

2014

# Big Horn County Growth Policy



May 1, 2014

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# 2014 BIG HORN COUNTY GROWTH POLICY

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**BIG HORN COUNTY, MONTANA**

**RESOLUTION #** 2014 - 21

**ADOPTING THE PROPOSED 2014 GROWTH POLICY**

WHEREAS, 76-1-604, MCA, authorizes the Board of County Commissioners to adopt or revise a growth policy; and

WHEREAS, the Board of County Commissioners requested the County Planning Board to prepare a growth policy, as authorized in 76-1-106, MCA; and

WHEREAS, the Big Horn County Planning Board prepared a growth policy in accordance with Title 76, Chapter 1, Part 6, MCA; and

WHEREAS, the proposed growth policy was made available for review at the Big Horn County Courthouse, Big Horn County Planning Office, and on the Beartooth RC&D website; and

WHEREAS, the Planning Board noticed and held a public hearing on the proposed growth policy in accordance with 76-1-602, MCA; and

WHEREAS, in accordance with 76-1-603, MCA, the Planning Board considered comments, recommendations and suggestions elicited at the public hearing held on February 19, 2014 and written comments received through the comment period ending on February 19; and

WHEREAS, the Planning Board made a recommendation to adopt the growth policy with revisions; and

WHEREAS, the proposed revisions were identified in a red-lined copy of the draft growth policy dated 03-14-2014 and included a new strategy for education to assist schools in identifying and prioritizing needed infrastructure improvements, adding wording to an existing housing strategy so the county could begin steps for a county-wide housing needs assessment, and other changes clarifying background information, and rectifying typographical errors; and

WHEREAS, the agenda for the Board of County Commissioners was posted for the April 9, 2014, Regular Commission meeting and the agenda included the growth policy resolution of intention; and

WHEREAS, the Board of County Commissioners considered public comment received at that meeting or received in writing prior to the meeting;

WHEREAS, in accordance with 76-1-604, MCA, the Board of County Commissioners adopted a resolution of intention to adopt the Big Horn County Growth Policy as recommended by the planning board on March 20, 2014; and

WHEREAS, the Board of County Commissioners' agenda was posted for the May 1, 2014, Commission meeting and the agenda included the adoption of the growth policy; and

WHEREAS, the Board of County Commissioners considered public comment received at that meeting or received in writing prior to the meeting;

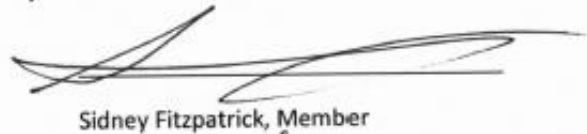
NOW, THEREFORE BE IT RESOLVED that the Big Horn County Board of Commissioners hereby adopts the growth policy as recommended by the planning board and as identified in the resolution of intention.

BOARD OF COMMISSIONERS

BIG HORN COUNTY, MONTANA



John Pretty On Top, Chairman

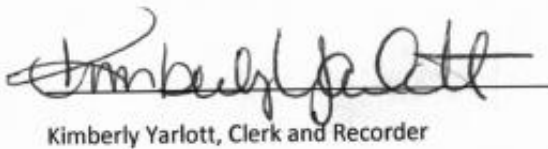


Sidney Fitzpatrick, Member



Chad Fenner, Member

ATTEST:



Kimberly Yarlott, Clerk and Recorder

# 1. PURPOSE AND SCOPE

## 1.1 PURPOSE

The purpose of this document is to update the 2002 Big Horn County Growth Policy with new information. Growth policies are comprehensive plans, primarily for the purpose of guiding land use and infrastructure development. As stated in Montana statute, a growth policy guides development; it is not a regulatory document and does not confer any authority to regulate that is not otherwise authorized in state law.

## 1.2 GEOGRAPHIC SCOPE

This Growth Policy is for the jurisdictional area of the Big Horn County Planning Board. This area includes all of Big Horn County, except for lands outside of the Big Horn County Planning Board area:

- the two incorporated towns of Hardin and Lodge Grass;
- City-County Planning Board jurisdictional area around the town of Hardin; and
- lands not under the county's jurisdiction—including specific areas on the Crow and Northern Cheyenne Indian Reservations, tribally owned lands, state and federal lands (refer to the land ownership map – Figure 10 in Chapter 5.1).

## 1.3 AUTHORITY

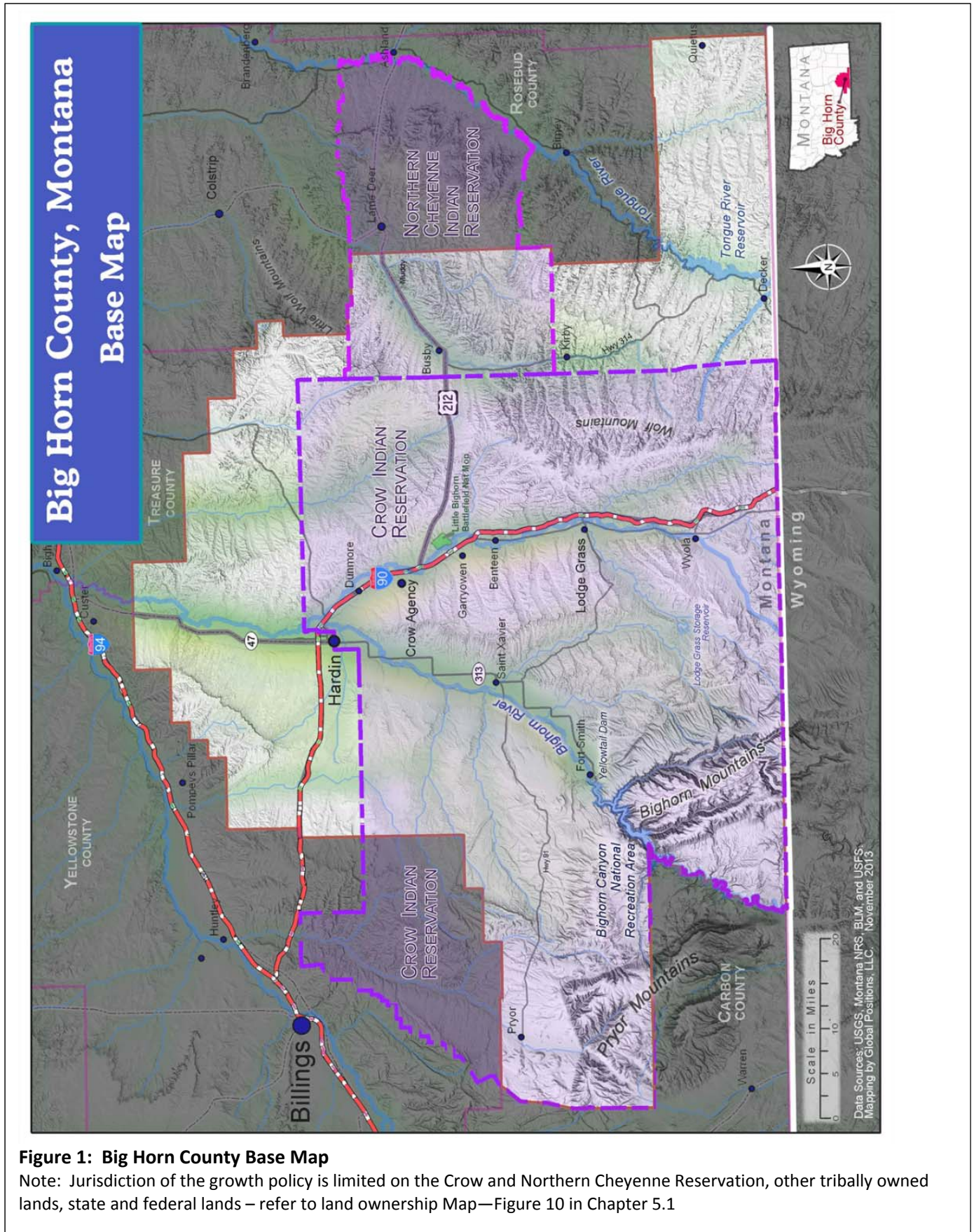
The authority and requirements for Big Horn County to adopt a growth policy are established in Montana state law, Title 76, Chapter 1, Part 6 “Growth Policies.”

## 1.4 COMPREHENSIVE PLANNING IN BIG HORN COUNTY

Big Horn County adopted a comprehensive plan in 1974. The county updated its comprehensive plan with the 2002 Growth Policy. The existing growth policy is over 10 years old. After reviewing the 2002 growth policy, the Big Horn County Planning Board determined that changes were necessary because of changes in the county as well as new requirements enacted into state law after 2002.

The Big Horn County Planning Board is appointed by the County Commissioners. The County Planning Department is staffed with a subdivision administrator, who also functions as the county sanitarian and county floodplain administrator. The county contracts for review of land divisions.







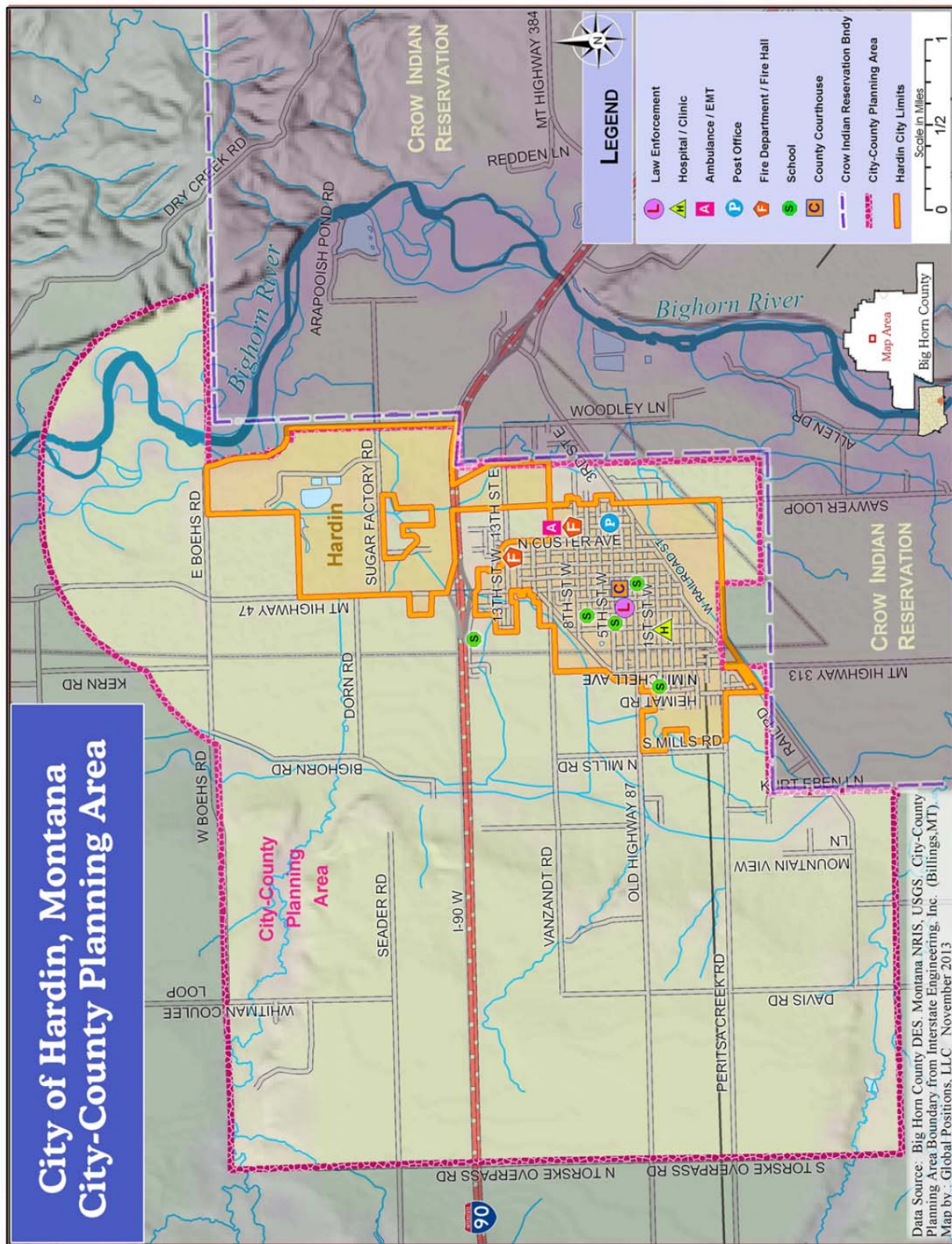


Figure 2: Hardin City-County Planning Area (separate from this growth policy)

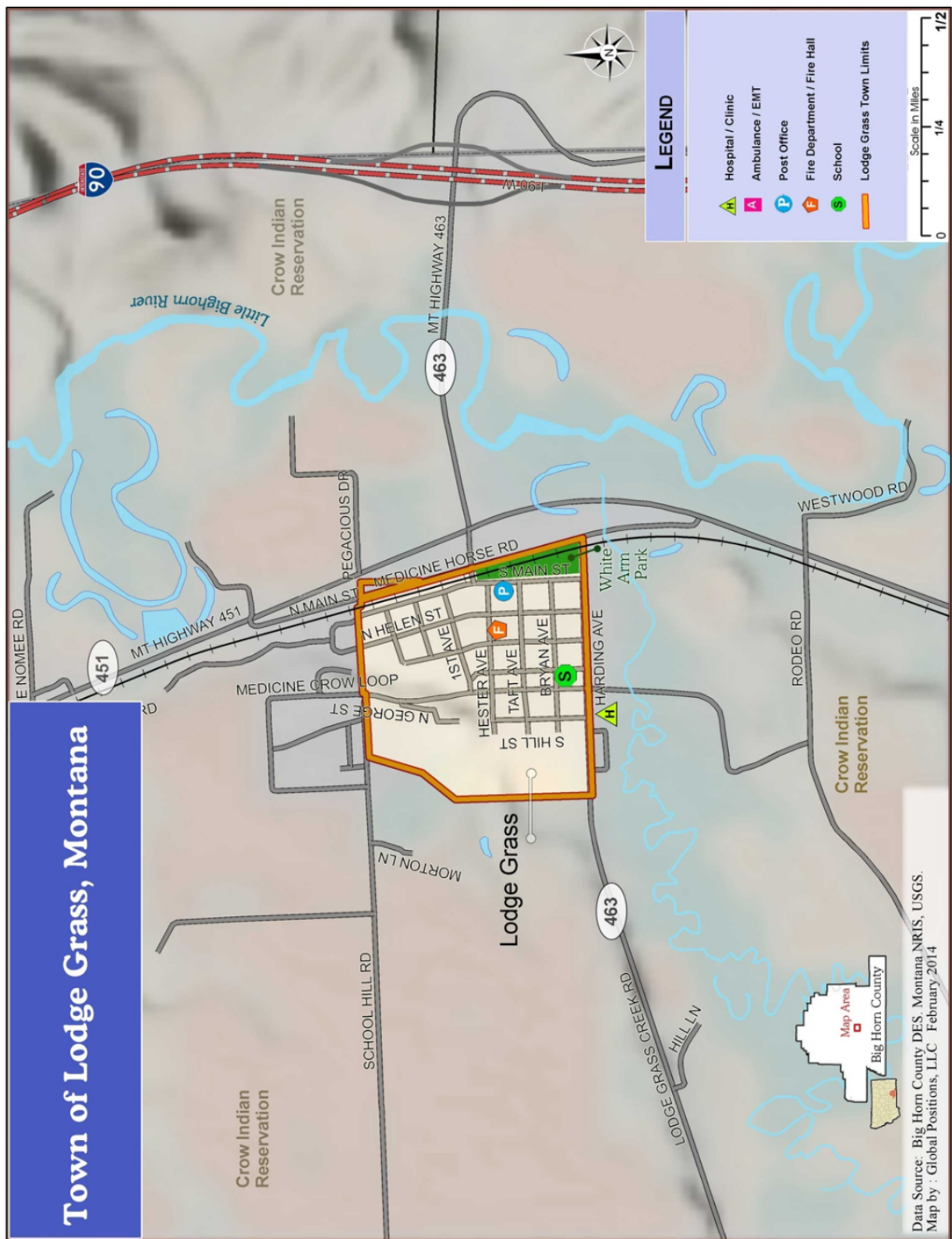


Figure 3: Town of Lodge Grass (separate from this growth policy)



Big Horn County and city of Hardin established the city-county planning area surrounding Hardin in 1969. A Growth Management Plan for the area was adopted in 2009.

Lodge Grass does not currently have a growth policy. Neither the Crow nor Northern Cheyenne Indian Reservations have a current comprehensive plan.

## **1.5 PLANNING PROCESS**

As authorized by 76-1-106, MCA, the planning board prepared a draft growth policy in response to direction from the Big Horn County Commissioners.

The county hired Cossitt Consulting, Inc. to provide technical assistance to the planning board in updating the growth policy. The consultant met with the planning board and provided draft documents for review. The planning board issued the draft for public review on January 2, 2014 and set a deadline of February 19, 2014 for comments.

A public hearing was held by the planning board on February 19, 2014. Notice of the hearing was published in the Big Horn County News on January 23<sup>rd</sup> (within the minimum 10-day advance notice required by 76-1-602, MCA) and posted again on February 13. Comments were received from Laurie Tschetter of Hardin and from Allison Mouch, Bureau Chief of the Montana Community Technical Assistance Program. The planning board considered the comments before finalizing their recommendation as a resolution, which was forwarded to the Big Horn County Commissioners. The Big Horn County Commissioners adopted the growth policy on May 1, 2014.

## **1.6 HOW THIS PLAN IS ORGANIZED**

This growth policy is organized in five separate chapters as follows:

- 1. Purpose and Scope**

This section identifies the geographic scope of the growth policy and its basic purpose. It also identifies the process used in developing this plan.

- 2. Historical Background and Setting**

This chapter provides a brief overview of the county and a brief summary of its history.

- 3. Trends and Issues**

Changes that have occurred since 2002, when the last growth policy was adopted, are discussed in this chapter. It also includes a section on projected trends for the future. The information in this chapter summarizes much of the detail in Chapter 5. It also sets the framework for the goals and objectives.

**4. Goals, Objectives and Implementation**

This chapter includes the goals, objectives and implementation strategies of the plan. It includes other sections on review, revision and amendments to the growth policy. It also includes sections on subdivision and the wildland urban interface, as required by state law.

**5. Inventory of Existing Characteristics**

This chapter provides detailed information on land use, population, housing, economics, local services, infrastructure, and natural resources in Big Horn County.

## 2. HISTORICAL BACKGROUND AND SETTING

Big Horn County is the sixth largest county in Montana. It was originally formed February 2, 1865 as one of the original nine counties of Montana Territory. It included the majority of eastern Montana, from the Canadian border above, to Wyoming below. On January 15, 1869 the northern portion of the county was split to create Dawson County. On February 16, 1877 the county boundaries changed again and received a new identity -- Custer County. In January 1913, Big Horn County as it is known today was created from portions of Yellowstone and Rosebud Counties.

Big Horn County is Montana's fourteenth most populous county with 12,865 residents according to the 2010 decennial census. Hardin, the county seat, is the state's 22nd largest city with a population of 3,505 in 2010.<sup>1</sup> Other cities and towns in Big Horn County include Busby, Crow Agency, Fort Smith, Garryowen, Lodge Grass, Pryor, St. Xavier, and Wyola. The majority of Big Horn County lies within the Crow and Northern Cheyenne Indian Reservations.

