

Development and Land Use

This paper presents a general overview of land development trends and current land use patterns in Big Horn County. Big Horn County is a rural, public lands county, with over three-quarters of the county land area owned and managed by the federal government. The county is rural by any definition, with an overall population density of just 3.6 people per square mile and with the county's largest town (Lovell) having only about 2,300 residents.

GENERAL LAND USE PATTERNS

Based on Bureau of Land Management records, Big Horn County is made up of the following amounts of federal, state, and private lands:

SURFACE MANAGEMENT	ACRES	PERCENT
National Park Service	26,725 acres	1.3%
Department of Defense	3,542 acres	0.2%
Bureau of Land Management	1,160,612 acres	57.2%
Bureau of Reclamation	20,324 acres	1.0%
Forest Service (non-wilderness)	268,852 acres	13.2%
Forest Service Wilderness	82,374 acres	4.1%
State of Wyoming	83,055 acres	4.1%
Private (patented)	383,614 acres	18.9%
TOTAL	2,029,102 acres	100.0%

Big Horn County's government and citizens have various opportunities to influence the management practices of federal land management agencies. Despite the preponderance federal lands, the County's influence over land use activities on private land is more direct. By state law, the county government has a responsibility to guide the growth and development of the county and to assure the best and wisest use of the county's resources now and in the future. Also by state law the county is responsible for regulating land subdivisions and has the option to regulate land use through zoning.

With regard to private land, most is used for agriculture according to County Assessor's records. (By law, the Assessor's definition of agricultural use is very broad and includes land that gross as little as \$500 per year from the sale of agricultural products.) The Assessor recognizes 43,330 acres of vacant

industrial land—this is mostly land used for mining purposes, primarily bentonite mining. Other industrial lands as well as commercial land make up a very small portion of the unincorporated land area. Residential land is the third largest category behind agriculture and vacant industrial lands. Assessor’s records indicate that land in the county (not counting land in incorporated towns) is currently used as follows:

LAND USE	ACRES	PERCENT
Agriculture	345,016 acres	83.7%
Vacant Commercial	91 acres	0.0%
Commercial	1,093 acres	0.3%
Vacant Industrial	43,330 acres	10.5%
Industrial	1,117 acres	0.3%
Vacant Residential	3,406 acres	0.8%
Residential	14,777 acres	3.6%
Local Tax Exempt	3,597 acres	0.9%
TOTAL	412,427 acres	100.0%

As noted in the Agriculture Inventory, Big Horn County has been losing agricultural land as it is converted to other use or idled. Agriculture is still by far the largest land use category. However, a substantial amount of future residential development will occur on land presently used for agriculture. Some agricultural land is marginal for various reasons (location, high cost, low productivity, and etc.) and would be better suited for residential use. Other agricultural land is more important to the agricultural base and should continue to be used for agriculture.

Some of the large amount of federal land present in Big Horn County land could be good locations for future development. The County and/or towns can request the federal agencies to release lands to facilitate the logical and efficient growth of the towns and county. Federal land close to the county’s towns or other development areas should be reviewed for this purpose.

DEVELOPMENT ACTIVITY

Development activity in Big Horn County, including subdivisions, new home construction, and commercial and industrial development will lead to changes in the current land use pattern. This section includes a review of development trends and what those trends indicate about future land use.

Subdivisions

Since 1990, 57 subdivisions were platted creating a total of 235 lots on 1,093 acres in Big Horn County. In the 1990s, the trend was for subdivisions with many lots, mostly relatively small (less than five acres each lot). Since 2000, the trend through June 2008 appears to be many subdivisions with only one or two lots and with larger lot sizes. Between 1994 and 1997, 14 subdivisions were platted creating a total of 153 lots, with an average lot size of 3.2 acres. Between 2000 and 2008, 43 subdivisions were platted creating a total of 82 lots with an average lot size of 7.4 acres.

It should be noted that in 2001, the Wyoming Legislature changed the state subdivision laws which had previously prevented counties from reviewing subdivisions of up to three lots. Prior to 2001, many lots were probably created under the old law and are noted in the statistics given above. Since 2001, most of the subdivisions reviewed by the county have been one- or two-lot "simple subdivisions."

