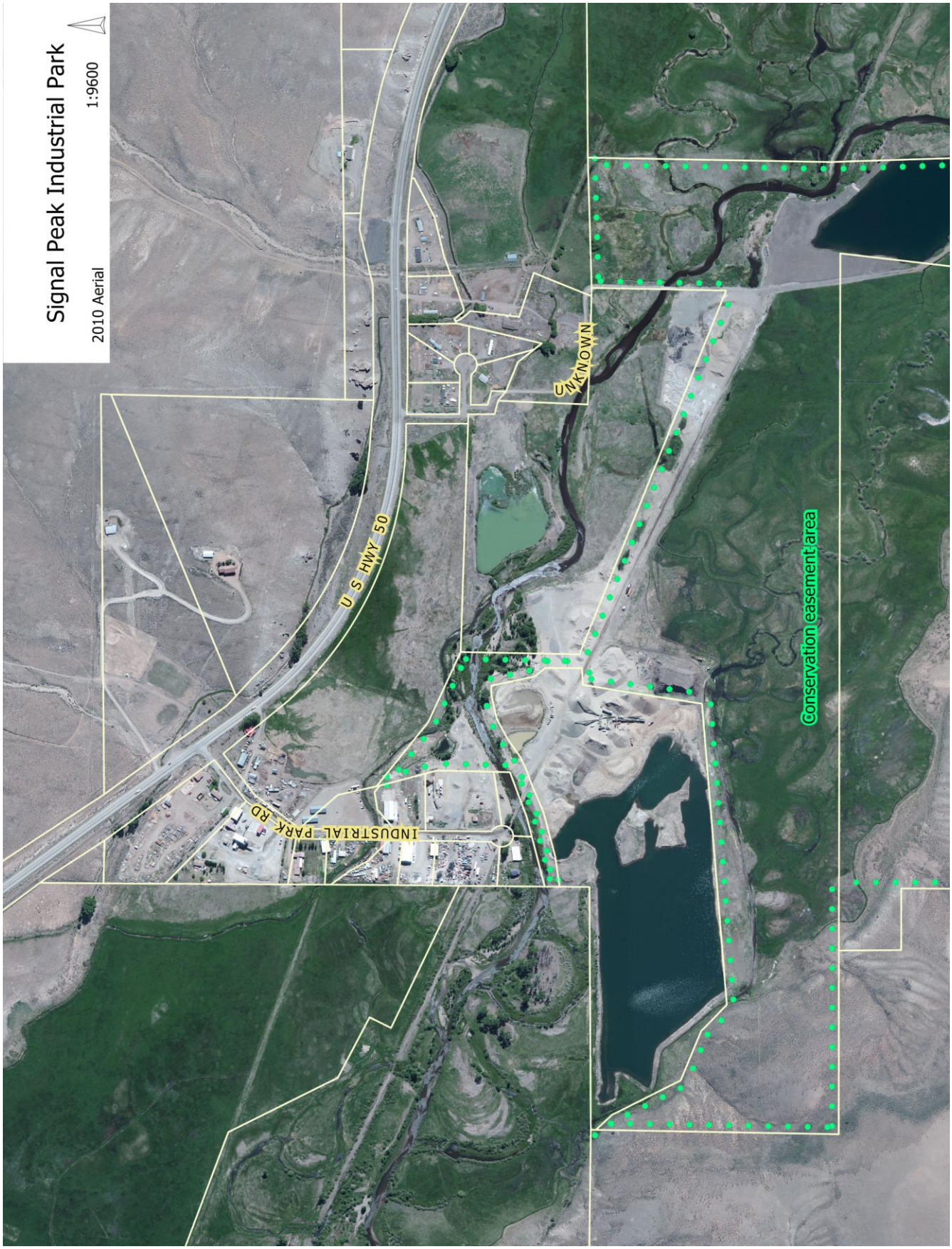
Landfill

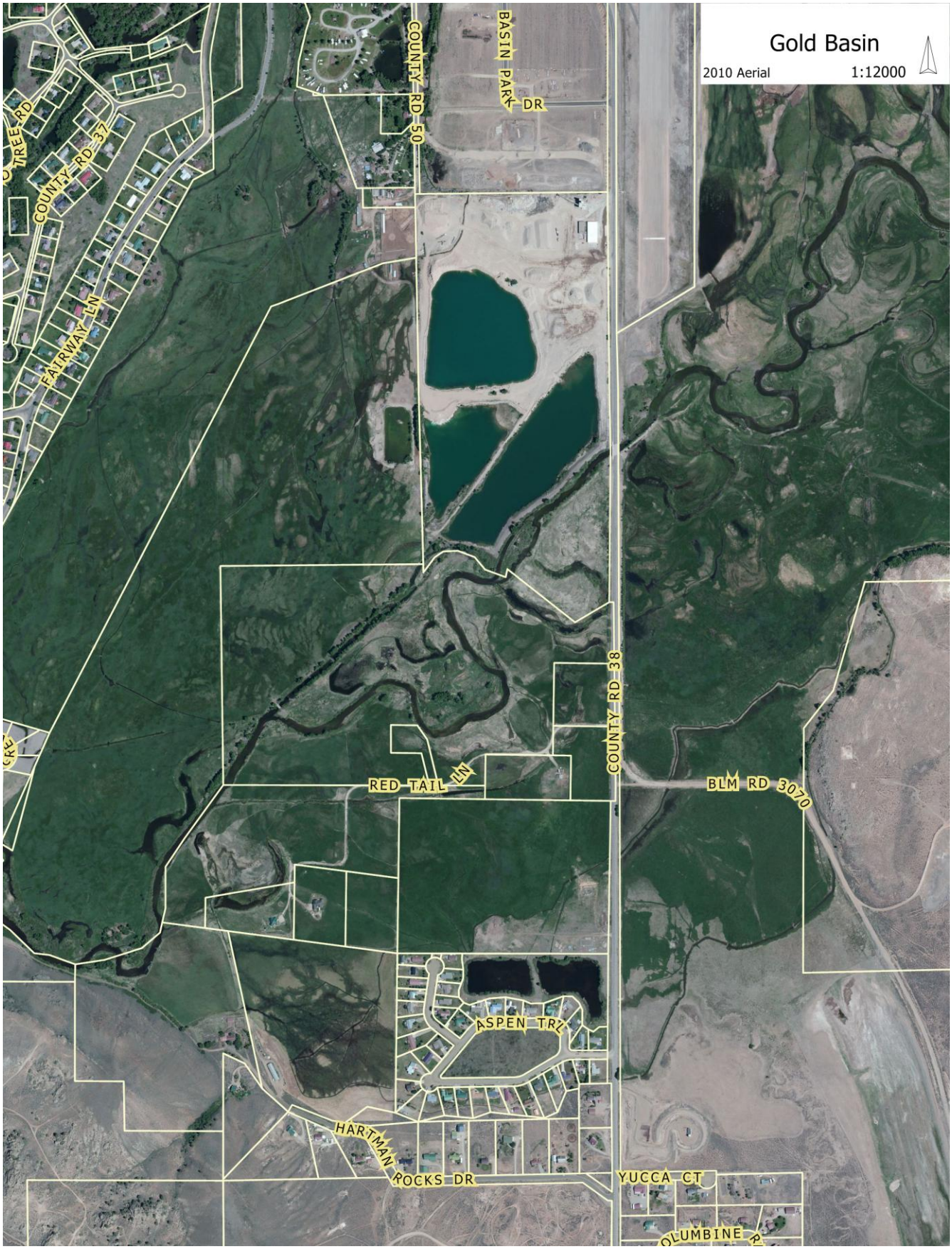
The Gunnison County landfill is located on County property acquired from the BLM for the single purpose of a landfill. The UMTRA milling tailing disposal site is to the south and residential and agriculture uses, and Highway 50 are to the north. The landfill area also has good Gunnison Sage-grouse habitat, with several sage-grouse leks in the vicinity, but bird counts in the area have been dropping according to Colorado Parks and Wildlife.

In 2007, the County explored the possibilities of locating a private wood pellet manufacturing facility on the property. At that time the County was told by the BLM that the use would not be allowed under the terms of the land transfer agreement. While recent discussions with BLM staff indicate this may not be accurate, Staff recommends that no uses other than the landfill be allowed on the property for the following reasons:

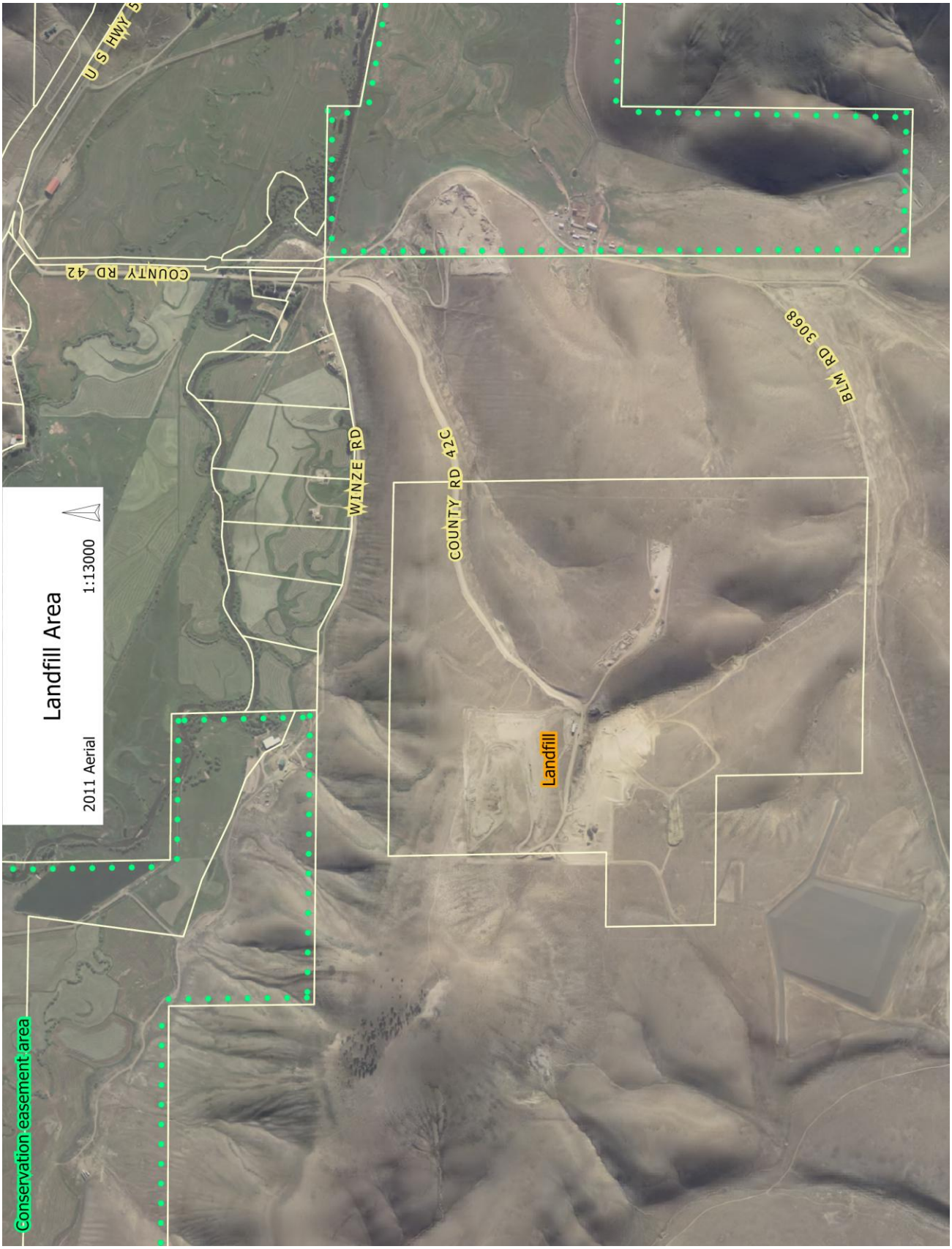
1. Locating a new facility would be very difficult due to the increased spread of potential neighbors compared to when the landfill was originally sited in the 1980s. Also other preliminary landfill sites from the 1980s now all have sage-grouse implications. Initially the landfill site was designed to be viable for 50 years, however, the decline in anticipated yardage, good compaction and the additional land that was added to the lease when the County purchased the ground will likely now serve the County for 50 - 75 more years.

2. The permits and restrictions from EPA and CDPHE are getting more restrictive and as the landfill owner, Gunnison County is responsible for groundwater quality, air quality and storm water management on the site forever (even after the landfill closes). The addition of private industrial uses on the site would add to the potential liability.


Signal Peak Industrial Park
1:9600
2010 Aerial
U S HWY 50
INDUSTRIAL PARK RD
UNKNOWN
Conservation easement area


Gold Basin
2010 Aerial
1:12000
BASIN PARK DR
COUNTY RD 50
TREE RD
COUNTY RD 37
FAIRWAY LN
COUNTY RD 38
RED TAIL LN
BLM RD 3070
ASPEN TRL
HARTMAN ROCKS DR
YUCCA CT

Riverland Industrial Park
2010 Aerial
1:11000
HWY 135
WAPITI LN
RIVERLAND DR
BUCKLEY DR
HWY 135
DEN MINE RD


Landfill Area
2011 Aerial
1:13000
Conservation easement area
U S HWY 5
COUNTY RD 42
WINZE RD
COUNTY RD 42C
BLM RD 3068
Landfill