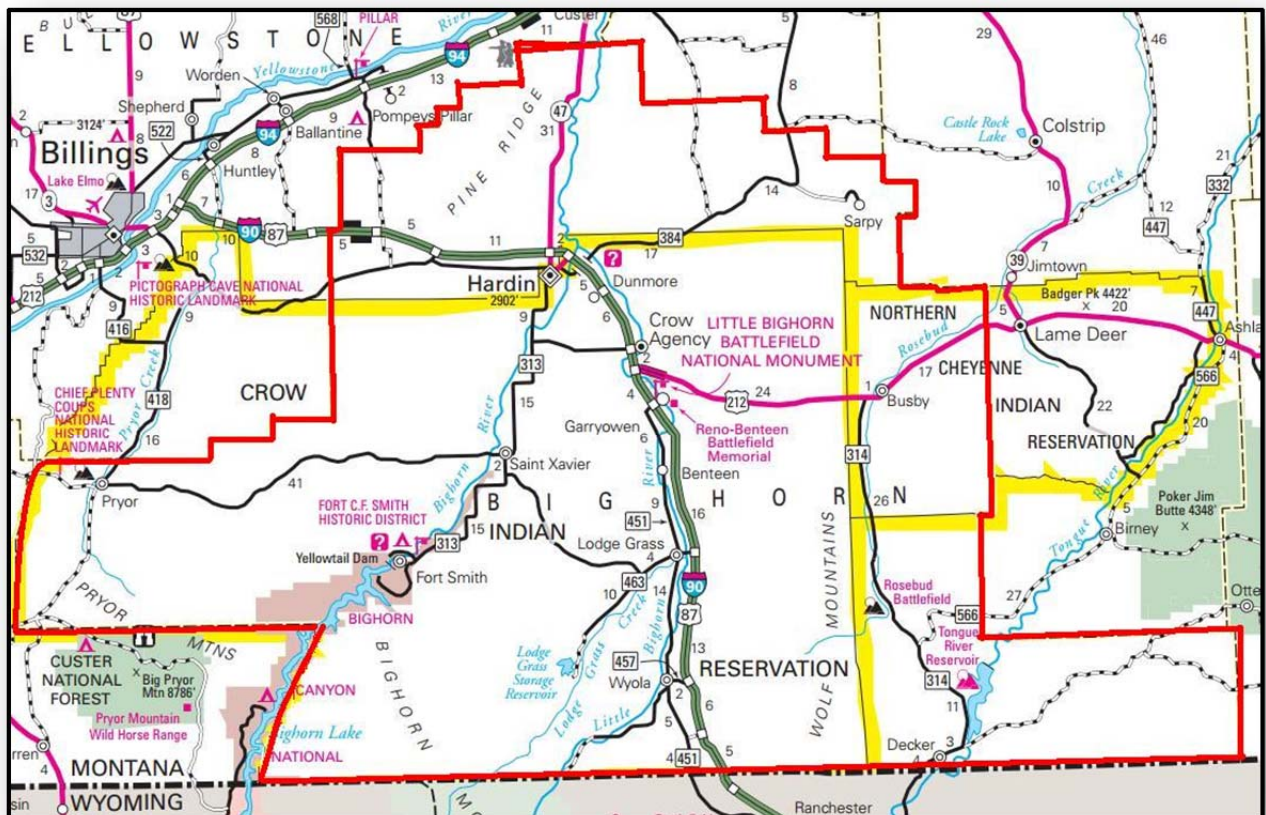


Figure 4: Highway Map of Big Horn County

Big Horn County's lowest elevation is at 2700 feet where the Big Horn County River exits the county and the highest point is at 9200 feet in the southwest of the County in the Bighorn Mountain Range. Big Horn County includes the Pryor Mountains, Bighorn Mountains, Wolf Mountains, and Pine Ridge Mountains. Rivers and streams flow from south-southwest to north north-east and include Tongue River, Rosebud Creek, Little Bighorn River, Lodge Grass Creek, Bighorn River and Pryor Creek.

Coal mining and agriculture both play major roles in Big Horn County's economy. Farms and ranches in the county produce mainly beef cattle, sugar beets, alfalfa, and small grains.

The County includes many historic and recreational features that attract visitors from around the world. The Bighorn River is a blue-ribbon trout fishery. Bighorn National Recreation Area and the Yellowtail Reservoir it encompasses include massive sheer rock walls and impressive vistas. The Tongue River Reservoir is a state park and another recreational destination. Historic resources include the single national monument listed in Montana – the Little Bighorn Battlefield National Monument, and two national landmarks—the Rosebud Battlefield and Chief Plenty Coups' home.



Fly Fishing in Big Horn County (photo: Montana Department of Commerce)



**Table 1: Key Dates in Big Horn County History**

<b>1450-1700</b>	Crow "Children of the Large Beaked Bird" arrive in area of Big Horn County	<b>1913</b>	Big Horn County formed from Yellowstone and Rosebud Counties
<b>1800</b>	Crow Tribe population estimated at 8,000	<b>1920</b>	St. Xavier town has a bank, grocery store, theater, two pool halls
<b>1825</b>	Rocky Mountain Fur Company expedition travels along the Big Horn River	<b>1921</b>	Seven oil wells on Soap Creek Dome
<b>1848</b>	Chief Plenty Coups born, becomes a chief at age 25 and by the time of his death, has become recognized internationally.	<b>1928</b>	Hardin gas field discovered
<b>1864</b>	Montana declared a territory and divided into eight counties	<b>1929</b>	Bank in St. Xavier shuts down
<b>1866</b>	Pryor Creek Battle - Crow defeat Sioux who had come to annihilate the Crow	<b>1932</b>	Chief Plenty Coups dies at his home near Pryor
<b>1866</b>	Fort Smith erected as a post along the Bozeman Trail	<b>1937</b>	Sugar Beet Factory north of Hardin constructed
<b>1868</b>	Fort Laramie Treaty of 1868 - established the boundaries of the Crow Indian Reservation which were revised in 1882, 1891 and 1904	<b>1939</b>	Tongue River Dam completed
<b>1870</b>	Crow Tribe population estimated at 2,000	<b>1942</b>	Bentonite mine started west of Wyola but closes within a decade
<b>1876</b>	Battle of the Little Big Horn	<b>1961</b>	Construction begins on Yellowtail Dam
<b>1884</b>	Northern Cheyenne Indian Reservation established, boundaries revised in 1900	<b>1966</b>	Yellowtail Dam and After Bay Dam are completed
<b>1887</b>	Catholic Mission founded at St. Xavier	<b>1966</b>	Big Horn Canyon National Recreation Area created by Order of Congress
<b>1893</b>	Decker Post Office established	<b>1971</b>	Sugar Beet Factor north of Hardin shuts down
<b>1894</b>	Railroad line is completed from Wyoming border to Huntley, MT across Big Horn County	<b>1974</b>	Westmoreland Resources begins mining in Sarpy Creek area
<b>1907</b>	Town of Hardin surveyed	<b>1978</b>	Decker coal - largest strip mining operation in the US at the time
<b>1907</b>	Town of Hardin established	<b>1980</b>	Spring Creek Coal mine begins operations
<b>1910</b>	Wyola established as a railroad station stop	<b>2009</b>	More than 900 Coal bed methane wells in southeastern Big Horn County



Little Big Horn National Battlefield National Monument (photo: Montana Department of Commerce)

### 3. TRENDS AND ISSUES

#### 3.1 DEVELOPMENTS AND TRENDS 2002-2012

The previous growth policy was adopted in 2002. At that time, the biggest change on the horizon was the potential for coalbed methane development in the southeast corner of the county. The county's population was projected to increase to approximately 15,600 by 2025. Housing, adequate infrastructure (water and sewer), and poverty were serious issues. There was need for improved coordination among the various jurisdictions, including the municipalities, Crow Indian Reservation, Northern Cheyenne Indian Reservation, Bureau of Indian Affairs and Big Horn County.

Change has occurred, but not quite as anticipated. Since 2002, **coal bed methane** development boomed with approximately 1500 wells drilled, 900 of which were producing by 2008. By 2012, declining commodity prices and high production costs caused all but about 300 wells to be shut down.

By 2013, **population** projections had backed off substantially. Actual population increase for the county between 2000 and 2010 was 1.5%, compared to a projected increase in the 2002 Growth Policy of 7.6%. The basis for the projections for the 2002 Growth Policy and the 2013 Growth Policy is fundamentally the same – projections provided by the state of Montana. In 2013, the population projection for the year 2025 was 12,454, several hundred less than the 15,600 estimated in the 2002 Growth Policy. The 2010 census population for the county was 12,925. Population has shifted within the county—Lodge Grass population declined by 16% between 2000-2010; many of those persons moved to Hardin. At the same time there were also people leaving the county entirely, believed by many to have moved to Billings and elsewhere.

Some things have continued to progress along a fairly solid trend line. In 2002, the county's Native American Indian population was a growing proportion of total population, and the county had a much **younger population** than most of Montana. The proportion of Native American Indian population to the total population has increased by 4% on average over each of the past two decades and in 2010 comprised 64% of total county population. In 2010 approximately 36% of the total

#### KEY CHANGES/TRENDS SINCE 2002

- **Coal bed methane** development came and went
- **Coal production** strong and #1 in state, more production possible
- **Population** growth slowed
- Youthful population **36% under age 20** – and **drop-out rates** are high
- # of **seniors** over age 64 increased by 20%
- **Housing needs** still a major issue
- **Infrastructure improvements** made
- Significant **infrastructure needs** remain
- **High labor earnings** but many people unemployed
- **Poverty** remains an issue
- Still **need jurisdictional coordination**
- **Truck and rail traffic** increases
- Local **bus service** begun in 2011
- **Agriculture product** value increase
- **Tourism** strong, more potential
- A few **gravel operations** have created issues for residences
- **Crow Water Rights** Settlement finalized

population was less than 20 years of age. Unfortunately, Big Horn County has one of the highest school **drop-out rates** in Montana.

Number of **seniors** is increasing. There were 200 more persons 65 years or older in 2010 than there were in 2000, an increase of approximately 20%.

**Housing** quantity and quality remain issues in the county. In 2005, the most recent year that the state conducted a housing condition study, nearly half (48%) of all the housing units in the county were in “fair” condition -- usable but needing much repair. Another 7% were “poor” condition -- “undesirable and barely usable.” An additional 5% were in “very poor” or “unsound” condition -- “structurally unsound and practically unfit for use.” Approximately 60% of the county’s housing was in fair or worse condition.

Big Horn County does not operate or manage any water or sewer systems, nor did it in 2000, but the county continues to support and encourage efforts to improve these systems in the municipalities and on the Indian Reservations. Support from the county includes grant-writing and some limited funding assistance for **infrastructure**. The systems have seen significant improvements overall – new systems in Crow Agency and Fort Smith, for example. Aging systems in Hardin, Lodge Grass, and other locations are still needed despite upgrades and changes over the last decade.

**Poverty** remains an issue. Although labor earnings are higher in Big Horn County than the average for the state of Montana, many people do not have paying jobs. The unemployment rates were high in 2000 and still high today. The unemployment rate in 2011 was 12%, 3-4% higher than in 2000 and nearly twice as high as the rest of the state.

There is still room for improvement for **coordination among jurisdictions**. Law enforcement coverage has improved somewhat, but is still an issue, particularly on the Crow Indian Reservation with a patchwork of ownership and jurisdictional questions. The patchwork ownership also creates issues for land use regulation. Although county subdivision regulations generally apply to parcels that are recorded in the county court house, the regulations do not apply to tribal lands or parcels that are not recorded. Consequently, unless the county and tribal governments adopt similar land use policies, it is entirely possible that restrictions apply on one parcel, but not to the adjoining parcel.

Development has occurred in Hardin (such as the annexation around Watson Drive) that affects or could affect irrigation outside of the city-county planning area.

**Gravel pits** have been developed next to residential areas in the county, affecting public health and safety and reducing residential property values. The location of sand and gravel resources is similar to the location of residential development in the county—along rivers. The gravel operations can be noisy, dusty, and trucks hauling the gravel impact local roads with dust and increased wear and tear.

**Rail traffic** has increased in the county with increased coal shipments. **Highway traffic**, including heavy semi-trucks and coal trucks, has also increased. Locals believe that people travelling to and from jobs in

the Bakken oil fields in eastern Montana and Western North Dakota is a factor in the increased highway traffic.

Crow Nation Transit began **bus service** from Wyola to Billings and Pryor to Billings in the spring of 2011. The service is available to anyone in the county, not just tribal members. In prior years, the bus system across the state had been declining with fewer routes. This service is a great benefit for the many in the county who do not have their own transportation.

Another bright spot is that the fundamental bases of the county's economy – **agriculture, coal mining, and tourism** -- remain strong. The market value of agricultural products sold increased by 43% between 2002 and 2007, according to the Census of Agriculture. The county is the state's number one coal producer, with over 22 million tons in 2012. Hundreds of thousands of visitors come to see the county's public historic and recreation sites annually. On average visitor groups in Montana spend \$195 per day.

Additional resources could also come into play with the **Crow Tribe water rights settlement**. The Crow Tribe Water Rights Settlement and Compact was signed into law by President Obama in 2010 and ratified by the Crow Tribe in 2011. Together, the Settlement Act and the Compact quantify the Tribe's water rights and authorize funding of \$131.8 million for the rehabilitation and improvement of the Crow Irrigation Project and \$246.4 million for the design and construction of a water system to serve numerous reservation communities, as well as funding totaling more than \$81 million for tribal water administration and for a portion of costs for the irrigation and municipal water systems. The Settlement also provides funding to boost energy development projects such as hydropower generation at Yellowtail Afterbay Dam, clean coal conversion, and other renewable energy projects.

The Crow Tribe continues to work on purchasing lands for the tribe, focusing particularly on parcels that are jointly owned by many individuals, who have inherited the property over decades from the original Crow individual owners. A single parcel may be jointly owned by dozens of individuals, who often rent the property out for agricultural purposes.

## 3.2 RECENT TRENDS/ISSUES

Hardin conducted a housing study focused on affordable and senior housing and instituted a housing authority in 2013.

On June 20, 2013, Crow Tribal Chairman Darrin Old Coyote announced that the Bureau of Indian Affairs approved a leasing agreement between the Crow Tribe and Cloud Peak Energy. The deal is approximated to encompass 1.4 billion tons of coal.

Reduced federal funding in 2013 could jeopardize the clinics and ambulance service in Lodge Grass and Pryor. The county provides the ambulance service throughout the county, but is subsidized with payments from Indian Health Services (HIS). With federal funding cutbacks, Big Horn County will be unable to sustain the service at the current levels with county funding alone.



### 3.3 GROWTH POLICY IMPLEMENTATION STATUS

The 2002 Growth Policy included a number of goals and objectives. Appendix A includes all of the goals and implementation strategies of the 2002 Growth Policy. The completion status of the strategies is also included. A few of the projects have been completed, more have been partially completed, and some are ongoing. Some were never initiated. After reviewing implementation status of the 2002 Growth Policy, the planning board came to the conclusion that the long list of implementation strategies was perhaps overly ambitious given the limited resources (including few staff).

### 3.4 ANTICIPATING AND PREPARING FOR NATURAL DISASTERS

In 2013, Big Horn County adopted an update to the county's Pre-Disaster Mitigation Plan and Community Wildfire Protection Plan.

#### Floods

Flooding can be severe in the county. In the spring of 2011, severe storms flooded much of central and south-central Montana. On May 26, 2011, the [Billings Gazette](#) reported that about 300 people were staying at a Red Cross Shelter set up in a residence hall at the Montana State University-

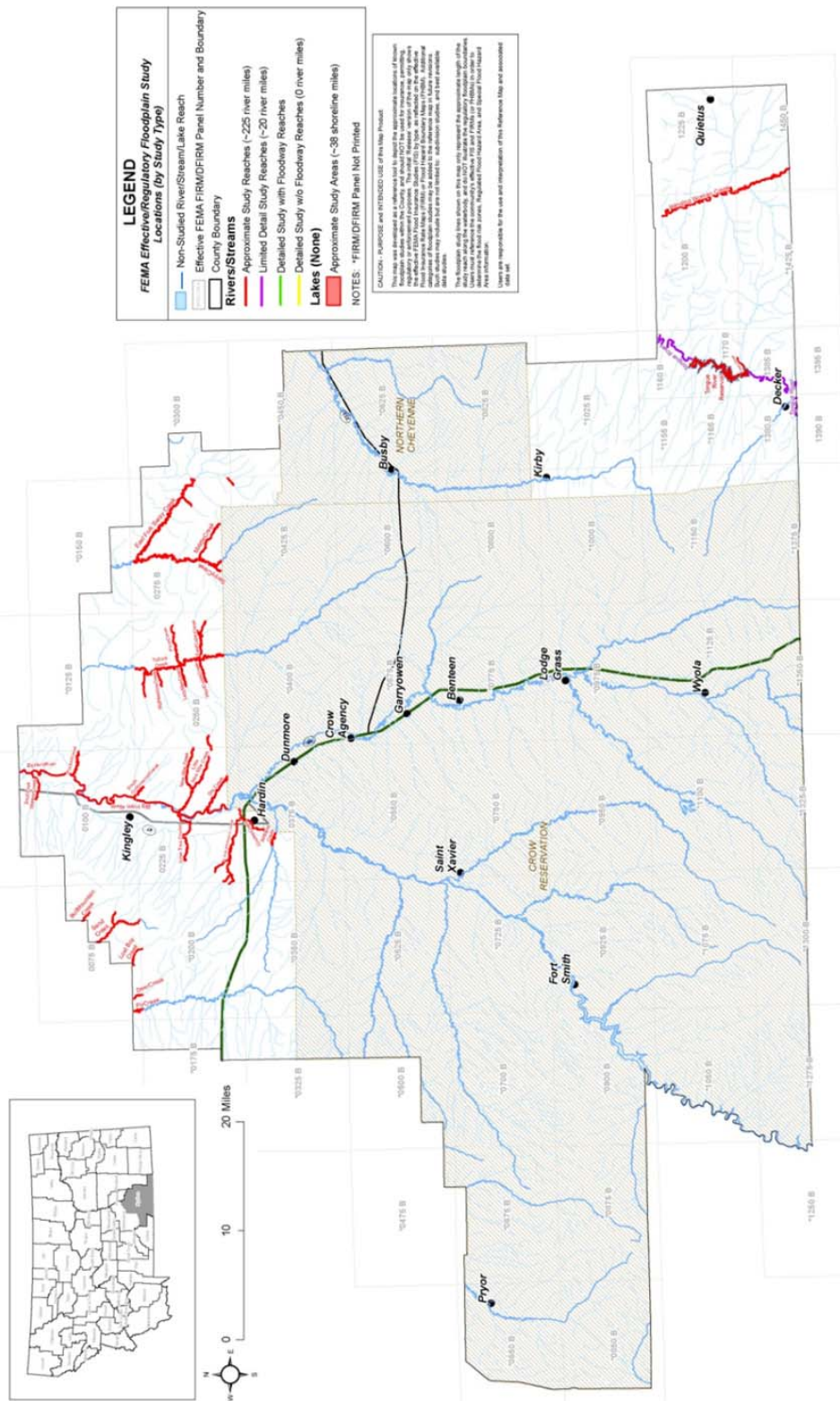
Billings campus and most of the evacuees came from the Crow Reservation.



Confluence of Little Horn and Big Horn Rivers near Hardin, 2011  
Source: 2013 Pre-Disaster Mitigation Plan for Big Horn County

Although the county has floodplain regulations, it does not preclude development within the floodplain. Instead it sets some parameters for such development. New development is excluded within the floodway. Federal Emergency Management Agency "Insurance Rate Maps" or "FIRMs" do not exist for all areas of the county. Figure 6 shows the current floodplain study reference map for Big Horn County. The areas that are shaded do not have any floodplain mapping. The rest of the county has only has "Approximate" and "Limited Detail" level studies at this time. Not having a clear understanding of the floodplain delineation makes it more difficult to ensure that new development near rivers is situated as safely as possible.

# FLOODPLAIN STUDY REFERENCE MAP BIG HORN COUNTY, MONTANA (Community #300143) DRAFT



Release Date	Revisions	NO.	Description	Date	By
DRAFT					
Jan. 2011					



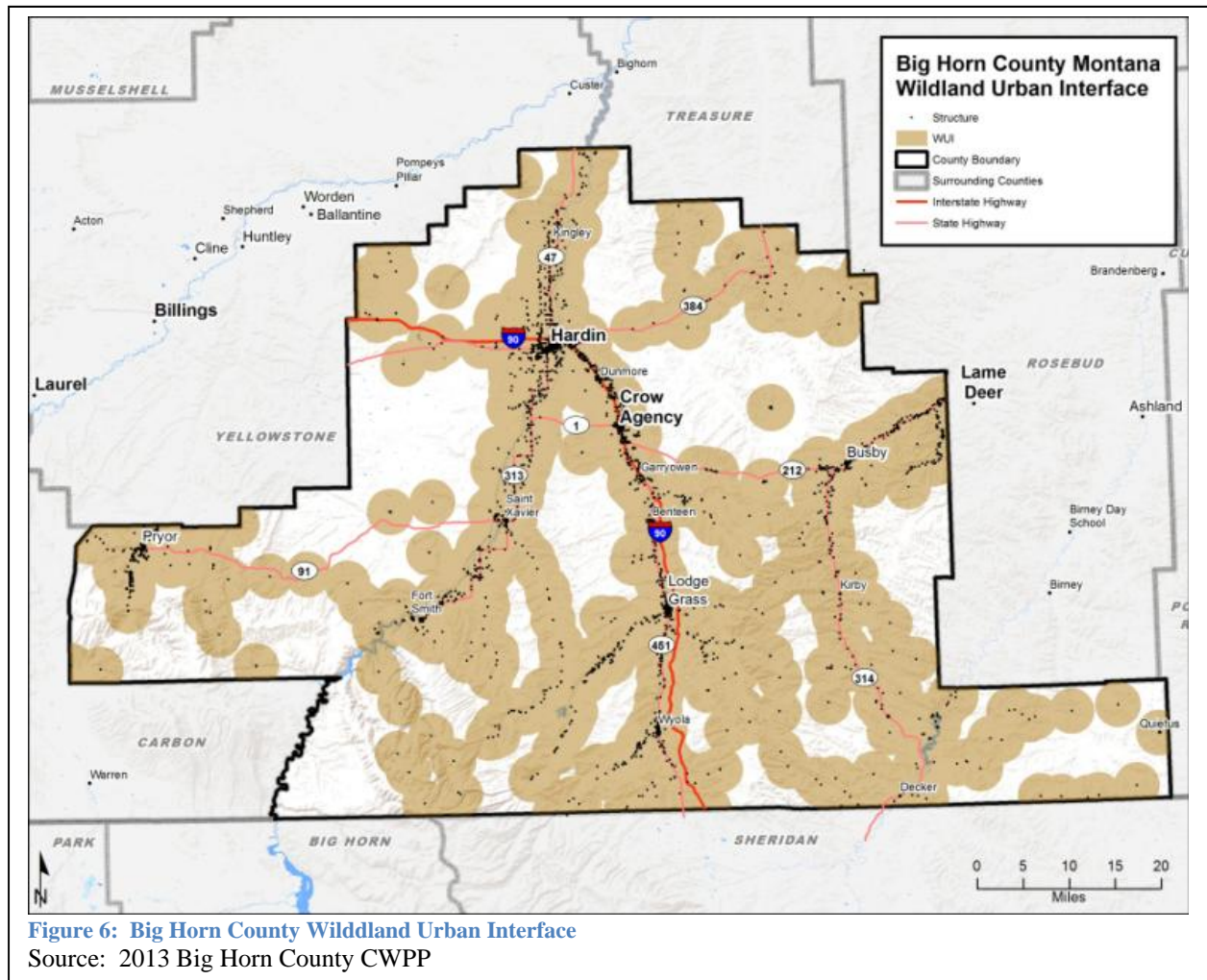
REFERENCE Map produced by Montana Department of Natural Resources and Conservation (DNRC),  
Water Resources Division, Floodplain Management. Contact State Floodplain Engineer, 406-444-6664.