SUBDIVISIONS CREATED BY YEAR					
Year	Number of Subdivisions	No. of Lots	Average Lot Size	Total acreage	Average No. of Lots per Subdivision
1990-1993	0	0	0	0	0
1994	3	32	3.2	102	10.7
1995	3	29	2.7	80	9.7
1996	2	24	3.3	80	12.0
1997	6	68	3.3	221	11.3
1998-1999	0	0	0	0	0
1990-1999 Subtotal	14	153	3.2	482	10.9
2000	2	7	5.0	35	3.5
2001	1	2	2.8	6	2.0
2002	1	3	9.4	28	1.0
2003	3	6	9.3	56	2.0
2004	6	15	7.4	111	2.5

2005	7	18	4.2	75	2.6
2006	9	12	14.3	172	1.3
2007	8	11	9.6	105	1.4
2008	6	8	2.9	23	1.3
2000-2008 Subtotal	43	82	7.4	611	1.9
1990-2008 Totals	57	235	4.6	1,093	4.1

Source: Big Horn County Planning Department

Vacant Subdivision Lots

According to records maintained by Big Horn County Planning Office, there are 1,389 vacant lots (no residences constructed) in unincorporated areas of the county. This includes 974 lots in platted town sites that were never developed—Alamo, Berlin Jordan, Rairden, and Bonanza. Each town is owned by a single land owner, except Bonanza, which has three separate landowners. The remaining 415 vacant subdivision lots are located in 82 subdivisions, only three of which are totally vacant. For comparison, according to its land use plan, neighboring Park County had 2,418 vacant subdivision lots in 1997.

Approximately one-third of the 415 vacant lots are in subdivisions approved since 1990. Of 235 lots created between 1990 and 2008, 102 remain vacant (no residence yet constructed). Nearly half (103) of all lots created between 1990 and 2008 were located in the Lovell area, and 37 of these remain vacant. Three-fifths of the 52 lots created in the Shell area during that time period are vacant.

While Big Horn County does not have the vast oversupply of subdivision lots that Park County had, there are a significant number of vacant lots even without counting the 974 lots in the old town sites. When land subdivision and speculation outpace actual demand for new building sites, the result can be an inventory that includes many lots that are viewed as substandard. This effect tends to be more pronounced as decades pass without sale or development of the lots. With the passage of time, consumer tastes and expectations change and often buyers view newer developments as more attractive and as better values. Ideally, subdivision activity should be rationally related to actual demand and larger developments are built in phases timed to match that demand.

LOTS PLATTED BY LOCATION AND VACANCY STATUS							
General Area	1990 – 1999		2000 – 2008		1990 – 2008		
	Subdivisions	Lots	Subdivisions	Lots	Total # Lots	# Vacant in May 2008	Percent Vacant
Basin	2	18	3	13	31	20	65%
Burlington	1	1	2	3	4	0	0%
Cowley	1	3	3	4	7	2	29%
Emblem	0	0	1	1	1	0	0%
Frannie	0	0	2	3	3	0	0%
Greybull	2	13	4	10	23	10	43%
Hyattville	0	0	4	8	8	2	25%
Lovell	6	77	14	26	103	37	36%
Manderson	0	0	3	3	3	0	0%
Shell	2	41	7	11	52	31	60%
TOTALS	14	153	43	82	235	102	43%

Source: Big Horn County Planning Department. Note: All subdivisions are located outside incorporated towns—the “General Area” designation (first column) refers to the town closest to the subdivision.

Developments in Process

As of August 2008, there were major five subdivisions with a total of 276 lots at various stages of review or proposal in Big Horn County unincorporated areas:

- Bush Subdivision – 11 lots near Lovell; pre-application approved and has not applied for final plat; lots are 1.5 to 2 acres each with 65 acres of open space.
- Dorsey Creek Subdivision – 138 lots near Basin; pre-application approved and has not applied for final plat; lots vary in size with most around 12,000 square feet with 580 acres of open space; central water and sewage systems to be provided.
- Moncur Springs Subdivision – 30 lots near Lovell; pre-application approved and has not applied for final plat; lots are one-acre each with 1,300 acres of common area.
- Paint Rock Crossing Subdivision – 76 lots next to Hyattville; pre-application approved and has not applied for final plat; variety of lots sizes ranging from 7,000 square feet to over 5 acres; first phase of development will be 12 lots.