\* DENOTES FIRMD/FIRM Not Printed

Figure 5: Floodplain Study Reference Map  
Source: Montana DNRC

## Wildland-Urban Interface

The 2013 Big Horn County Community Wildfire Protection Plan (CWPP) indicates that all areas of Big Horn County are at risk for wildfire. The CWPP and the goals, strategies, and implementation measures included within the CWPP have been formally adopted by Big Horn County, Hardin, and Lodge Grass. The following provides a brief summary of that information and also addresses the requirements of state law (76-1-601(3)(j), MCA) to assess the need to delineate the wildland urban interface (WUI) and adopt regulations to address wildland fire in the WUI.



**Figure 6: Big Horn County Wildland Urban Interface**

Source: 2013 Big Horn County CWPP

The Wildland Urban Interface (WUI) is defined as “the zone where structures and other human development meet and intermingle with undeveloped wildland or vegetative fuels.” As part of the CWPP, the county identified and mapped the WUI as shown in the map inset. It includes a three-mile buffer around structures because of the potential for grasses and other fuels immediately surrounding communities and for the speed at which fire can travel. For example, in 2003 the Little Hawk fire near Busby made a 3-mile run in 15 minutes. That combined with the long distances between fire



departments and response times that can be up to an hour factored into the determination to set the 3-mile buffer area. The Big Horn County Planning Board considered whether regulations should be adopted to require:

- 1) defensible space around structures;
- 2) adequate ingress and egress to and from structures and developments to facilitate fire suppression activities; and
- 3) adequate water supply for fire protection.

The Big Horn County Planning Board recognizes that the CWPP has addressed defensible space, ingress/egress, and water supply in goals and objectives as voluntary measures rather than regulations. The county's subdivision regulations have design standards for fire suppression access and water supply. The Big Horn County Planning Board does not recommend additional regulations at this time for the WUI.

### **3.5 PROJECTED FUTURE TRENDS - OVERVIEW**

Key developments in the county that could have significant effects for the future of the county include:

- Crow Tribe Water Rights Settlement and Compact
  - New rural water delivery system planned as part of the Crow Tribe Water Rights Settlement.
  - The compact also includes provisions for hydropower generation at Yellowtail Afterbay Dam, clean coal conversion, and renewable energy. Crow Tribe controls the water originating on the Reservation.
- Increased coal development resulting from the coal leasing agreement between the Crow Tribe and Cloud Peak Energy as well as increased production from existing mines
- Increased demand for gravel (needed for construction and road upkeep)
- Continued high proportion of persons less than 19 years of age and issues with high rates of school drop-out
- Increased numbers of seniors, aged 65 or older

- Increased truck and rail traffic—based on the 2010 Montana State Rail Plan, shipments by truck and rail from Montana are projected to nearly double by 2035, compared to 2002.

**Table 2: Montana Shipments by Weight**

**Montana Shipments by Weight**  
2002 and 2035 (Millions of Tons)

	2002			2035		
	Within State	From State	To State	Within State	From State	To State
Truck	36.6	7.2	8.6	92.7	15.6	26.0
Rail	4.4	48.1	1.6	1	71.8	6.5
Water	0.1	0.1	0.1	0.1	0.1	0.1
Air, Air, and Truck	0.1	0.1	0.1	0.1	0.2	0.1
Intermodal	0.2	0.6	0.2	1.1	0.9	0.5
<b>Total</b>	<b>41.4</b>	<b>56.1</b>	<b>10.6</b>	<b>95.0</b>	<b>88.6</b>	<b>33.2</b>

- Potential for wind generation projects—although no developments have begun as yet, there is anticipation that this could occur within the next 10 years. Big Horn County is among a handful of Montana counties that have high wind power in proximity to major electrical transmission lines. One of these lines crosses the area of the county near Fort Smith with the highest wind power.
- Potential to expand the county's economic base with cultural tourism focused on historic and cultural sites and activities as well as recreational tourism focused on the county's rivers and scenic resources
- Potential for damages associated with riverine flooding

Factors outside of the county that could affect future developments include:

- Commodity prices for agricultural products, coal, oil, gas – if natural gas prices were to go up, the coal bed methane development could resurge; high energy prices could make wind energy and other renewable energy projects more viable

## Land Use

Major new projects, such as new coal mines, and the projects anticipated as part of the Crow Tribe Water Settlement or from wind generation and renewable energy could result in significant effects to land use. There would be direct effects on-site, and indirect effects of increased demand for temporary or permanent worker housing. Temporary worker housing would be needed during the construction phase. Major new construction projects will increase demand for gravel, resulting in greater potential for compatibility issues with adjoining or nearby uses such as residential.

## Population

The current projection is for slow population decline in the future, with a continued large proportion of youth under age 20 and an increasing number of seniors. Major economic developments such as expanded coal mining or construction of a rural water delivery system could result in population

increases. The extent to which newcomers would re-locate permanently to Big Horn County would depend on a number of factors affecting quality of life, such as housing, local services (including public education) and infrastructure.

### **Housing Needs**

Housing quality and quantity are current issues that will continue into the future unless something changes. Poor housing quality will deter residents from staying and newcomers from relocating to the county. Increased numbers of seniors will create specialized housing needs.

### **Economic Conditions**

Poverty will remain high as long as unemployment rates are high. Reducing unemployment rates depends on creation of jobs that can be filled by local residents. There is potential for significant job creation in the future, but local residents may still have difficulty obtaining jobs that pay a living wage. Education plays a key role in obtaining jobs, and the county's school drop-out rate is an issue.

### **Local services**

Local services are important for retaining and attracting residents. The county is quite large and services such as fire protection, ambulance, law enforcement, schools, and medical centers can be distant from the individuals needing the services. Law enforcement has been a historically chronic problem, particularly in areas where jurisdictions among BIA, Tribal governments, county sheriff are confusing and result in long response times and complexities for residents. Schools with high drop-out rates create incentives for residents to school their children elsewhere or leave the area, and they are a disincentive for others with children to relocate to the county. The high proportion of youth creates special needs for services. Increased numbers of older persons will also create increased demands for medical care, transportation, and other services.

### **Infrastructure**

Keeping infrastructure in good condition is important for retaining and attracting residents, similar to provision of services. Major construction projects like the rural water system and coal mine expansion would put increased pressure on roads and highways, directly from truck traffic and indirectly from workers. A rural water system could provide water to communities and additional water needed for fire-fighting (as identified in the 2013 Community Wildfire Protection Plan). Once in place, the water delivery system will need ongoing funding for regular maintenance and long-term replacement and repair. Sewer systems are in various degrees of upkeep and operation in the county. Some need considerable work to provide for existing residents, and it would take additional upfront funding and operations costs for population increases. If population decreases in the future as anticipated, it will be more difficult to generate revenues from taxes and user fees to offset improvements and maintenance to any public infrastructure. The infrastructure that Big Horn County maintains includes county roads, and county buildings, such as the court house, fairgrounds, library, and public health department, and other buildings it supports including the museum, senior center, etc.

## Natural resources

Natural resources could be affected by development in the future. Coal development is intensive but limited to specific geographic areas and subject to requirements for reclamation. Concerns about wind generation include affects to viewshed, noise, and wildlife, particularly birds. Flooding is a natural occurrence and will continue in the future. The more development occurs in the floodway and floodplain, the more costly it will be to recover from flood events.

### Sources:

Cambridge Systematics. 2010 Montana State Rail Plan. Prepared for the Montana Department of Transportation.

## 4. GOALS, OBJECTIVES, AND IMPLEMENTATION

### 4.1 CONCEPTUAL APPROACH

The Big Horn County Planning Board reviewed the status of the many implementation strategies of the 2002 Growth Policy as they contemplated the development of new actions for this 2013 Growth Policy. Recognizing that many of the 2002 Growth Policy action strategies were never completed, the Planning Board concluded that the 2002 Growth Policy may have been overly ambitious and also somewhat vague about the task. Consequently, the planning board recommended focusing the action strategies of this 2013 Growth Policy on only those items directly under the authority of the Big Horn County Commission or the planning board.

### 4.2 VISION FOR BIG HORN COUNTY'S FUTURE

The following is the vision as included in the 2002 Growth Policy, with a few word changes recommended by the Planning Board.

*Farming and ranching remain an important component of Big Horn County's way of life and landscape, punctuated by communities with "small town" characteristics of friendly residents, commercial and retail businesses that serve local residents and visitors, and safe, clean neighborhoods.*

*The economy is diversified, building upon the agricultural base and natural resources such as coal, gas, and oil, providing a living wage, and economic enterprises are scaled appropriately to be consistent with residents' quality of life expectations.*

*County, town, and tribal governments in Big Horn County work together on issues that overlap jurisdictional boundaries.*

*Land use change and development occurs in such a way so as not to jeopardize water quality or availability and other natural resources.*

*Big Horn County remains a good place to live and visit as evidenced by low crime rates, clean air and water, quality outdoor recreation experiences with abundant wildlife, open space and scenic vistas, and historic sites and cultural places that are retained, understood, and respected by residents and visitors alike.*



## 4.3 GOALS, OBJECTIVES AND IMPLEMENTATION MEASURES

### Communication/Coordination

*Background:*

*There are many overlapping concerns and responsibilities among the local municipalities, Big Horn County, and tribal governments of the Crow and Northern Cheyenne. These include land use policies and regulations, law enforcement, fire protection, etc. The “patchwork” pattern of land ownership on the Crow Indian Reservation presents particular issues--what applies to one parcel may not apply to the next door neighbor.*

*There is very limited communication between the county planning board and the city-county planning board, although some issues overlap the boundaries.*

*It is not easy for the general public to stay informed of county activities. The newspaper is one source, but needs to receive information. The county’s website is outdated.*

**Goal 1:**

**Improve communication and coordination between the county and city of Hardin, town of Lodge Grass, Crow Tribe, Northern Cheyenne Tribe, and general public.**

**Goal 1: Objectives:**

- a. Improved communication creates better understanding of issues.
- b. Coordinated solutions among jurisdictions leads to cost savings and better results.

Goal 1: Implementation Strategies:	Timetable
a. County to continue to provide information to the municipalities, and Crow and Northern Cheyenne Tribes on issues of shared concern and to request participation in identifying solutions.	Immediate and ongoing
b. Planning Board to request copies of city-county planning board’s agendas and meeting notes and will reciprocate by doing the same.	Immediate and ongoing
c. County to update the website with current information, including agendas, meeting notes, and documents for public review.	Initiate within 1 year

## Infrastructure Strategy

### *Background:*

*Big Horn County is responsible for over 1500 miles of county roads and bridges, county buildings and facilities (court house, fairgrounds, fire facilities, new airport, etc.), and major equipment (road graders, etc). Maintaining county infrastructure is costly, particularly when considering the long-term costs of major replacement and repair. The county does not have a capital improvements plan (CIP) that inventories condition of roads, bridges, buildings, and equipment and schedules and budgets for major/repair and replacement.*

*Although Big Horn County government does not have any water or sewer facilities, the condition of these facilities is important to the county. Most CIPs have at least a 10-year time frame for budget purposes, but extend out as far as 50 years for scheduling major repair and replacement.*

*The county is being affected by increase of non-agricultural heavy truck traffic on county roads and state highways. As reported by [USA Today](#) (September 10, 2007), one 40-ton truck does as much damage to the road as 9,600 cars.*

### **Goal 2: Provide for the long-term infrastructure needs of the county.**

#### **Goal 2: Objectives:**

- a. A standardized approach to long-term repair/replacement of infrastructure owned by Big Horn County.
- b. County assistance where possible on provision of other non-county infrastructure, such as community water and sewer.
- c. Non-agricultural semi-trucks pay their fair share of impacts to county roads.

<b>Goal 2: Implementation Strategies:</b>	<b>Timetable</b>
a. Big Horn County to develop a Capital Improvements Plan to inventory county-owned infrastructure and major equipment, including current condition, and set a multi-year schedule and budget for major repairs, renovation, and replacement.	Initiate within 2 years
b. Big Horn County to provide grant-writing assistance and match-funding within reasonable limits to support community water, sewer, and storm drainage systems.	Ongoing
c. Big Horn County to identify and implement a system to recoup costs to county roads caused from non-agricultural semi-trucks. Begin with an assessment of fees for new approaches onto county roads.	Initiate within 2 years

## Education

*Background:*

*Approximately 36% of Big Horn County's population is less than 20 years of age. The county has one of the highest school drop-out rates in Montana. Lack of employment and underemployment are linked to education and poverty.*

### **Goal 3: Big Horn County's youth are educated.**

#### **Goal 3: Objectives:**

- a. Reduce school drop-out rate for students in grades 6-12 in Big Horn County.
- b. More young adults residing in Big Horn County are employed.

<b>Goal 3: Implementation Strategies:</b>	<b>Timetable</b>
a. County Commissioners take an active role in promoting education and encouraging students to stay in school.	Within 1 year; then ongoing
b. Provide grant-writing assistance where possible.	Ongoing
c. County Commission to assist schools in identifying and prioritizing what infrastructure improvements or changes may be needed for schools.	Within 3 years

## Housing

*Background:*

*Housing condition has been an issue in Big Horn County for decades. More than half of the county's housing stock is in rough shape, some barely habitable.*

### **Goal 4: Big Horn County's housing condition is improved.**

#### **Goal 4: Objectives:**

- a. Repair and renovate existing housing where possible.
- b. Demolition and rebuild housing that is beyond repair.
- c. New housing stock is affordable for the workforce and built to last.
- d. More affordable housing options for seniors in Big Horn County.

Goal 4: Implementation Strategies:	Timetable
a. County Commissioners take an active role in promoting housing improvements and senior housing, and initiate steps for a county-wide housing needs assessment and planning for improvements.	Within 1 year; then ongoing
b. Provide grant-writing assistance where possible.	Ongoing
c. Provide links on county web-site to housing information and assistance.	Within 2 years

## Land Use

### *Background:*

*Big Horn County's subdivision regulations need updating to comply with provisions of state law, as changes have been made to the law since 2006. The sanitation regulations also need an update, and local provisions for the review of parcels 20-160 acres, which are exempted from DEQ review but are required to be reviewed locally. The floodplain regulations also need an update, but this is a lesser priority because the county follows provisions of state law when reviewing development in the floodplain. When updating the floodplain regulations, the county should consider impacts of new development in flood-prone areas, as described in this growth policy and the 2013 Pre-Disaster Mitigation Plan.*

*Gravel operations, wind farms, and cell towers came up several times in the course of planning board discussion as they prepared this growth policy. Work camps might be needed for housing workers on major construction projects, such as coal mine expansion or the water distribution system (per the Crow Tribe Water Rights Settlement and Compact). The need to provide mechanisms to reduce conflicts between gravel operations, wind farms, cell towers, work camps and other existing uses is a future possibility.*

*Issues of gravel pits for nearby residents include noise, light pollution (if working at night), dust, heavy truck traffic, etc. that reduce property values and increase risk to health and safety. Wind farms can also affect nearby residential property values by affecting surrounding scenic quality and noise. They also affect wildlife populations, particularly birds. Cell towers create visual issues. Gravel operations, wind farms, and cell towers have all been the subject of conflict and litigation between developers and nearby landowners in Montana and other parts of the country. Work camps increase traffic on the roads, noise and light for nearby neighbors. The*

*ability to regulate these uses is limited by a number of state and/or federal laws that protect the rights of the developer. Local regulations must comply with state and federal laws. Local regulations cannot generally ban the development of gravel operations, wind farms, and cell towers in a jurisdiction, but they can establish guidelines for how they may be developed. Local regulations can also be developed to manage the effects of work camps. In order to establish guidelines under local regulations, however, state law requires that the growth policy set the framework. Including a strategy in the growth policy for this purpose does not create defacto regulation (the growth policy is entirely non-regulatory, a requirement of state law). Nor does including a strategy in the growth policy require the county to establish new regulations. If regulations were adopted, the authority would be that under 76-3-201, MCA, et.seq.. It is suggested that the regulations could be county-wide as conditional use permits, setting parameters for how development is to occur. An example is the ordinance passed by Richland County to address work-camps. The ordinance was developed as a template by the Montana Department of Commerce – Community Technical Assistance Program.*

#### **GOAL 5:**

**Big Horn County has the means to provide for compatibility of land uses with consideration of public health and safety, provision of adequate infrastructure, and character of surrounding area.**

#### **Goal 5: Objectives:**

- a. Big Horn County has the regulations that are required by state law (e.g., subdivision, sanitation, and floodplain) and these regulations conform to law.
- b. If the need arises, Big Horn County has the ability to adopt regulations for gravel operations, windfarms, cell towers and work-camps.
- c. Any new regulation will include public review prior to adoption.

<b>Goal 5: Implementation Strategies:</b>	<b>Timetable</b>
a. Update Big Horn County subdivision, sanitation, and floodplain regulations, beginning with subdivision regulations.	Initiate within 1 year
b. Incorporate the provisions of this growth policy regarding subdivisions (as included below) into the subdivision regulations.	Within 1 year
c. As need arises, Big Horn County to consider new regulations for gravel operations, wind farms, cell towers, and work-camps. Process for adopting the regulations would include public review per requirements of state law under 76-3-201, MCA, et. seq.	As needed
d. Any new regulation will include public review prior to adoption.	Ongoing policy

## 4.4 SUBDIVISION REGULATIONS

### Subdivision Review Criteria

#### Criteria Definition

State law requires that subdivisions be reviewed against their effects on six criteria: agriculture, agricultural water user facilities, natural environment, wildlife and wildlife habitat, local services and public health and safety. This section clarifies how the county defines those criteria.

**Agriculture:** The use of the land for grazing and cropping to produce food, feed, and fiber commodities. Examples may include: cultivation and tillage of the soil; dairying; growing and harvesting of agricultural or horticultural commodities; and the raising of livestock, bees, fur-bearing animals, or poultry.

**Agricultural water user facilities:** Facilities that provide water or drainage for the production of agricultural products on agricultural land including, but not limited to ditches, canals, pipes, head gates,



Photo: Library of Congress, Roundup in Big Horn County circa 1940,

sprinkler systems, tanks, reservoir, ponds, or developed springs.

**Local services:** Any and all services or facilities local government is authorized to provide, such as water supply, sewage disposal, law enforcement, fire protection, ambulance services, transportation system, and educational system.

#### **Natural environment:**

Existing physical conditions relating to land, water, air, plant and animal life of an area and the interrelationship of those elements, such as soils, geology, topography, vegetation, surface water,

ground water, aquifers, drainage patterns, recharge areas, climate, floodplains, noise, scenic resources, and objects of historic, prehistoric, cultural, or aesthetic significance.

**Wildlife:** Animals (e.g. mammals, birds, reptiles, fish), that are neither human nor domesticated, existing in their natural environment.

**Wildlife habitat:** Geographic areas containing physical or biological features essential to wildlife for breeding, rearing, nesting, and/or winter feeding and forage; and/or essential to the conservation of listed endangered and threatened species under the Endangered Species Act.

**Public health and safety:** A condition of well-being, reasonably free from danger, risk, or injury for a community at large, or for all people, not merely for the welfare of a specific individual or a small class of persons.

### **Review Criteria**

The evaluation of the effect of the proposed subdivision on these six criteria determines if there are significant unmitigated adverse impacts. Unmitigated adverse impacts are potential grounds for denial of a proposed subdivision. Below are examples of items considered in evaluating the impact of a proposed subdivision on the six criteria. These examples do not reflect all potential items, but they do include a preponderance of the items under consideration. Depending on the proposed subdivision, some of these items included may not apply. In addition, some proposals may require evaluation of other topics not included in these examples to weigh the subdivision's effect on these criteria. It is the subdivider's responsibility to document proposed mitigation of any adverse impacts on these six criteria.

#### *Effect on agriculture*

- Number of acres that would be removed from the production of crops or livestock.
- Acres of prime farmland (as defined by the USDA) that would be removed
- Effect on use of remainder and adjoining properties as farm or ranch land
- Potential conflicts between the proposed subdivision and adjacent agricultural operations including:
  - Interference with movement of livestock or farm machinery
  - Maintenance of fences
  - Weed proliferation
  - Vandalism or theft
  - Harassment of livestock by pets or humans
- Other items to be considered include:
  - Effect on market value of surrounding land
  - Net effect on taxes resulting from additional services

#### *Effect on agricultural water user facilities*

- Location and proximity to agricultural water user facilities

- Potential conflicts between facility users and subdivision residents including:
  - Seeps, flooding, washouts,
  - Obstructions and interference
  - Unintended uses (recreation or landscaping)
- Water rights
- Vehicular access to facility

#### *Effect on local services*

- Increased demand on services and need to expand services
- Ability to provide services to subdivision
  - Response times
  - Conditions of roads, bridges, and railroad crossings
  - Physical Barriers.
- Provision of adequate local services and public facilities simultaneous or prior to onset of impact.
- Any special or rural improvement districts that would obligate local government involvement fiscally or administratively

#### *Effect on natural environment*

- Runoff reaching surface waters (e.g., streams, rivers or riparian areas).
- Impacts on ground water supply, quantity, and quality.
- Impacts on air quality.
- Impacts on scenic resources.
- Impacts on historic, pre-historic, and cultural resources
- Noxious weeds.
- Wetlands not covered under nationwide permits.
- Cumulative impacts of multiple subdivisions on natural environment.

#### *Effect on wildlife*

- Effects of humans and pets on wildlife

#### *Effect on wildlife and wildlife habitat*

- Loss of significant, important and critical habitat, as defined.
- Impacts on significant, important and critical habitat including potential effects of
  - roads and traffic
  - closure of existing operations and/or potential to provide new access to public lands



### *Effect on public health and safety*

- Creation of potential man-made hazards (e.g. unsafe road intersection, development in wildland residential interface fire areas).
- Natural hazards (e.g. wildfire, flooding, steep slopes).
- Existing potential man-made hazards (e.g. high pressure gas lines, lack of fire protection, cumulative impacts).
- Traffic safety.
- Emergency vehicle access.
- Emergency medical response time.
- Cumulative impacts on groundwater from individual sewage disposal systems and/or individual wells.
- Any other item that endangers public health and safety.

### **Subdivision Public Hearing Procedures**

A fundamental component of the subdivision review process is the opportunity for members of the public and interested groups to offer comments on the proposal. The opportunity to make comments in public is provided by the public hearing process. The Planning Board will also accept written comment received outside of the public hearing, but may set deadlines for the receipt of such comment. Under state law, the requirement to hold a public hearing does not apply to the first minor subdivision from a tract of record and other qualifying minors as may be determined per 76-3-609, MCA. A minor subdivision is defined as containing five or fewer lots.

The general steps for the public hearing, which is conducted by the Planning Board in Big Horn County, are as follows:

1. Introduce public hearing
2. Explain subdivision review procedure and decision criteria
3. Planning Department staff report.
4. Applicant presentation.
5. Public testimony.
6. Close public hearing.

Recent court decisions have held that public meetings that extend late into the night are not really accessible to the general public. The meeting should be conducted so that those who want to speak for or against, or who seek additional information, will have an opportunity to do so while still providing a reasonable adjournment time.

The Planning Board Chair, who presides over the meeting, is responsible for setting the guidelines or methods for public comment. The Chair will review general guidelines prior to public comment, reminding the public of the criteria upon which the final decision must be made. Because each meeting is somewhat different, a standardized set of guidelines may not work in every case. Options to manage public discussion can include, but are not limited, to the following:

- Asking those who wish to speak to sign in, and use the list to determine speaker sequence
- Limiting the amount of time each person can speak
- Allowing each person to speak only once until all have had an opportunity
- Requesting individuals to address new issues only and not repeat what has already been addressed

## **4.5 WILDLAND URBAN INTERFACE (WUI)**

Growth policies must include an evaluation of the potential for fire and wildland fire and whether or not there is a need to delineate the wildland-urban interface and adopt regulations requiring defensible space and adequate ingress and egress for fire suppression activities. This evaluation is included in Chapter 3, “Trends and Issues.” The county’s wildland-urban interface is mapped in the Community Wildfire Protection Plan. The Big Horn County Planning Board does not recommend additional regulations at this time.

## **4.6 GROWTH POLICY REVIEW – IMPLEMENTATION, REVISIONS AND AMENDMENT**

### **Implementation Timetable**

For each action strategy listed above, there is a timeframe. The intent is that all strategies will have been initiated within 1-2 years after adoption of this growth policy and that all will have been completed within 5 years, with the exception of those that are listed as “ongoing.”

### **Periodic Review of Growth Policy**

The Planning Board will review the Growth Policy annually and issue a status report to the County Commissioners. The status report will include:

- Status of goals, objectives, and specific action strategies outlined in the Growth Policy,
- Assessment of work to be completed in the following year, and
- Evaluation of need to revise Growth Policy.

### **Conditions for Revising the Growth Policy**

The Big Horn County Growth Policy provides a plan for the future based on existing conditions and projected trends. It cannot cover all potential future scenarios and thus needs to be flexible to deal with new issues as they arise.

Under the following conditions, the Planning Board will review the Growth Policy and determine if changes are needed:

- Implementation of major proposed actions outside of county authority, such as development of the proposed Tongue River Railroad, with potential to significantly affect implementation of the stated goals, policies, and strategies in this Growth Policy;
- Actions or events with potential to significantly alter the health, safety, and welfare of citizens that were inadequately addressed in the Growth Policy;
- Changes in state law regarding growth policies;
- Court cases and/or litigation that sets legal precedent in Montana for growth policies;
- Individual neighborhood plans developed in accordance with state law (76-1-601) are to be included as amendments to the current Growth Policy; or
- Planning Board evaluation of implementation measures and progress, and determination that modifications would enhance the effectiveness of the Growth Policy.

#### **Process for Revising the Growth Policy**

If the Planning Board determines that a revision to the Growth Policy is necessary, the Board will provide a written notice to the County Commissioners prior to commencing work on the revision and proceed with revisions if so requested by the County Commissioners.

The Planning Board will follow the process outlined in state law for adopting a growth policy (76-1-602 through 76-1-603) for any subsequent revisions. Once revisions are drafted, the Board will conduct a public hearing on proposed revisions and then by resolution make its recommendation to the County Commission. The County Commission will then make its decision to adopt, revise, or reject the changes as outlined in state law (76-1-604).

## 5. INVENTORY OF EXISTING CHARACTERISTICS

### 5.1 LAND USE

#### Land Uses - General

The county is predominantly agricultural, with rangeland, irrigated cropland in the valleys and dryland crops elsewhere. According to the [2007 Census of Agriculture](#), Big Horn County had 2.90 million acres in agricultural production, up from 2.81 million acres in 2002. Total number of farms also increased from 584 in 2002 to 695 in 2007. The USDA report, “[Montana 2013 Agricultural Statistics](#)” indicated that in 2012, Big Horn County ranked 5<sup>th</sup> in the state for winter wheat production, 9<sup>th</sup> in barley production, 6<sup>th</sup> for alfalfa, and 3<sup>rd</sup> for cattle inventory.

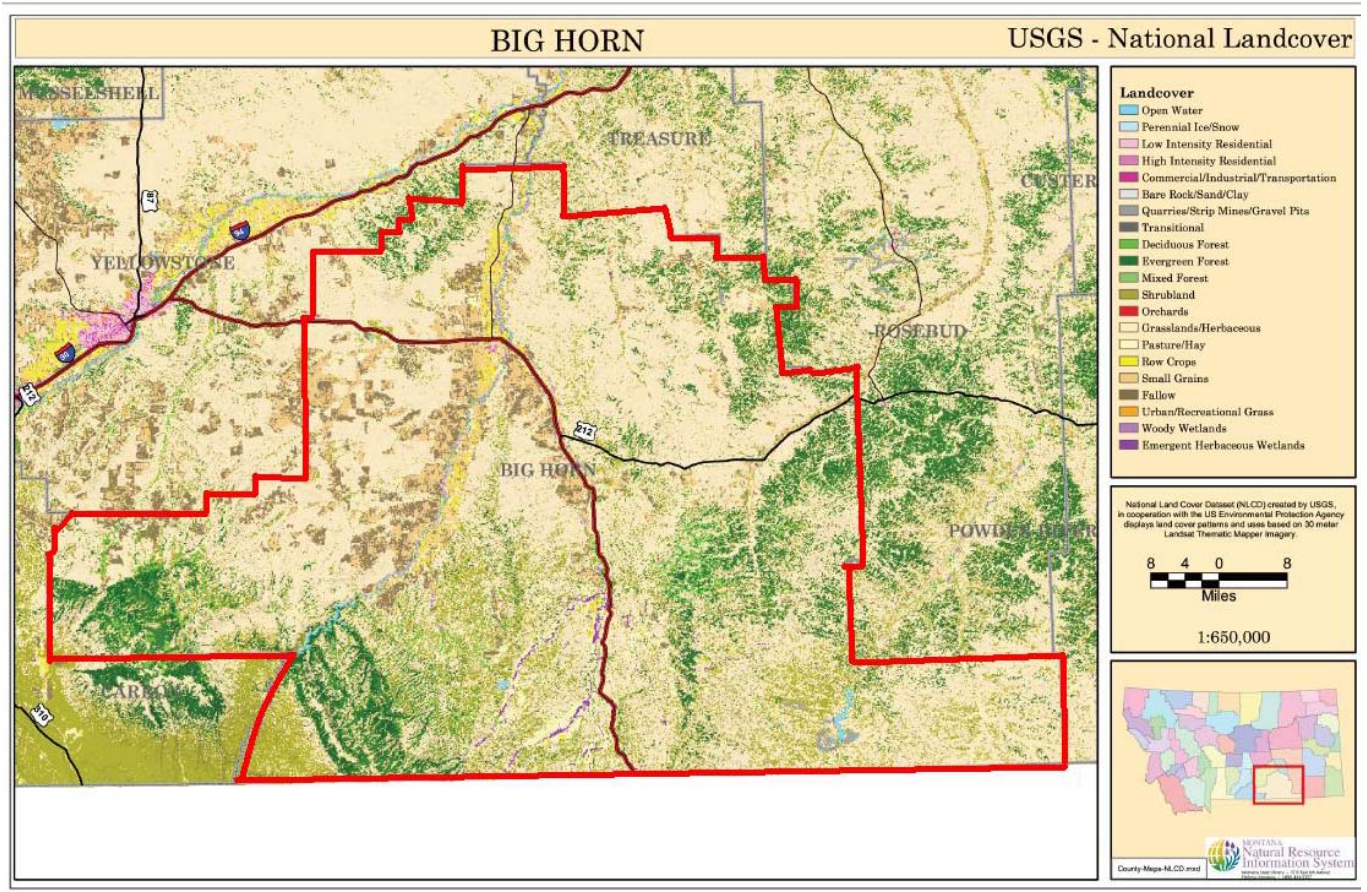


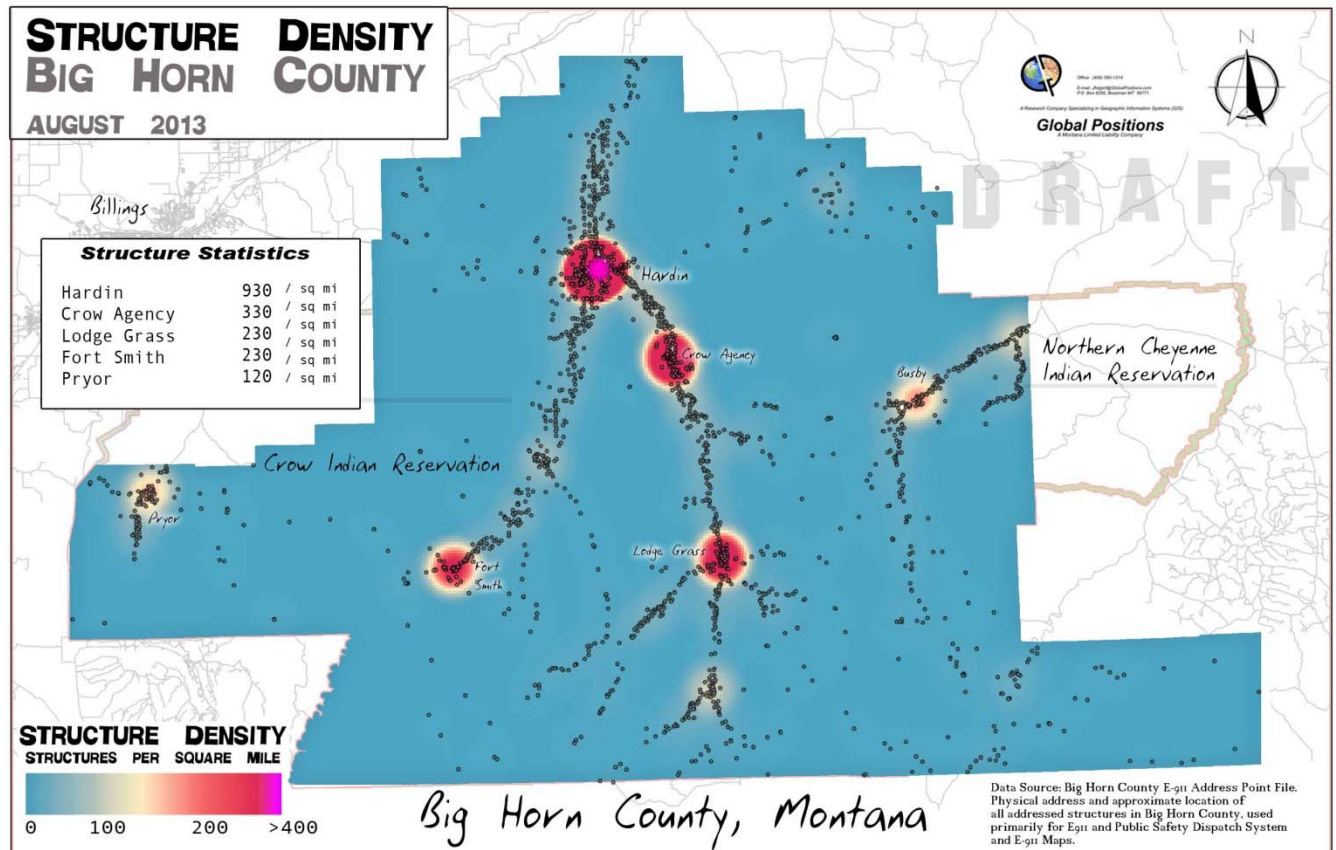
Figure 7: Landcover Types in Big Horn County

Source: Montana NRIS <http://nr.is.mt.gov/>

Residential and commercial land use occurs primarily in existing communities. Hardin has the largest concentration of population and commercial/industrial uses in the county. Crow Agency, Lodge Grass, Busby, Pryor, Fort Smith, St. Xavier, and Wyola are the other communities in the county. Muddy Cluster



is a residential area on the Northern Cheyenne Reservation located close to the county's eastern boundary on Highway 212. Scattered residential development outside of existing communities occurs predominantly along major travel routes and waterways. With the exception of the vacant historic town of Corinth (west of Hardin along Fly Creek), there are no residential subdivisions of any significant concentration in the county. With the exception of some smaller parcels along the Big Horn River where demand is higher for recreational properties, and to a lesser extent on the Tongue River Reservoir, the county area outside of communities is almost exclusively comprised of large parcels of 160 acres or greater. Since 2002 in the planning area has had only a handful of new additional lots created.



**Figure 8: Structure Density in Big Horn County**

Map produced by Global Positions for the 2013 Big Horn County Growth Policy

Nearly half of the county includes significant coal deposits. Big Horn County includes four of the seven active coal mines in Montana, more than any other county in the state. The Apsalooka Mine in the Rosebud Mountains east of Hardin, and Spring Creek and East and West Decker Mines in the Wolf Mountains near Tongue River Reservoir in the southeast corner of the county, are all surface mines. More coal development could be possible in the future. On June 20, 2013, Crow Tribal Chairman Darrin Old Coyote announced that the Bureau of Indian Affairs approved a leasing agreement between the Crow Tribe and Cloud Peak Energy. The deal is approximated to encompass 1.4 billion tons of coal. (Big Horn County News, June 27, 2013)