- White Creek Subdivision – 21 lots near Shell; has not yet received pre-application approval; lots are 2 acres each with about 260 acres of open space.

These subdivisions may or may not actually get developed. Sometimes developers will back out of projects for various reasons, including problems with market conditions, project finances, and development feasibility. If all these projects are developed in the near future, they would represent a significant increase in the pace of subdivision activity in the county.

Non-Regulated Subdivisions

In addition to subdivisions the County reviews under its subdivision regulations, there are a number of state-mandated exemptions that allow parcels to be divided without county review. The County Planning Department estimates that 110 parcels have been created in the three years since August 2005. These parcels were created as agricultural land divisions, family divisions, 35-acre divisions, and other division types that conform to the state exemptions. Most likely many but not all of these parcels were intended as building sites. These non-regulated divisions create a significant number of new parcels—around twice as many as were created through the subdivision process during the same time.

Housing Construction

Housing construction, as represented by housing starts or building permits issued for a given time period, is a common indicator of an area's development activity. According to the U.S. Census Bureau, 104 building permits were issued for new housing units in the incorporated towns in Big Horn County for the years 2000 through 2007. For the unincorporated areas of the county, housing construction activity is not specifically recorded because the County does not require building permits. Using data produced by the Big Horn County Planning Department, we have estimated that approximately 162 new housing units were built in the unincorporated areas, 2000-2007.

When added together, these counts of new home construction indicate that 266 housing units have been built in the entire county, 2000-2007. By comparison, Census Bureau records show that the entire county had a net gain of 57 housing units, 1990-2000. These statistics are not directly comparable because we do not have an estimate of housing units that have been lost since 2000, such as unit lost through demolition, destruction, abandonment, or conversion to another use; lost units

would have to be subtracted from new units to get the net gain. Nevertheless, it does seem that housing construction is significantly stronger now.

FUTURE LAND USE IMPLICATIONS

Residential Development

It is possible to estimate the number of new housing units that will be constructed in the future and how much land they will need. The housing unit projections discussed our Housing Inventory (shown again below) provide a range of estimates of the amount of new housing that will be built for different time frames. The estimates vary depending on whether the population growth rate will be “moderate”, “strong”, or “very strong”. (See the Population Inventory for discussion of the various population growth projections.)

HOUSING UNIT FORECASTS -- NET INCREASE IN HOUSING UNITS ALL OF BIG HORN COUNTY (INCLUDING TOWNS)		
Growth Projection	2000 - 2020	2000 - 2030
Moderate	356	n/a
Strong	815	1,398
Very Strong	1,363	2,439

To estimate land requirements for new housing, a distinction is made between housing to be built in unincorporated areas versus housing built in towns. In 2000, the unincorporated areas of the county accounted for 34% of all households in the county and that proportion was the same in 1990, as well. If the proportion of households in the unincorporated areas continues at 34% of all households in the county, by 2020 it would result in an additional 121 households under the moderate household projection scenario, 277 under the strong growth scenario, and 463 under the very strong scenario.

Land requirements for new housing can now be estimated. Between 2000 and 2008, 43 subdivisions created a total of 82 lots with an average lot size of 7.4 acres. Using this average per lot size and assuming one lot for each projected additional new household under each scenario, the following acreages would be needed:

ESTIMATED LAND REQUIREMENTS FOR NEW RESIDENTIAL UNITS IN UNINCORPORATED AREAS OF COUNTY COMPARED TO BASE YEAR 2000			
	Moderate	Strong	Very Strong
2020: Additional households	121	277	463
2020: Acres needed for additional households	896	2,051	3,429
2030: Additional households	---	475	829
2030: Acres needed for additional households	---	3,517	6,137

Note that the acreage that could be required for new residential development is significant but not very large. Under the “very strong” growth scenario, 6,137 acres would be needed over 30 years for residential development. Most of this land is presently used for agriculture. Residential development is likely to reduce the amount of agricultural land in the county. However, these figures are based on an average lot size of 7.4 acres. The County could implement measures, such as cluster development, to reduce the average lot size and reduce the loss of agricultural land.