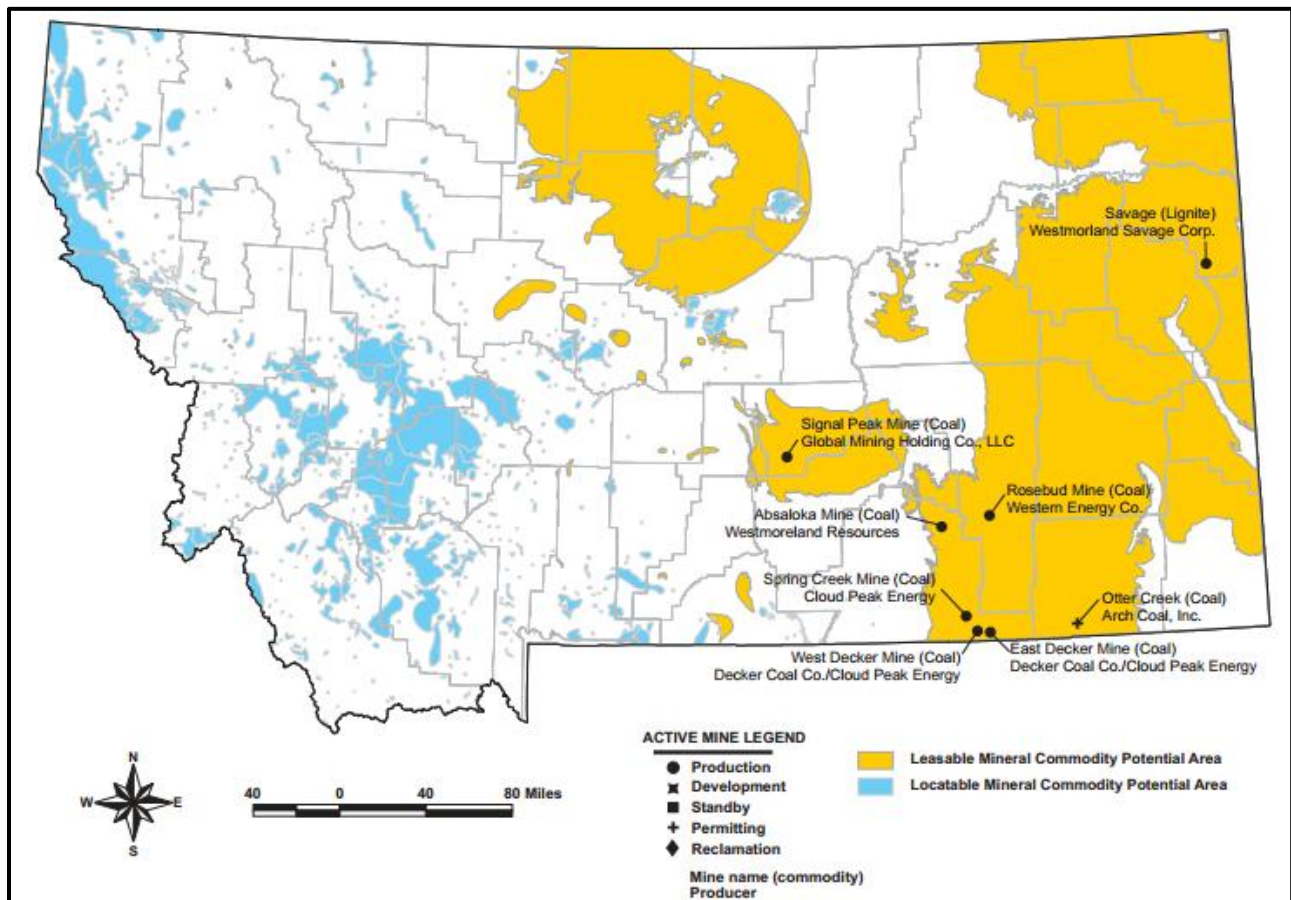
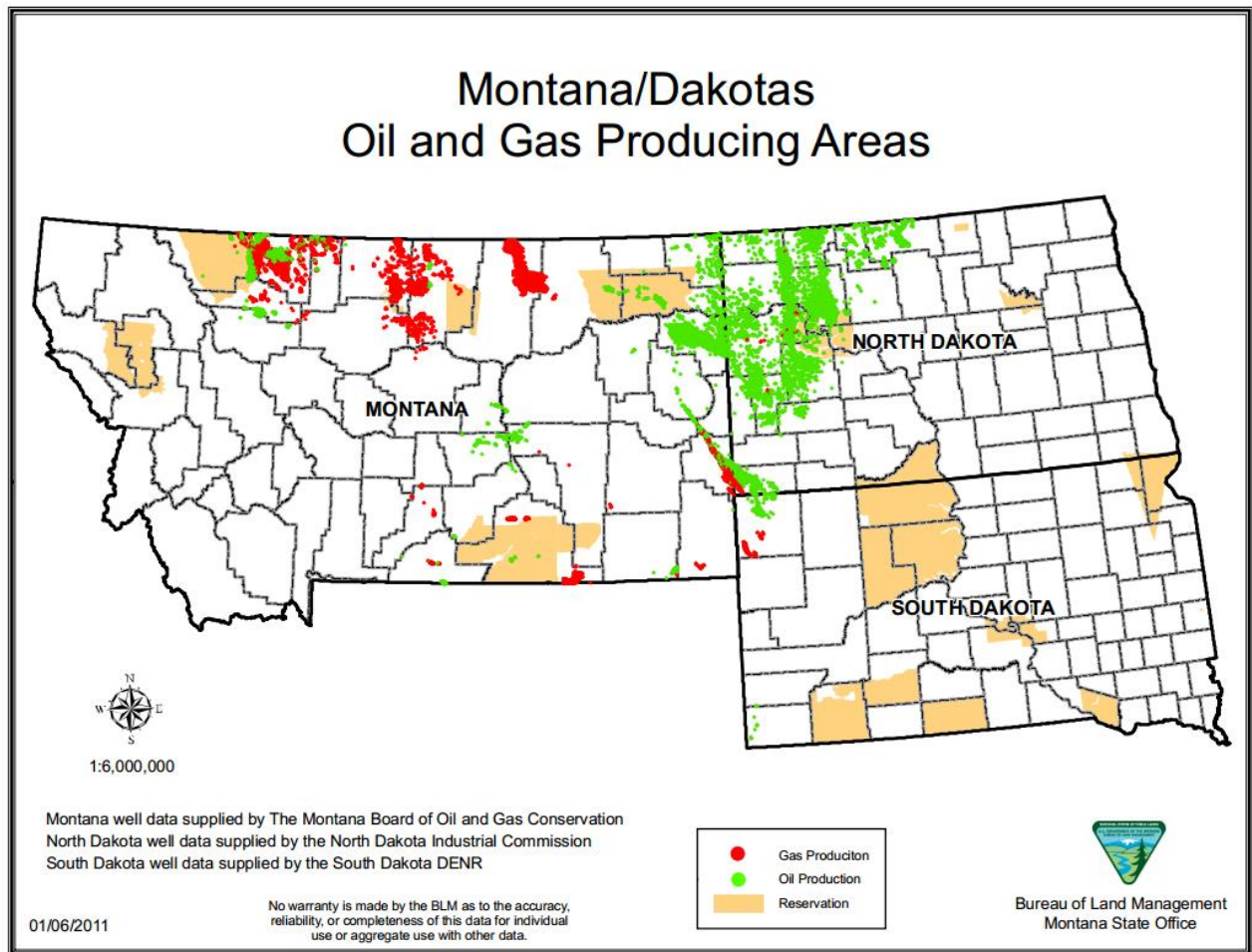


Figure 9: Coal Producing Areas and Coal Mines in Montana  
Source: McCulloch, Robin. "Montana Mines and Exploration — 2012"

The southeast corner of Big Horn County is also the single location of the state's existing coalbed methane development. At the time the 2002 growth policy was being prepared, the Bureau of Land Management estimated that initial development in this area could result in 250 producing wells. Between 2002 and 2013, more than 1500 wells had been drilled. At the height of productivity in 2007-2008, there were approximately 900 producing wells but production dropped off significantly in the next four years. Declining prices and requirements for disposing of the by-product water were factors in production decline. In October 2012, there were 332 producing wells. Fidelity Corporation, which at one time owned 90% of all coalbed methane wells in Big Horn County has since sold out and left. (Meredith)

The south part of the county near Soap Creek by Fort Smith has an oil field. (Big Horn County Homeland Security Strategy) There has been a significant amount of oil and gas development in this area in the past ten years. According to the Montana Department of Revenue, the county had 342 active wells in December 2011. (Big Horn County PDM) There is also natural gas production near Hardin.



**Figure 10: Oil and Gas Producing Areas**

Source: [Bureau of Land Management, Montana State Office](#)

There are two major electrical generation facilities in Big Horn County – hydroelectric at Yellowtail Dam and a coal fire power plant near Hardin (completed in 2006). The Yellowtail Dam is located at Ft. Smith. The dam impounds water to create Bighorn Reservoir. The reservoir is situated in both Montana and Wyoming in a deep canyon. The dam also produces electrical power and regulates flows for the fishery in the Big Horn River. The Dam is operated by the U.S. Bureau of Reclamation.

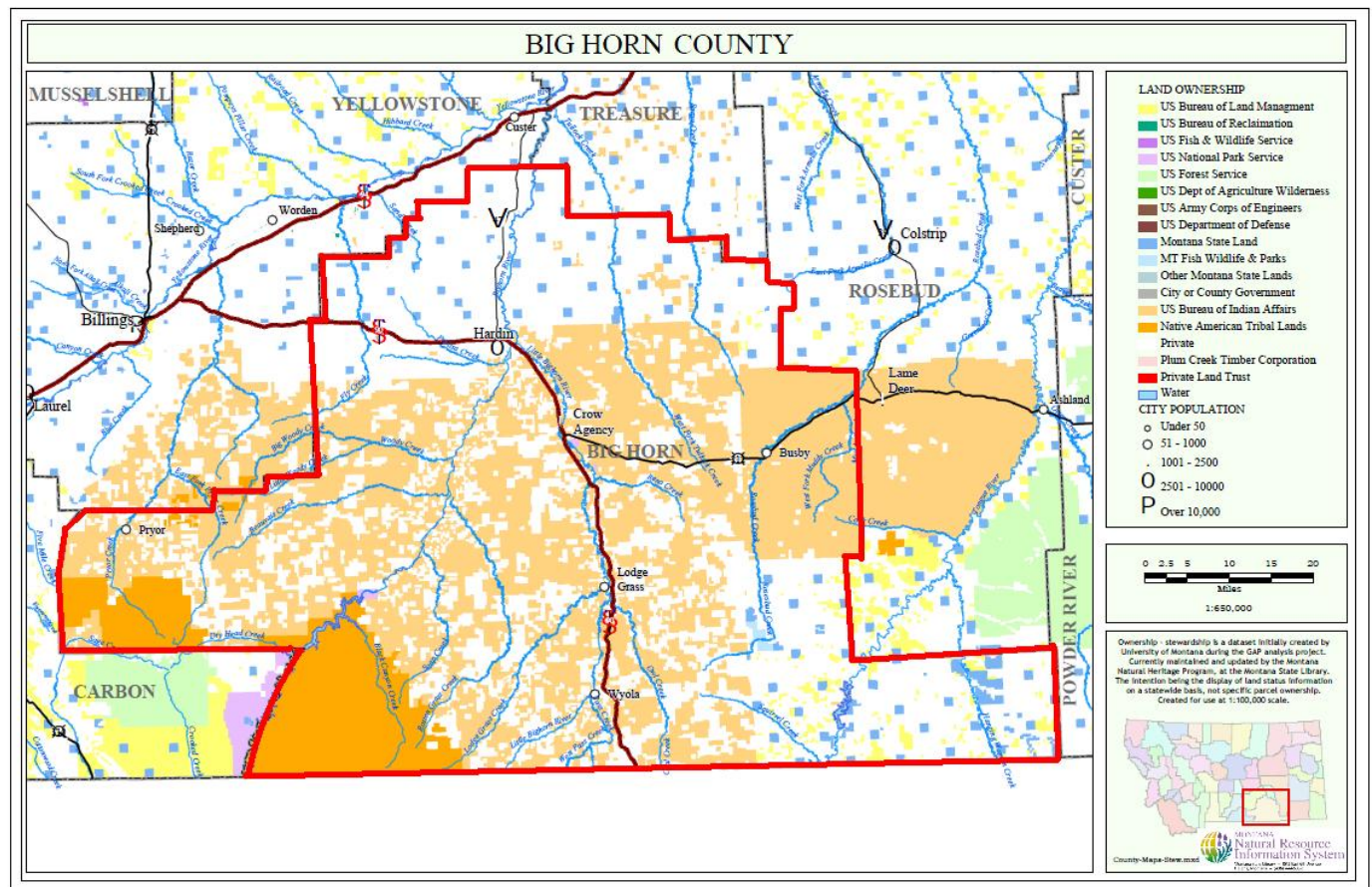
Big Horn County also has many significant historic sites, sites of cultural importance, and sites with religious significance to the Crow and Northern





Cheyenne, and world-class scenery and recreation locations. Big Horn County has the only national monument in Montana – the Little Bighorn Battlefield National Monument. Chief Plenty Coups' home and Rosebud Battlefield, two of the 26 national landmarks in Montana, are located in Montana. The Big Horn Canyon National Recreation Area provides boating and fishing and dramatic landscapes. The Big Horn River north of the dam is a world-class blue-ribbon trout fishery. There are six state fishing access sites along the Big Horn River (<http://fwp.mt.gov/fishing/guide/fasGuide.html>). The Tongue River Reservoir is also a destination for fishing and boating for Montanans and Wyoming residents and other visitors.

## Land Ownership



**Figure 11: Land Ownership Types in Big Horn County**

Source: Montana NRIS <http://nr.is.mt.gov/>

The make-up of land ownership among private landholders, Indian tribal ownership, and local, state, and federal governments has not changed significantly since the 2002 growth policy. Approximately two-thirds of Big Horn County falls within the boundaries of the Crow or Northern Cheyenne Indian Reservations. Nearly all of the Northern Cheyenne Reservation is under the Bureau of Indian Affairs (shown as light orange on the map above), but there are some scattered parcels of privately deeded land (parcels with no color). Much of the Crow Reservation consists of deeded parcels interspersed

with lands managed by the BIA. The Crow have three large parcels under tribal ownership in the southwest corner of the county. There are also some scattered BIA trust lands outside of the Reservation boundaries—in the north part of the county and in the Tongue River Reservoir area in the southeast portion of the county.

The state (blue parcels in the map) has scattered school trust sections throughout the county outside of the Indian Reservations. The state also has Chief Plenty Coups, Rosebud Battlefield, and Tongue River Reservoir State parks, as well as fishing access sites.

The National Park Service manages the federal property of Little Bighorn Battlefield National Monument, Big Horn Canyon National Recreational Area, and Yellowtail Dam. The U.S. Bureau of Land Management manages lands (shown as yellow on the map) located primarily in the southeast portion of the county as well as subsurface mineral rights in the county owned by the federal government.

The county has properties for its facilities, such as the county court house, and also other lands such as the area of the new airport (west of Hardin, within the city-county planning area jurisdiction). The county also has fire suppression facilities located near Decker, Fort Smith, Saint Xavier, Pryor, North Valley (approximately 7 miles north of Hardin), and in Hardin.

## Land Use Regulations

Land use regulations in the county planning area consist of subdivision regulations (2006), floodplain regulations (2005), and sanitation (water/wastewater) regulations (1987), all of which are in need of review and update to conform to current state law and best practices. The 2013 legislature resulted in a new law addressing buildings for rent or lease and Big Horn County Commissioners adopted regulations, as required by law, in November 2013. There is no zoning in the Big Horn County planning area, other than a wireless communication facilities ordinance, which needs updating so that it can be more easily understood and enforced. An electrical, plumbing, and/or mechanical permit may be required by the state of Montana for new noncommercial construction and is required for all commercial construction.

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## 5.2 POPULATION

### Historic Population Trends

Big Horn County is Montana's 14<sup>th</sup> most populated county. Big Horn County grew at a significantly slower rate (1.5%) than its neighboring counties during the last decade, with Yellowstone County seeing a 12.6% increase and Carbon County seeing a 5.2% increase. Hardin grew by about 3.5% (121 persons) between 2000 and 2010. Lodge Grass lost 16% (82 persons) between 2000 and 2010 and has seen population decline over the past two decades (see Table 3). The population of the unincorporated area of the county, including Lodge Grass and census designated places was 8,932 in 2010, compared to 8,777 in 2000. Approximately 45% of the population in the unincorporated areas lives within one of the six census designated places or Crow Agency.

**Table 3: Population Change for Hardin, Lodge Grass, Crow Agency and Big Horn County: 1990-2010**

				% Change	% Change
	1990	2000	2010	1990-2000	2000-2010
Hardin	2,940	3,384	3,505	15.1	3.5
Lodge Grass	517	510	428	(1.3)	(16.0)
Crow Agency	1,446	1,552	1,616	7.3	4.1
Big Horn Co.	11,337	12,671	12,865	11.7	1.5

Source: U.S. Census Bureau, 2010 Demographic Profile Data

**Table 4: Census Designated Places (CDPs): 2000-2010**

Town	2000	2010
Busby	695	745
Fort Smith	122	161
Muddy	627	617
Pryor	628	618
St. Xavier	67	83
Wyola	186	215

Source: U.S. Census Bureau, 2010 Demographic Profile Data

Locals report that many of the people who left Lodge Grass in the last decade moved to Hardin. Others from Lodge Grass, Hardin and other areas in the county have left the county entirely and have moved to the Billings area.



Crow Fair (Photo: Montana Department of Commerce)

The ethnic composition of the county continues to change toward a greater proportion of American Indians.

**Table 5: Ethnic Groups as Percent of Total Population: 1990, 2000 and 2010\***

	1990	2000	2010
White	43.4	36.6	31.4
American Indian & Alaska Native	55.5	59.7	64.3
Hispanic or Latino	n/a	3.7	4.0
Black or African American	.2	.2	0.5
Asian	.4	.5	0.7
Some Other Race	.6	.7	1.2
* Numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.			

Source: U.S. Census Bureau, 2010 Demographic Profile Data

Big Horn County is a younger county than Montana on the whole with Montana's percentage of persons older than 65 being more than 15%. The median age in Big Horn in 2000 was 29.8; and in 2010, 30.5. Whereas Montana's median age in 2010 was 39.8 and the median age in the U.S. was 37.2 in 2010.

**Table 6: Population by Age: 1990, 2000 and 2010\***

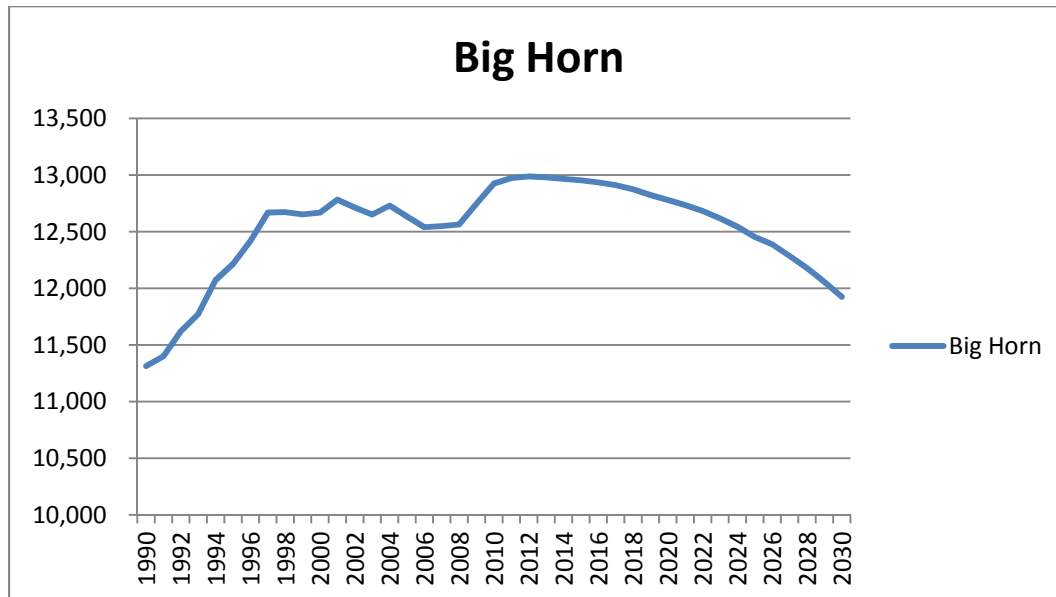
	1990		2000		2010	
	Persons	%	Persons	%	Persons	%
0-4	1,278	11.3	1,180	9.3	1,355	10.5
5-17	2,903	25.6				
5-19			3,737	29.5	3,311	25.7
18-24	1,008	8.9	1,322			
20-24			707	5.6	935	7.3
25-44	3,327	29.3	3,363	26.5	2,864	22.3
45-64	1,817	16.0	2,595	20.5	3,110	24.2
65+	1,004	8.9	1,089	8.6	1,290	10.0
* 2000 and 2010 Census categorized age differently than previous censuses						

Source: U.S. Census Bureau, 2010 Demographic Profile Data

## Population projections

Based on standardized methodology from the Montana Census and Economic Information Center (CEIC), the population of Big Horn County is projected to decline slowly over the next few decades. By 2030, the population is projected at 11,925 persons, approximately the same as the 1994 population.

**Table 7: Big Horn County Population 1990-2012 Estimates and 2012-2030 Projections**



Source: Montana CEIC, "Montana State and County Population Projections 1990-2060" compiled using eREMI - a product of Regional Economic Models, Inc. ([www.remi.com](http://www.remi.com)) - Released April 2013

Sources:

Montana Census and Economic Information Center (CEIC). <http://ceic.mt.gov> "MT County Total Population Comparison, 1990 – 2060"

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## 5.3 HOUSING

Big Horn County saw very little growth in the number of housing units over the last decade compared to Montana and the nation as a whole. The number of housing units in Big Horn County increased by less than 1% compared to 17% for the state of Montana.

The average household size in Big Horn County has remained stable at approximately 3.2 persons per household and continues to be greater than the average household size of the state which is currently 2.58 persons. Average household size is much larger for Muddy Cluster, Crow Agency, Pryor, and Busby than for the county average.

**Table 8: Big Horn County Housing Units**

	2000	2010	% Change
County	4655	4695	0.8
Hardin	1411	1401	-0.7
Lodge Grass	164	133	-19.0
Montana	412,633	482,825	17.0

Source: U.S. Census Bureau, 2010 Demographic Profile Data

Population growth generally outpaced housing stock. In the county between 2000 and 2010, housing stock grew at about half the rate of the population (housing stock in the county increased by 0.8% and population grew by 1.5%). In Hardin, the population increased by 3.5% but the housing stock declined by 0.7%. According to locals, some of the newcomers to Hardin are living in RVs and mobile homes that have been moved onto city lots. In Lodge Grass, where the population declined by 16%, the housing stock diminished at an even greater rate of 19%.

**Table 9: Average Household Size\***

	MT	Big Horn	Hardin	Lodge Grass	Muddy	Crow Agency	Pryor	Busby
2000	2.45	3.25	2.56	3.34	4.18	4.40	3.78	3.93
2010	2.35	3.21	2.65	3.80	4.28	4.51	3.47	4.07

\*averages both renter and owner-occupied housing

Source: U.S. Census Bureau, 2010 Demographic Profile Data

Owner-occupied housing units in the county increased by 26 units between 2000 and 2010 (see Table 3.3) and renter-occupied units increased by 55 units. The reduction in vacant housing units could be a combination of the removal of some older housing units and the occupancy of some previously vacant (and possibly substandard) units. Overall vacancy rates for owner-occupied homes in the county are consistent with the state (see Table 11), but vacancy rates are much tighter in Muddy Cluster and Crow Agency. The increase in rental occupancy also follows national trends during the Great Recession with more people renting homes than buying.

**Table 10: Big Horn County Housing Unit by Occupancy**

Characteristic	2000	2010	# Change	% Change
Total Occupied Housing Units (Owner or Rental)	3,924	4,004	80	2.0
Owner - occupied housing units	2,534	2,560	26	1.0
Renter - occupied housing units	1,389	1,444	55	3.9
Total Vacant housing units	731	691	40	-5.4
Vacant - Seasonal	296	319	23	7.7

Source: U.S. Census Bureau, 2010 Demographic Profile Data

**Table 11: Vacancy Rates for Homeowners and Rental Units, 2010**

	MT	Big Horn	Hardin	Lodge Grass	Muddy	Crow Agency	Pryor	Busby
Homeowner	2.1	2.2	1.1	0.0	0.0	0.0	0.0	0.0
Rental	7.1	6.3	6.2	5.6	3.0	3.2	6.2	4.7

Source: U.S. Census Bureau, 2010 Demographic Profile Data

As previously noted, with the increase in population disproportionate to the increase in housing units it appears there's a need for additional housing, particularly rental housing.

Big Horn County has issues with both quality and quantity of housing. Average household size can be dramatically higher in Big Horn County than is the average for the state or the nation. Although population gain was modest for the county between 2000 and 2010 the increase in housing did not keep up, which means that more people are likely living in less than standard housing.

Poor housing condition has been an issue in the county for decades. The [2005 Montana Housing Condition Study](#) showed that 41% of all housing units in Big Horn County had an effective age of 65 years or more (effectively built prior to 1940). Nearly half of all the housing units (48%) were in "fair" condition described as usable but "rather unattractive and undesirable. Much repair is needed and many items need refinishing or overhauling. Deferred maintenance is obvious." Another 7% were "poor" condition described as "undesirable and barely usable." An additional 5% were in "very poor" or "unsound" condition, "structurally unsound and practically unfit for use." In Lodge Grass, abandoned houses have been the source of arson, which has contributed to the decline of housing units since 2000.



Abandoned house in Lodge Grass; Photo by Cossitt (2005)



The city-county planning board developed the [City of Hardin Housing Study 2012](#) that recommended more affordable housing and housing for the elderly. The city enacted a housing authority in 2013 to address the housing issues.

Sources:

Hardin-Big Horn City-County Planning Board. "City of Hardin Housing Study 2012."  
[http://www.hardinmt.com/Housing\\_Study.htm](http://www.hardinmt.com/Housing_Study.htm)

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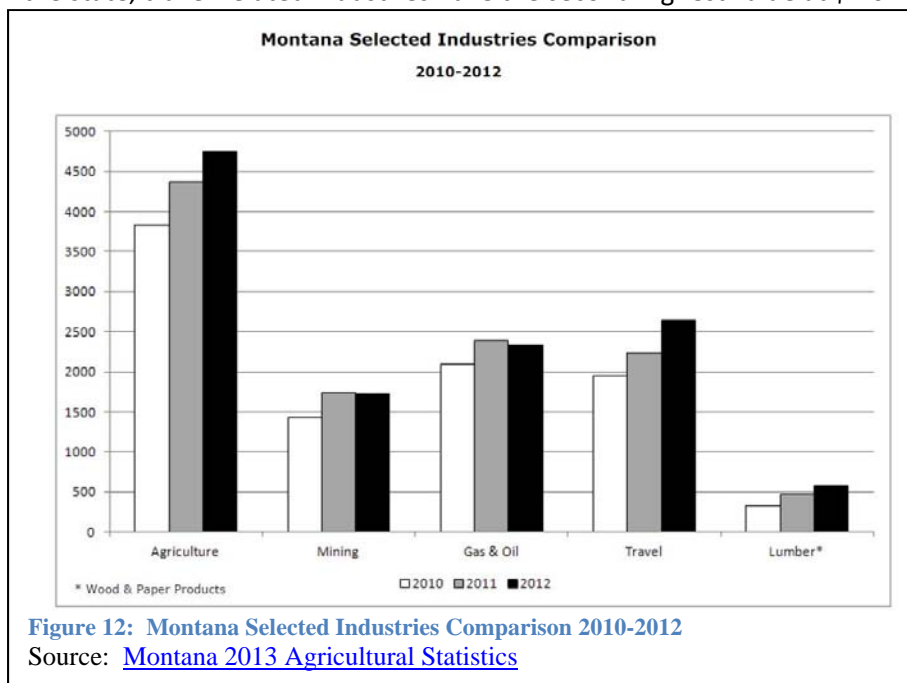
## 5.4 ECONOMIC CONDITIONS

### Overview

In Big Horn County, the major factors in the private sector economy are agriculture, coal mining, and tourism, which is generally similar to Montana's overall economy. Agriculture is the number one economic producer in Montana, with a value of \$4.7 billion in 2012, according to the USDA's [Montana 2013 Agricultural Statistics](#). In the state, travel-related industries have the second highest value at \$2.6 billion, followed by gas and oil at \$2.3 billion, and mining with \$1.7 billion.

In Big Horn County, the market value of agricultural products in 2007 was \$94.9 million, according to the [2007 Census of Agriculture](#). The values of mining, gas and oil, and travel-related industries aren't as readily available at the county level. With approximately 22.6 million tons of coal produced in Big Horn County in 2012 (as reported by the Bureau of Mines and Geology in

["Montana Mines and Exploration – 2012"](#), it is the largest coal producer in the state. The county also has considerable tourism economy, with the blue-ribbon trout fishery on the Big Horn River and with the historic sites.



### Big Horn County Economy Quick Facts

**Mining:** 22.6m tons in 2012 -  
largest coal producer in  
Montana

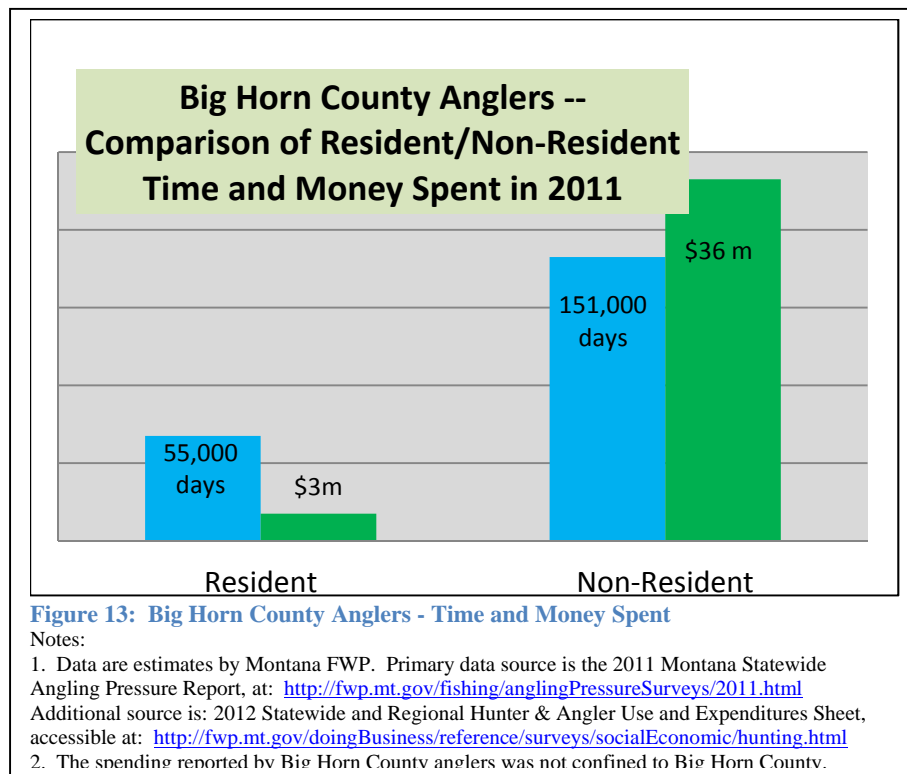
**Agriculture:** \$94.9m in value in  
2007

**Tourism:** >\$30m estimated annual

In its report, ["Expenditure Profiles and Marketing Responsiveness of Nonresident Visitor Groups to Montana,"](#) the Montana Institute for Tourism and Recreation Research (ITTR) found that groups visiting Montana for recreation or pleasure spent on average \$195 per day. In 2010, there were 320,959 visitors to the Little Bighorn Battlefield National Monument, according to [National Parks Traveler](#). If each visitor was part of a 3-person group and if each group stayed in Big Horn County one day, this would account for approximately \$20.9 million in value from travel in Big Horn County.

A separate analysis of revenue from sport-fishing in Big Horn County was conducted in 2013, using a standardized methodology that was also used to track revenues from the Big Hole River in Madison County. Sport

fishing in Big Horn County generates approximately \$39 million per year, although some is spent elsewhere (e.g., travel to/from the county, etc.). Of the total \$39 million, 92% is generated from the Big Horn River, and 6% from Tongue River Reservoir. In addition recent improvements at Tongue River Reservoir campgrounds could increase indirect revenues to the county in the future.



## Income and Employment

Big Horn tracked at nearly the same rate of growth in areas such as personal income and earnings as Montana and the nation in the last decade, based on census data. However, [Montana Department of Labor and Industry](#) data show the county had an unemployment rate of 12% in 2011, approximately 3-4% higher than in 2000 and nearly twice as high as the state. In addition, transfer payments accounted for a greater percentage of personal income in the county than in the state (see Table 12).

The average earnings per job in 2011 were \$41,982 in Big Horn. Of the approximate 2,293 private sector jobs in Big Horn, approximately 500 of those were in the mining industry, or 22% of all jobs. From 1998 to 2010, mining employment grew from 347 to 500 jobs, a 44.1% increase. Agriculture accounted for 11.5% of all jobs; travel and tourism accounted for 22% of all jobs, with 12% of those in accommodations and food service, according to [Headwaters Economics](#) (using economic census and other federal data).

**Table 13: Average Annual Wages**

	2000 <sup>a</sup>	2010 <sup>b</sup>
Big Horn	25,852	35,552
Montana	24,272	34,589
U.S.	35,320	46,742

Source:

<sup>a</sup> U.S. Bureau of Labor Statistics

<sup>b</sup> Montana Department of Labor and Industry, Quarterly Census of Employment of Wages (QCEW) Program.

**Table 12: Personal Income by Component - 2011**

	MT	Big Horn
Dividends, Interest, & Rent	20.4	12.2%
Transfer Payments	19.2	27.4%
Labor Earnings	60.3	60.4%

Source: U.S. Bureau of Economic Analysis

**Table 14: Top 10 Private Employers (2011)**

Business Name	Size Class
Awe Kualawaache Care Center	4
Big Horn/Little Horn IGA	5
Big Horn Hospital Association	6
Colorado Energy Mgmt/Hardin Generating Station	4
Decker Coal Company	6
Kennecott Energy Co. Spring Creek Mine	7
Little Horn State Bank	4
McDonald's	4
St. Charles Mission School & Pretty Eagle Catholic School	5
Westmoreland Resources Inc.	6
<i>Employment Size Class Coding: Class 7 = 250 to 499 employees, Class 6 = 100 to 249, Class 5 = 50 to 99, Class 4 = 20 to 49.</i>	

Source: Montana Department of Labor and Industry, Quarterly Census of Employment of Wages (QCEW) Program. This list ONLY includes industry employers subject to unemployment insurance. Railroads, tribal entities, and government agencies are excluded.

**Table 15: Employment by Industry in Big Horn County (Annual Average, 2010)**

Industry	Number of Establishments	Average Annual Employment	Annual Wages Per Job
TOTAL ALL INDUSTRIES	460	3,557	\$29,066
TOTAL PRIVATE	419	2,653	\$26,685
AGRICULTURE, FORESTRY, FISHING & HUNTING	46	245	\$24,649
MINING	3	96	\$78,979
CONSTRUCTION	51	147	\$31,155
MANUFACTURING	13	61	\$23,224
WHOLESALE TRADE	16	144	\$23,654
RETAIL TRADE	46	400	\$20,307
TRANSPORTATION AND WAREHOUSING	10	15	\$24,404
INFORMATION	7	37	\$33,879
FINANCE AND INSURANCE	21	110	\$40,956
REAL ESTATE AND RENTAL AND LEASING	23	167	\$31,718
PROFESSIONAL AND TECHNICAL SERVICES	31	73	\$24,825
ADMINISTRATIVE AND WASTE SERVICES	15	41	\$28,008
EDUCATIONAL SERVICES	2	*	*
HEALTH CARE AND SOCIAL ASSISTANCE	38	478	\$35,083
ARTS, ENTERTAINMENT, AND RECREATION	16	50	\$14,597
ACCOMMODATION AND FOOD SERVICES	51	451	\$10,858
OTHER SERVICES	28	114	\$11,157
TOTAL GOVERNMENT	41	904	\$36,057
Local Government	15	371	\$29,196
State Government	11	317	\$34,080
Federal Government	15	215	\$50,794

Source: Montana Department of Labor and Industry, Quarterly Census of Employment of Wages (QCEW) Program.

As defined by the [U.S. Census Bureau](#), “per capita income” is the mean money income received in the past 12 months computed for every man, woman, and child in a geographic area. It is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area. Note -- income is not collected for people under 15 years old even though those people are included in the denominator of per capita income. This measure is rounded to the nearest whole dollar.

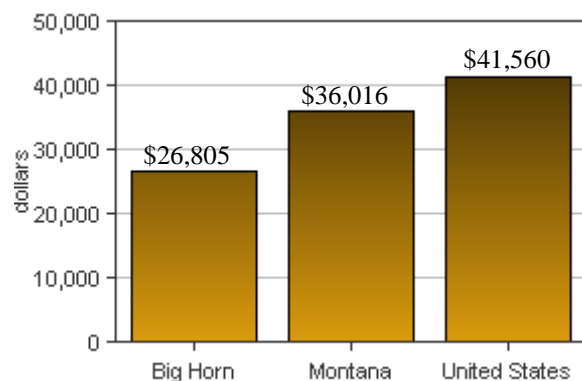
Money income includes amounts reported separately for wage or salary income; net self-employment income; interest, dividends, or net rental or royalty income or income from estates and trusts; Social Security or Railroad Retirement income; Supplemental Security Income (SSI); public assistance or welfare payments; retirement, survivor, or disability pensions; and all other income.

In 2011, Big Horn County had a per capita personal income (PCPI) of \$26,805, a 35% increase from a decade prior. Big Horn County ranked 54<sup>th</sup> out of 56 counties in the state for PCPI in 2011. The county’s PCPI was 74 percent of the state average of \$36,016, and 64 percent of the national average of \$41,560. In 2001 the PCPI of Big Horn was \$17,269 and ranked lowest in the state (56<sup>th</sup> out of 56 counties).



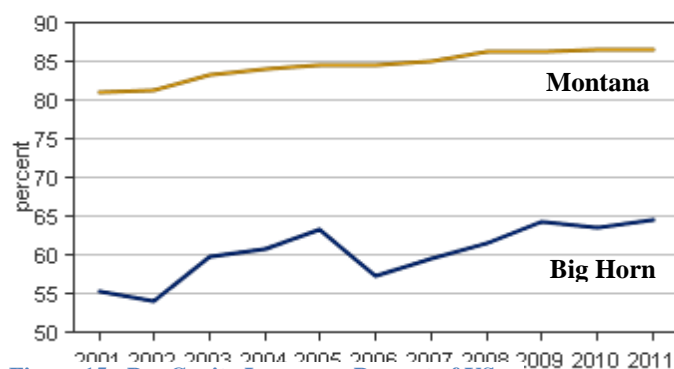
According to the [U.S. Bureau of Economic Analysis](#), in 2011 Big Horn County had a total personal income (TPI) of \$350,962. This ranked 19<sup>th</sup> out of 56 counties in the state and accounted for 1.0 percent of the state total. In 2001, the TPI of Big Horn was \$220,744 and ranked 21<sup>st</sup> in the state.

According to the [U.S. Census “QuickFacts”](#) with American Community Survey data, Big Horn County’s median household income was \$37,277 in 2011. This was equivalent to 82% of the state’s median household income of \$45,324. The county had nearly 28% of the population living below the poverty level compared with 14.6% of the total population of Montana. The American Community Survey is a rolling average of data collected annually on a random sample basis.



**Figure 14: Per Capita Income, 2011**

Source: U.S. Bureau of Economic Analysis, BEARFacts for Big Horn County, MT.



**Figure 15: Per Capita Income as Percent of US**

Source: U.S. Bureau of Economic Analysis, BEARFacts for Big Horn County, MT.

### Economic Development and Planning

The county’s economic development plan is the multi-county Community Economic Development Strategy prepared by the [Beartooth Resource Conservation and Development – Economic Development District](#) (RC&D-EDD). The on-line document from the RC&D website is dated 2001. The RC&D is in the process of updating the plan.

The City of Hardin created the [Two Rivers Trade Port Authority](http://www.tworiversauthority.org/index.html) in 2004. The website for Two Rivers includes marketing information for the industrial park north of Hardin, which includes the coal-fired electrical generating facility. The website also markets the Two Rivers Regional Correctional Facility in Hardin, completed in 2007, but which has not yet been utilized.

No information on the economic development activities of the Crow and Northern Cheyenne were available on their websites.

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Montana Bureau of Mines and Geology. "Montana Mines and Exploration – 2012" – See McCulloch, Robin.

Montana Institute for Tourism and Recreation Research. 2008. "Expenditure Profiles and Marketing Responsiveness of Nonresident Visitor Groups to Montana." <http://www.itrr.umt.edu/research08/NonresExpendProf05.pdf>

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National Parks Traveler. <http://www.nationalparkstraveler.com/2011/06/numbers-little-bighorn-battlefield-national-monument8258>

Two Rivers Trade Port Authority. <http://www.tworiversauthority.org/index.html>

U.S. Bureau of Economic Analysis <http://www.bea.gov/regional/index.htm>

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U.S. Census Bureau, Definition of per capita income: [http://quickfacts.census.gov/qfd/meta/long\\_INC910210.htm](http://quickfacts.census.gov/qfd/meta/long_INC910210.htm)

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## 5.5 SERVICES

### Government

Big Horn County includes two municipalities, the Crow Indian Reservation, Northern Cheyenne Indian Reservation and lands managed by various state agencies (e.g., Montana Department of Transportation, Fish, Wildlife and Parks, Montana Department of Natural Resources and Conservation) and a federal agency presence (e.g., National Parks, Bureau of Land Management, Bureau of Indian Affairs, Bureau of Reclamation).

Big Horn County has a 3-member Commission with a Commissioner elected from each of the three districts. The Commissioners serve 6-year terms, with one seat up for election every two years.

Big Horn County Commissioners work with the city councils, tribal governments, and state and federal agencies to coordinate where possible. Big Horn County participates in a city-county planning board that surrounds and includes Hardin. The City of Hardin owns and operates the Hardin landfill and contracts with the county, Crow Tribe, and private industries such as the power plant (fly ash disposal) to accept solid waste. The County Commissioners participate in a number of state and federal working groups and advisory councils.

Coordinating all of the services among the county, municipalities, tribal governments, BIA, and state and federal agencies can be quite complicated. The tribal governments have their own laws and regulations, separate from the powers authorized in state law for municipalities and counties.

### Fire Protection

There are ten fire agencies that are first responders to fire in Big Horn County, as shown in Table 16. Only the Big Horn County Fire District qualifies as a rural fire district (as established under state law, Title 7, Chapter 33, Part 21, Montana Code Annotated).

Although each department has a defined response area, all ten departments coordinate well to respond to fires in Big Horn County within and outside of their individual response areas. Even with this coordination, the major impediment to quick response is the enormity of the county. The response time could be up to two hours in some areas of the county.