Commercial, Industrial, Transportation, and Utility Facilities

Outside of the municipal areas, parcels of land in Big Horn County assessed as industrial are primarily bentonite and other mining claims. Major transportation and utility systems consist of highways, railroad, pipelines, and electric power and telephone lines. Outside of municipalities, there are no county regulations that would affect location or design of commercial, industrial, transportation, or utility facilities in Big Horn County.

Although most of Wyoming’s economy is driven by extraction of energy-related resources, Big Horn County does not have the large reserves of these resources found elsewhere in the state. Other energy-related resources on the horizon to be tapped for the future include wind and solar energy. According to the U.S. Department of Energy’s map of Wyoming’s Wind Power Resource Estimates (June 2002), Big Horn County has marginal wind power resources. Solar energy technology has not yet expanded to provide for efficient export of the energy; consequently any solar power is typically used close to its source. As a result, Big Horn County may see some increase in solar powered generation in the future, but not likely on a commercial scale.

Transmission is a critical link between electric generation facilities and customer end-user markets. More than 13,000 megawatts of transmission capacity originating in Wyoming and connecting with major population centers in the West is under development. Part of this effort is the designation by federal agencies of major transmission corridors. One such corridor is proposed to run through Big Horn County. The proposed corridor would enter the county east of Frannie, continue west of Greybull and west of Manderson, before heading south out of the county.

Demand for better cell phone reception is likely to increase demand for more cell towers around the county in the future.

It is difficult to predict what other industries or industry shifts might occur in the future for Big Horn County. According to the Wyoming Economic Analysis Division, the state's very low industrial diversity and high dependence on the energy sector could be a limiting factor in growth of the state. Big Horn County's distance from large population centers makes it an unlikely location for major new industries to locate and export goods. It is more likely that new industry to the county would be relatively small in scale, given past trends.

Bighorn Lake and Bighorn Canyon National Recreation Area

Bighorn Lake extends approximately 71 miles through Wyoming and Montana. The Bighorn Canyon National Recreation Area was established by an act of Congress on October 15, 1966, following the construction of the Yellowtail Dam by the Bureau of Reclamation.

Lake access on the Wyoming side is from Horseshoe Bend Marina, just outside of Lovell. During construction of Yellowtail Dam, some projected that recreational use of the lake would be more than half a million visitors by 1970. Instead, peak visitation of 481,000 occurred 21 years after the dam was completed. Since then, numbers have generally declined. In 2005, visitor numbers were just above 194,500. These counts include visitors who fish below the dam in Montana.

Years of drought have reduced lake water levels, stranding Horseshoe Bend Marina high and dry in some years. In an effort to raise lake water levels, the group "Friends of Bighorn Lake" has worked to prevent water released from the dam by the Bureau of Reclamation.

In 2007, the Bureau of Reclamation formed the Bighorn River System Issues group to address issues of water flow. The group continues to meet. Although water levels were higher in 2008, due to better mountain snowpack and stream flow, the long term drought projections remain a critical issue.

CONCLUSIONS

In the foreseeable future, the County will not have the problem of trying to accommodate rapid population growth and development. It is most likely that the county will have fairly slow growth for the foreseeable future.

Even without rapid population growth, there is still a need to plan for future land use. One reason is that a good land use plan should be flexible enough to accommodate some unexpected growth. Rapid growth often catches communities by surprise. Planning now helps hedge against that possibility.

A second reason for planning now is that even with modest growth, bad outcomes can result through a lack of planning. A good plan will address county development issues including second home development, subdividing agricultural land, and encouraging building near towns. Whether growth is rapid or slow, development will be better when it follows a well-planned pattern.

Based on the foregoing review, it is recommended that the new land use plan for Big Horn County should:

- Identify federal lands that should be transferred to private owners or local governments to facilitate logical and efficient development of the county and its communities.
- Evaluate planning techniques for reducing the consumption of important agricultural land for housing developments.
- Be flexible enough to accommodate unforeseen growth and development in the residential, commercial, and industrial sectors.