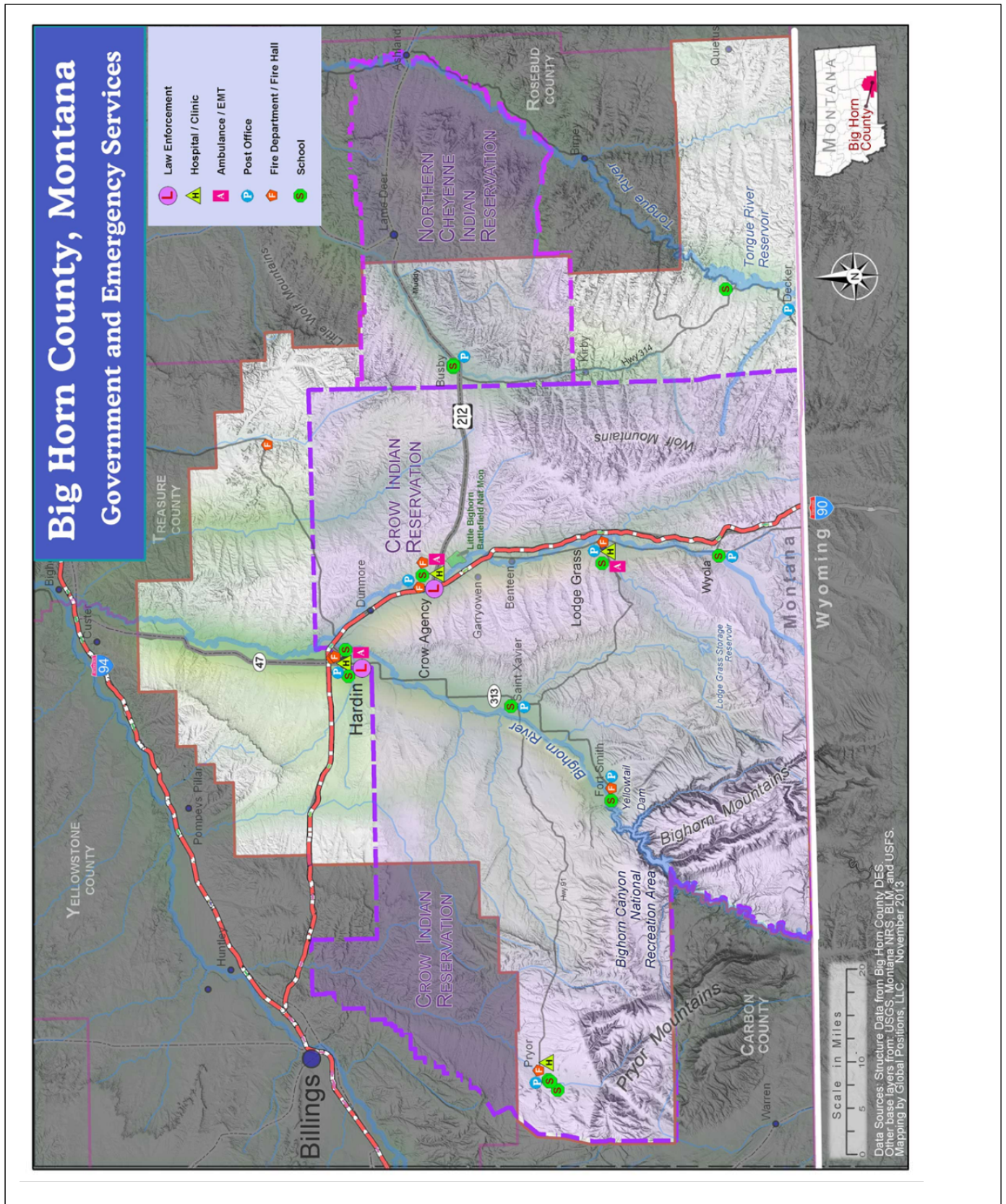


Figure 16: Big Horn County Government and Emergency Services



**Table 16: Fire Departments in Big Horn County**

Department	Area Covered
BIA Forestry-Fire Management: Crow Indian Reservation	Crow Indian Reservation
Northern Cheyenne Fire and Aviation (BIA)	Northern Cheyenne Indian Reservation
Big Horn County Fire Department*	Entire county
Crow Agency Volunteer Fire Department*	5 mile radius around Crow Agency (primarily a corridor extending from the Dunmore exit to the Garryowen exit along I-90)
Fort Smith Volunteer Fire Department*	5 mile radius around Yellowtail Government Camp (Fort Smith)
Hardin Volunteer Fire Department*	City of Hardin
Lodge Grass Volunteer Fire Department*	From Reno Creek (south of Highway 212) to Wyoming border
National Park Service	Big Horn Canyon National Recreation Area
Northern Cheyenne Tribal Fire Department*	Northern Cheyenne Reservation
Northern Cheyenne Tribal Schools*	Busby

\* Primarily set up to fight structure fires

Source: Big Horn County Wildfire Protection Plan 2012

## Law Enforcement

Law enforcement in Big Horn County is provided by the Big Horn County Sheriff and the Bureau of Indian Affairs and Crow Tribal Police. The County Sheriff's department is based in Hardin. The department has 14 total full-time sworn officers. The Crow Reservation is served by 14 sworn officers and six civilians.

In 2010, the municipality of Hardin established its first police department in 35 years. Prior to that time, the city was served by the county's law enforcement and in return the city contributed some funding. As noted in the 2002 growth policy, the shared services were a problematic issue for both the city and county. By January 2011, the three-person Hardin police department was no longer functioning and has not been re-established. The town of Lodge Grass does not have a police department.

In addition to the Sheriff and BIA officers, there are specialized law enforcement officers. These include federal park rangers, a Bureau of Land Management Officer stationed in Billings, and a U.S. Fish and Wildlife Service Agent in Billings, Montana Highway Patrol, and a Montana Fish, Wildlife and Parks Game Warden based in Hardin.

There are three detention facilities in Big Horn County—the county jail in Hardin, BIA jail in Crow Agency, and a juvenile facility in Busby. The Two Rivers Regional Correctional Facility, completed in 2007, but which has not yet been utilized, is located in Hardin. This facility was intended primarily to serve inmates from outside the county.



## Disaster and Emergency Services

The county has a Disaster Emergency Coordinator. The county and municipalities adopted Pre-Disaster Mitigation and Community Wildfire Protection Plans in 2012. These plans identify hazards and steps that can be taken now to reduce serious effects and harm from disasters when they do occur. The county also recently updated its Emergency Operations Plan (EOP), which was 10 years old at the time of the 2002 Growth Policy). The EOP identifies situations that may be encountered and actions to be taken by the county and municipalities to respond to and recover from disasters.

## Road Maintenance

The county operates a road department with shops in Hardin, Decker, and Lodge Grass. The county is responsible for 1500 miles of roads and bridges. The county had been responsible for some 400 miles of paved highway but that reverted back to the state in the past decade.

The county Road Department also has fire protection responsibility for the county which consumes time that would otherwise be spent on road projects. The county has a policy which prioritizes snow plowing. School bus routes are plowed first, paved roads next, then all other roads. Due to the size of the county, some rural residents must wait to be plowed out following major storms. Many county residents commute long distances from rural areas to work. Future development in rural areas will mean increased expectations for services from the county related to roads, and an increased cost of providing services.

As with other services, there are a number of jurisdictions involved in road maintenance in the county. The municipalities are responsible for the streets and roads within their boundaries. The BIA maintains roads within the reservations that are not county roads or state or federal highways or federal routes (such as roads in the Big Horn Canyon Recreation Area). In addition there are routes that appear to fall between the cracks for maintenance, either because they are private roads or because they have not been formally accepted into the jurisdiction of the municipalities, county, state or federal government, BIA, or tribal government.

## Education

According to the Montana Office of Public Instruction, “[2012-2013 Directory of Montana Schools](#),” Big Horn County has 15 public schools and 6 non-public schools (including 3 schools operated by the Cheyenne Tribe.) There is also some home-schooling in the county. The numbers of students enrolled in school (public or non-public) in the county declined by 10%, roughly equivalent to the percentage change in numbers of youth ages 5-19 between 2000 and 2010 (refer to the population section above). Some students may be attending out of county schools (e.g., Billings or communities in Wyoming), but the numbers reflect high drop-out rates. According to the [Human Resources and Development Council](#), Big Horn County had a drop-out rate of 11.3%, the highest in the state of Montana.

**Table 17: Big Horn County Public School System**

School Name	Location	Enrollment 2002	Grades	Enrollment 2012	Grades
Spring Creek	Decker	12	K-8	6	PK-8
Pryor Elementary	Pryor	30	K-6	35	PK-6
Pryor Junior High	Pryor	7	7-8	15	7-8
Plenty Coup H.S.	Pryor	83	9-12	42	9-12
Community	North Valley	13	1-5	0	NA
Crow Agency	Crow Agency	252	K-6	264	PK-5
Fort Smith	Fort Smith	30	K-5	44	PK-5
Hardin Primary	Hardin	272	K-2	317	PK-2
Hardin Intermediate	Hardin	295	3-5	308	3-5
Hardin Middle	Hardin	402	6-8	343	6-8
Hardin H.S.	Hardin	449	9-12	421	9-12
Lodge Grass Elem.	Lodge Grass	400	K-8	159	PK-6
Lodge Grass 7-8	Lodge Grass	--	--	43	7-8
Lodge Grass H.S.	Lodge Grass	215	9-12	106	9-12
Wyola	Wyola	55	K-8	86	PK-6
Wyola 7-8	Wyola	--	--	12	7-8
TOTALS		2515		2201	

Source: Montana Office of Public Instruction

**Table 18: Big Horn County Non-Public Schools**

School Name	Location	Enrollment 2002	Grades	Enrollment 2012	Grades
Big Horn Christian Academy	Hardin	10	1-8	18	1-8
Pretty Eagle Catholic School	St. Xavier	137	K-8	153	K-8
Northern Cheyenne Elementary	Busby	188	K-8	117	K-6
Northern Cheyenne 7-8	Busby	--	--	39	7-8
Northern Cheyenne High School	Busby	77	9-12	72	9-12
St. Charles Mission	Pryor	137	K-8	113	K-8
Home schools	Various	30	K-12	55	K-12
TOTALS		579		567	

Source: Montana Office of Public Instruction

The county also has one college-- the [Little Big Horn College](#) located in Crow Agency. The 2-year college is operated by the Crow Tribe, and has been in operation since the 1980s. Two new campus buildings

were constructed in 2002-2003, and the old and new buildings combined feature a library, archives, academic laboratories, classrooms, student services area and administrative offices. Phase 2 of the campus construction began in spring 2007 with the construction of the Library Archives and Administration facilities. Plans to move on to Phase 3 of the new construction are ongoing.

## Health Care

Residents of Big Horn County receive health care both from within and outside of the county. Health service providers in the county include private providers, county and federal government.

The Big Horn County Health Department is situated in Hardin and reports to a 6-member County Health Board. County programs provide flu shots for at-risk individuals, Shots for Tots recognition, free immunization for children, a car seat loan program, a Postponing Sexual Involvement program, and administration of the Women, Infants and Children (WIC), and the Maternal Child Health (MCH) programs.

Medical facilities are located in Hardin and in Crow Agency. The Hardin Clinic and the Big Horn County Memorial Hospital are located side-by-side in Hardin. Big Horn County Memorial Hospital became a critical access hospital on July 1, 2004. The Hardin Clinic building is owned by the hospital and leased to St. Vincent's Hospital which operates the clinic. Much of the health care in Hardin has been consolidated under the hospital board. The Big Horn Valley Clinic recently opened in Hardin to serve the underserved population in Big Horn County.

The Indian Health Service (IHS) operates clinics in Pryor, Lodge Grass, and Crow Agency. The IHS operates a hospital in Crow Agency. Northern Cheyenne tribal members in Big Horn County also have access to IHS hospital in Lame Deer located in Rosebud County.

The primary ambulance service for the county is run by the county and located in Hardin. Patients are transported to both Big Horn Memorial Hospital in Hardin and the IHS Hospital in Crow Agency. Military veterans utilize the VA Hospital in Sheridan and VA Clinic in Billings as well as other facilities. The ambulance service travels to Billings with patients that are transferring there or in the event that the emergency is in close proximity to Billings. Air ambulance is utilized according to the hospital's protocol, generally based upon the severity of the call, the number of injured, and the distance involved. Response time varies by location in the county and can be as quick as 5 minutes or as long as 60 minutes. First responders are employed by the large coal mines to serve the mines.

Access to additional resources for lab work, and expertise for non-routine medical cases is available from Billings. A small number of county residents travel to Billings for primary care. In the southern and southeast portions of the county many residents travel to Sheridan, Wyoming, to receive health care services.

## Bus Service

Crow Nation Transit began bus service from Wyola to Billings and Pryor to Billings in the spring of 2011. Through a combination of help from Big Horn County, and grants from the Montana Department of Transportation and the federal government, Crow Nation Transit has a fleet of several 14-15 passenger vans. The service is available to anyone in the county, not just tribal members. ([Billings Gazette, April 27, 2011](#))

### Sources:

The primary source for the “Services” section was the 2002 Big Horn County Growth Policy.

Billings Gazette. April 27, 2011. “Crow Tribe Makes Travel Easier.”

[http://billingsgazette.com/news/state-and-regional/montana/article\\_57674532-bf34-5e05-9d98-307727710c72.html](http://billingsgazette.com/news/state-and-regional/montana/article_57674532-bf34-5e05-9d98-307727710c72.html)

Human Resources and Development Council, District 7. Quick Facts.

<http://opi.mt.gov/PDF/Directory/2013Directory.pdf>

Little Big Horn College. <http://www.lbhc.edu/about/>

Montana Office of Public Instruction, “2012-2013 Directory of Montana Schools

<http://opi.mt.gov/PDF/Directory/2013Directory.pdf>

## 5.6 PUBLIC FACILITIES/INFRASTRUCTURE

### County Capital Improvements Plan

The county has a capital improvements plan for roads, library, public safety (e.g., sheriff), and general. The plans were adopted in 2000 and contain little detailed information. No budget information was attached. There is also a capital improvements plan for the county airport, which is located in the city-county planning area jurisdiction.

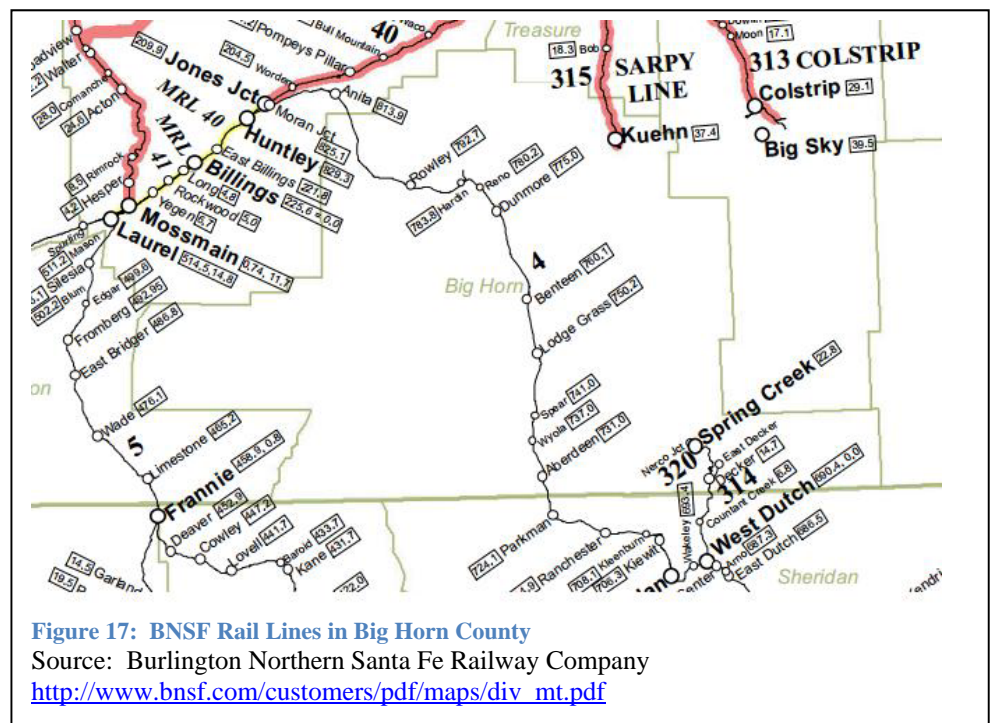
### Transportation: Air

Commercial and air charter services are available in Billings (approximately 45 miles west of Hardin) or Sheridan, Wyoming (80 miles to the south of Hardin). There are two public airstrips in the county—at Hardin and at Fort Smith. The National Park Service owns and operates the airstrip at Fort Smith. Big Horn County is currently in the process of building a new airport west of Hardin to replace the aging existing airport it owns next to the county fairgrounds. The proximity of grain elevators, power lines, and narrow 60' width of the runway rendered the existing Hardin airport non-FAA compliant.

### Transportation: Rail

No passenger rail service is available in Big Horn County.

Commercial/industrial service is limited to three areas of the county. The Burlington Northern Santa Fe (BNSF) operates a line between Billings (via Ballantine), Hardin and Sheridan, Wyoming. The coal mines at Decker are served by a spur line of the BNSF which terminates in a large loop at Decker and returns to the Sheridan area. There is a similar spur line serving the Absalooka Mine in the northwest corner of the county (shown as “Kuehn” on the map). The cars on these lines primarily carry coal and some mixed freight. Hazardous materials moved by rail through the county must comply with federal guidelines administered by the Federal Railroad Administration. There is railroad right-of-way between Hardin and Kingley to the north but no active rail line. The line was used to move sugar beets to Hardin,





when the sugar beet factory was operating. Rail traffic on the operating lines has increased over the past decade.

### Transportation: Roads

Big Horn County is served by a system including interstate, state primary, state secondary, county, Bureau of Indian Affairs, and National Park Service roads.

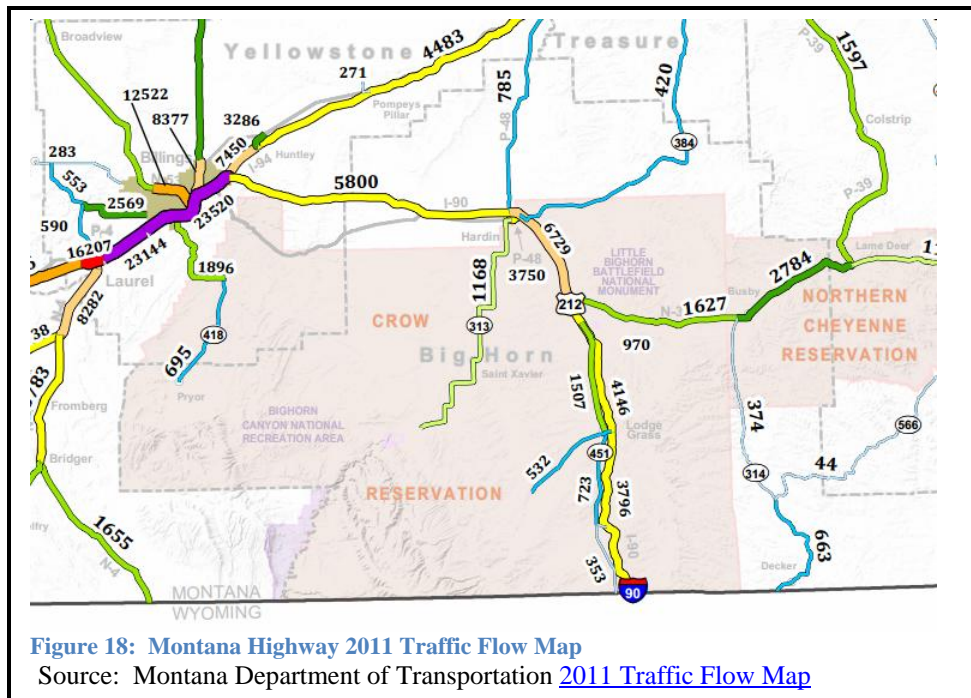
Based on statistics presented in the following table, there are some places that have very little change in traffic and others with major increases. The map inset shows the highway sections, but numbers in the table and map may be different because of slightly different segments. Traffic on Highway 384 nearly doubled between 2001 and 2011, when coal trucks began transporting coal to the power plant north of Hardin.

**Table 19: Change in Highway Traffic 2001-2011**

Highway	Location	2001 AADT	2011 AADT	% Change
I-90	Jct W Hardin Interchange to Jct US 212 (RP 495+1.019-510+0.890)	6,696	6,729	0.5%
	Jct US 212 to MT/WY Border (RP 510+0.890-554+0.438)	3,449	3,955	14.7%
US 212	Jct I-90 to Jct S-314 (RP 000+0.000-023+0.596)	1,582	1,627	2.8%
	Jct S-314 to Lame Deer (RP 023+0.596-041+0.965)	2,290	2,773	21.1%
MT 47	Jct I-90 to Jct I-94 (RP 001+0.039-029+0.767)	852	785	-7.9%
S-313	Jct 3rd St W in Hardin to entering Bighorn Canyon National Rec Area (RP 000+0.790-038+0.730)	1,063	1,116	5.0%
S-314	MT/WY border to Jct S-566 (RP 000+0.000-017+0.522)	549	663	20.8%
	Jct S-566 to Jct US 212 (RP 017+0.522-044+0.078)	270	374	38.5%
S-384	Jct Mountain Crow Frontage Rd to Sarpy Ck Rd (RP 001+0.170-025+0.772)	402	761	89.3%
	Jct Sarpy Ck Rd to Jct I-94 (RP 025+0.772-057+0.242)	92	106	15.2%

Source: Marie Stump, MDT|Planning Division, Traffic Data Collection Section

The Big Horn County road department is responsible for 1500 miles of roads and bridges. The Bureau of Indian Affairs maintains the road between Pryor and St. Xavier, the road between Lodge Grass and St. Xavier, much of the network of roads on the Crow Reservation south and west of Lodge Grass, and the Muddy Creek Road on the Northern Cheyenne Reservation.



The road network in the county provides access routes to each community, but is not accurately described as a system. Roads are of varying standards, signing, and levels of maintenance. Routes are frequently circuitous owing to the rivers and mountain ranges and complicating the provision of all types of services to residents. Many county residents make difficult, daily commutes because they reside in one area of the county and work in another. Traffic fatalities are common in Big Horn County despite the relatively small population. Over the 10-year period 2002-2011 there was an average of 10.6 traffic fatalities per year. ([Montana Department of Transportation](#))

The Big Horn County Subdivision Regulations contain a section on roads. This direction provides standards for road design with which developers must comply. The road standards in the county regulations were adapted from model regulations developed by the state.

## Water Systems

Water is provided to residents from individual wells, privately and municipally-owned systems, and systems operated by the Tribes, BIA, National Park Service, and Bureau of Reclamation. There are 31 public water supply systems in Big Horn County, according to the Montana Department Environmental Quality. The list does not include systems operated by tribal government or BIA.

**Table 20: Permitted Water Supply Systems in Big Horn County**

<b>Water Supply Systems Permitted by Montana DEQ in Big Horn County 2013</b>		
<b>Water System Name</b>	<b>Type</b>	<b>Primary Water Source</b>
Fort Smith Water And Sewer District	C	GW
Hardin City Of	C	SW
Lodge Grass Town Of	C	GW
Quality Water	C	SWP
Wegner Water Service Hauler	C	SWP
Yellowtail Dam Gc Lower System	C	GW
Yellowtail Dam Mk Upper System	C	GW
7th Ranch RV Camp	NC	GW
Big Horn Co Historical Museum	NC	SWP
Chief Plenty Coups Museum	NC	GW
Cottonwood Camp Fort Smith	NC	GW
Fort Custer Golf Club Inc	NC	SWP
Hardin Eastbound Rest Area	NC	GW
Hardin Koa	NC	GW
Hardin Koa Cistern	NC	SWP
Hardin Westbound Rest Area	NC	GW
Historical Land Preservation Co. Inc.	NC	GW
Kirby Saloon	NC	GW
Ok A Beh Marina	NC	GW
Spring Creek Tavern Hardin	NC	GW
Tongue River Pee Wee Point	NC	GW
Tongue River - Campers Point	NC	GW
Yellowtail Dam Powerplant And Visitor Center	NC	SW
Absaloka Mine	NTNC	GW
East Decker Coal Mine	NTNC	GW
Little Bighorn Battlefield Nm	NTNC	GW
Spring Creek Coal Domestic	NTNC	GW
Spring Creek Mine	NTNC	SWP
St Charles School	NTNC	GW
Wegner Water Service Bottling Plant	NTNC	SWP
West Decker Coal Mine	NTNC	GW

Source: Montana DEQ website: <http://sdwisdww.mt.gov:8080/DWW/index.jsp>

C Community: Serves at least 15 service connections used by year-round residents or regularly serves 25 year-round residents

NTNC Non-Transient Non-Community: Serves at least the same 25 non-residential individuals during 6 months of the year

NC Transient Non-Community: Regularly serves at least 25 non-residential individuals (transient) during 60 or more days per year

GW Ground Water SW Surface Water SWP System purchases water that originates from a surface source

Big Horn County does not operate any water systems. The only public water system formed under the authority of Big Horn County is the Fort Smith Water and Sewer District, which operates under its own Board of Directors. Citizens of the Fort Smith area petitioned the County Commissioners for the formation of a water and sewer district in the late 1990s. The district was formed after a vote of the residents and began providing service in 2012. The system serves 450 persons with three active wells and an inactive back-up well.

Many county residents are not served by public water systems and some who may not have wells or have wells with inadequate potable water may obtain water from two commercial water providers in the county, Quality Water and Wegner Water Service, or haul their own water from the Hardin water station.

The incorporated municipalities of Hardin and Lodge Grass have municipal water systems. The city of Hardin was on the state DEQ's 2013 capital improvements funding list for \$2.1million in water treatment plant improvements and has used the funds to install automated controls. The water plant continues to have issues with sedimentation and will be in need of a major upgrade in 5-10 years. Lodge Grass's system has had one pump renovated and a new telemetry sensor control system installed since 2000, but the town still needs another well to address capacity and to replace the town's corroded tank. The town is now working to develop a capital improvements plan and growth policy to address long-term infrastructure needs.

On the Crow Indian Reservation, water supply systems operated by the tribe and/or BIA include Crow Agency, Wyola and Pryor. There are two water supply treatment plants serving Crow Agency, one operated by the tribe and the other by the BIA. At time of the last growth policy, in 2000, the tribal plant was not in operation. The systems are now both operating and working well for current needs. The Wyola water supply has had some renovation since 2000. A new automated telemetry sensor control is now in place and can pump and treat concurrently providing more consistent supply compared to the previous manual control system. Wyola has two wells now and one has a considerable amount of iron that can clog the system. Developing another well is needed for a back-up. Pryor operates with a main well and two back-up wells. Water system issues include the tank, which is corroding and not at sufficient elevation to provide good water pressure for all residents, particularly those in homes close to the tank.

The Northern Cheyenne Tribe operates the water systems for Busby and Muddy Cluster. Muddy Cluster operated previously on a separate well system, but recently was connected to the Lane Deer water supply system. Busby has a separate system with two wells, a telemetry sensor control system.

Other systems include the U.S. Bureau of Reclamation's government camp at Fort Smith. Private systems that serve more than one family or household include the systems operated by the coal mines and other businesses (e.g., restaurants).

Big Horn County's Community Wildfire Protection Plan identified known issues with adequate water supply and hydrants for fire suppression in Busby, Crow Agency, Rosebud, Lodge Grass, Eagle Feather, Wyola, Pryor, and St. Xavier.

## **Waste Water Systems**

Wastewater systems in the county include individual septs and drainfields as well as systems serving multiple users. The pipeline collection systems serving communities is typically quite old and includes clay pipe.

Big Horn County does not operate any wastewater systems. The Fort Smith Water and Sewer District, which was formed under state law and under the auspices of the county, functions as an independent operator, with its own board of directors. The wastewater system has not had major changes since it was installed in the 1960s, when the dam was being built. The system serves the community of Fort Smith, but does not include the federal government housing, which has its own system. Approximately 195 owners are served by the systems.

The municipalities of Hardin and Lodge Grass have made some improvements to their systems, but face major upgrades in the future. The Hardin system received approximately \$2 million in upgrades, including meters and UV treatment. The treatment plant is about at capacity with existing loads, however, and would need to be upgraded or expanded to serve more hook-ups. Lodge Grass has a municipal wastewater system that serves residents as well as tribal housing outside city limits. There has been replacement of some collection lines in the past decade. The town is in serious need of a wastewater treatment plant upgrade. The system has periodically not been meeting discharge permit requirements. Total cost of the treatment system upgrades is estimated at \$2.2 million. The town will need to obtain land to install a third cell in the lagoon system and it will need to be aerated.

Community wastewater systems operated by the tribe or BIA on the Crow Indian Reservation include Crow Agency, Wyola, and Pryor. St. Xavier has a wastewater system that primarily serves the school there but may have other hook-ups as well, but it is operated privately. Crow Agency systems has a brand new aerated lagoon, that is just being completed at the time this report was written. It will have its final inspection in spring 2014. In Wyola, there is a community wastewater system that serves the school and approximately 14 HUD housing units. The long range plan is to connect the entire town to a wastewater system. The Pryor wastewater system is in serious need of repair, which is scheduled to start Fall of 2013. Cost is estimated at \$1.2 to build facultative lagoons.

On the Northern Cheyenne Indian Reservation, Busby and Muddy Cluster both have separate wastewater systems. Busby has a system that is adequate for current needs. Muddy Cluster's system has had a partial renovation but more needs to be done.



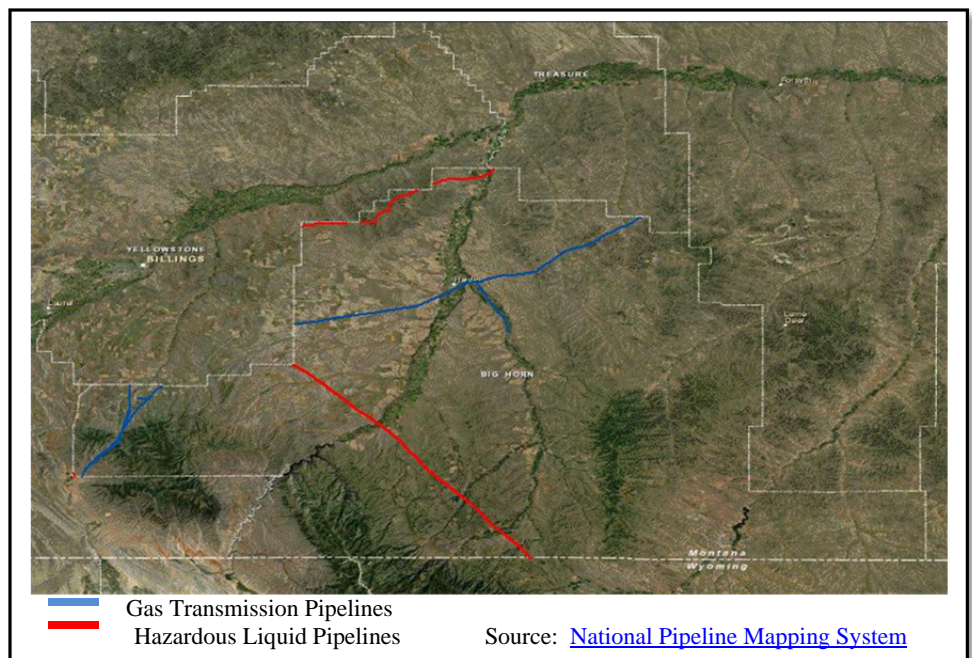
## Solid Waste

The county operates a county wide solid waste collection/hauling/disposal program and has transfer stations located near Crow Agency (4 bays), Lodge Grass (4 bays), North Valley (3 bays), Wyola (2 bay), Fort Smith (2 bays), St. Xavier (2 bays), Pryor (2 bays), Decker (1 bay) and Tongue River State Park (1 bay during tourist season). Each canister has a 40-cubic yard capacity. A need has been identified for a canister at the Hardin Landfill when closed (after 5PM and on Sundays). In addition to the canister sites, Crow Agency and Pryor also have residential cart/business dumpster service. The City of Hardin collects solid waste from individual residences and businesses in Hardin for disposal at the Hardin Class II Landfill. The Town of Lodge Grass collects solid waste from individual residences and business in Lodge Grass and disposes at the Lodge Grass Solid Waste Transfer Station (constructed in 2011 at a new location, 4 bays).

The county has access to a licensed landfill located near Hardin. The Hardin Class II landfill is owned and operated by the City, and has a remaining life expectancy of approximately 28 more years in the Class II cell, and 23 more years in the coal ash cell. Because of the distance to markets and low returns, the additional capacity of the landfill and the corresponding lack of an immediate need to reduce the solid waste stream, there is relatively little recycling in the county. However, a new recycling business in the Factory Subdivision in the northern expanded city limits of Hardin is increasing the local recycling of most metals such as white goods, car bodies, brass, copper, aluminum, stainless steel, iron, and lead acid batteries. A county program collects and disposes of tires at a monofill near Selesia, MT and there is a voluntary newspaper/aluminum can recycling bin at the IGA in Hardin.

## Other Infrastructure – Oil/Gas Pipelines

There are two major oil pipelines in the county—two carry crude oil and account for more than 50 miles of pipe across the county that runs northwest-southeast from a point approximately halfway between St. Xavier and Pryor and exits south of Wyola. There are about 25 miles of refined product transported in a pipeline along the northwestern corner of the county from north of Kingley to east of Ballantine.



**Figure 19: Gas and Hazardous Liquid Pipelines in Big Horn County**

Gas Pipelines cross the county in a southwest-northeast direction.

#### **Sources:**

The primary source for the “Public Facilities” section was the 2002 Big Horn County Growth Policy, updated with information from Montana Dept. of Transportation (Marie Stump, MDT | Planning Division, Traffic Data Collection Section and data from <http://www.mdt.mt.gov/>), County Sanitarian Craig Taft, and Big Horn County Planning Board Members.

Water and Sewer information was updated as follows for each community.

#### Crow and Northern Cheyenne Indian Reservations:

Rydquist, Todd. Assistant Director- Sanitation Facilities Construction. Indian Health Service, Billings, MT. Phone conversation. 08-08-13. 247-7095. Information on water and waste water systems for Crow Agency, Pryor, Wyola, Lodge Grass, Busby, and Muddy Cluster.

#### Fort Smith Water and Sewer District:

Montana DEQ website: “Drinking Water Watch” <http://sdwisdww.mt.gov:8080/DWW/index.jsp>  
Fisher, Dennis. President, Board of Directors, Fort Smith Water and Sewer District. Phone conversation with Anne Cossitt, August 12, 2013.

#### Hardin:

Montana DEQ: “Drinking Water State Revolving Fund – Intended Use Plan and Project Priority List. July 1, 2012.  
Maxwell, Tony. Hardin Public Works Superintendent. Phone conversation with Anne Cossitt August 12, 2013.

#### Lodge Grass:

Rydquist, Todd. (Refer to Crow and Northern Cheyenne above.)  
Seymanski, Stephanie. Civil Engineer, Morrison-Maierle, Billings, Montana. Phone conversation with Anne Cossitt August 9, 2013.

## 5.7 NATURAL RESOURCES

Big Horn County encompasses portions of the Big Horn and Pryor Mountains at the west edge of the plains. The Big Horn Mountains rise sharply in the south-central portion of the county to an elevation of 9200 feet above sea level. The lowest point in the county at 2700 feet, occurs along the Big Horn River north of Hardin. The rivers, valleys, uplands, breaks, and mountains contain a diversity of mineral, soil, water, fish and wildlife, air, vegetation, scenic, and cultural resources which uniquely define Big Horn County.

### Mineral Resource

Mineral resources in Big Horn County include coal, natural gas (including coalbed methane gas), oil and sand, gravel and bentonite deposits. Reserves of high quality, accessible coal are estimated to exceed 11 billion tons. The county has nine oil and gas fields and the largest identified reserves of coalbed methane gas in the State of Montana.

Big Horn County is very rich in mineral resources. The mineral estate is in some cases owned by the surface land owner and in other cases, split from the surface ownership. On the Northern Cheyenne Reservation, all of the mineral estate is owned by the Tribe. Mineral ownership within the Crow Reservation is held by a combination of individual allottees and the Tribe. The BIA and BLM work together with the Tribe to administer and permit development of the mineral rights held by the U.S. government for the Crow Tribe. In areas outside of the reservation, surface ownership may include private, state, and federal, and a mix of mineral ownerships

Sub-bituminous coal is found in the eastern half of the county. Coal is currently mined east of Hardin and in the Decker/Kirby area in an area of mixed surface/mineral ownership—private and federal (BLM). Substantial coal reserves are believed to underlie the Northern Cheyenne Reservation, but have never been developed. In June 2013, the Bureau of Indian Affairs approved a leasing agreement between the Crow Tribe and Cloud Peak Energy for exclusive rights to mine Crow tribal coal estimated at 1.4 billion tons. The Absaaloka mine east of Hardin is also Crow tribal minerals.



Natural gas is produced from wells in the Hardin gas field. In 2000, at the time the previous Big Horn County Growth Policy was being developed, companies had begun to explore coalbed methane in the southeast corner of the county. The majority of land in the area that was being explored is privately owned surface with ownership of the mineral estate split equally between the federal government and the private sector. Although more than 900 wells were producing in 2008, only about 300 remained in 2012, as declining prices and high costs of production caused many wells to be shut down.

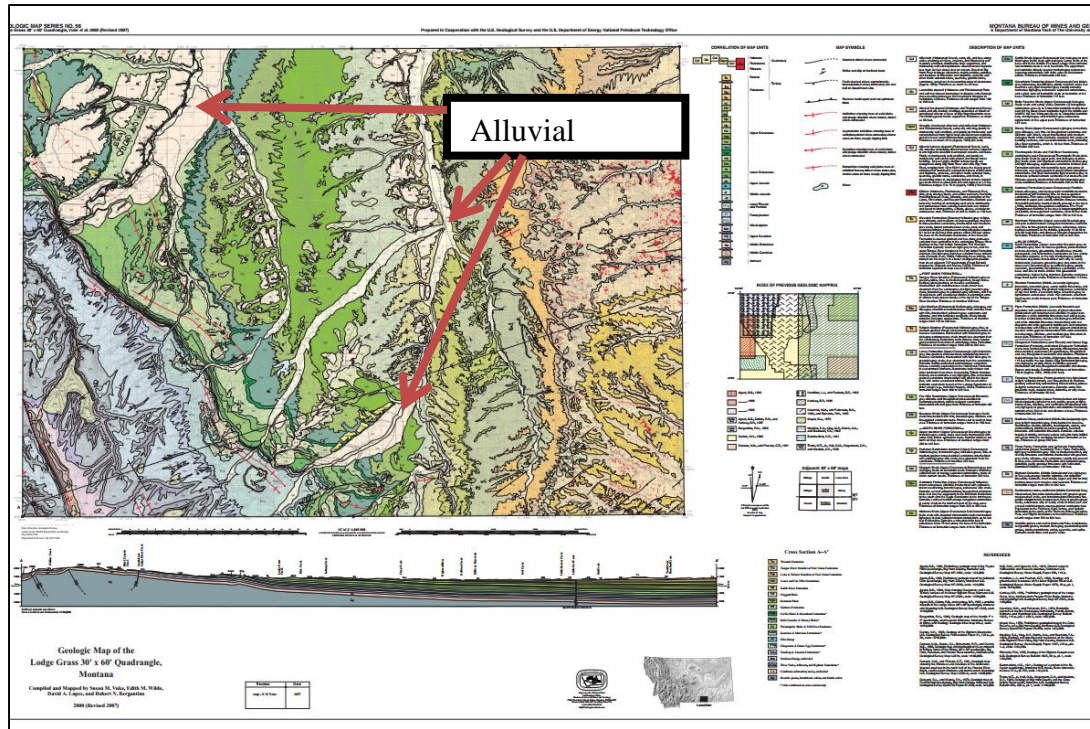
The Soap Creek Oil Field was discovered in 1920 in Big Horn County, and expanded by new drilling as recent as 2005. Secondary fields are found near Tullock Creek, Lodge Grass, and Decker.

Bentonite, a heavy clay, is used as a natural sealant and is found south and west of Lodge Grass, between the Little Bighorn and Big Horn Rivers, and on the east flank of the Pryor Mountains. Uranium is present on the south slopes of the Pryors and was last mined during World War II.

### **Sand and Gravel Resources**

Sand and gravel deposits in the county are primarily found in the county as alluvial deposits. Qal (alluvium) is found along active channels of rivers, streams, and tributaries. Qat (alluvial terrace deposit) is adjacent to and higher in elevation than current streams and rivers. There are also some alluvial fan deposits (Qaf) at the Base of the Big Horn Mountains. Maps of the gravel bearing deposits are available at the [Montana Bureau of Mines and Geology](http://www.mbmgs.mtech.edu/pdf_100k/lodgeGrass-gm56.pdf) as quadrangle maps. The quadrangles encompassing Big Horn County are the Lodge Grass, Big Horn, Birney, and Hardin quadrangles. The following depicts the Lodge Grass quadrangle Geologic Map ([http://www.mbmgs.mtech.edu/pdf\\_100k/lodgeGrass-gm56.pdf](http://www.mbmgs.mtech.edu/pdf_100k/lodgeGrass-gm56.pdf)). The light colored areas are gravel-bearing alluvial formations.





**Figure 20: Sand and Gravel Resources: Example of Montana Bureau of Mines and Geology Maps**

Gravel pits permitted by the state of Montana are shown in the map inset. Gravel pits adjacent to residential areas was identified as an issue for the county. The location of the sand and gravel resource is similar to the location of residential development in the county—along rivers (which also align generally with roads and highways).





**Table 21: Big Horn County Soil Characteristics**

<b>Soils</b>	<b>Characteristics</b>	<b>Primary Uses</b>
Stream terraces and alluvial fans	deep, well-drained soils on floodplains, terraces, fans	irrigated crops, dryland crops, pasture
High gravel terraces, fans and benches	shallow to deep, nearly level to very steep, undulating, well-drained soils on fans, terraces and benches	small grains, rangeland
Sandstone hills	moderately deep and deep, gently sloping to strongly sloping and undulating hills, well-drained soils on footslopes, fans, valley bottoms and sedimentary uplands	range, dryfarmed small grain and hay
Dissected shale hills	shallow to deep, nearly level to very steep, gently undulating to hilly soils on fans, footslopes, terraces and sedimentary uplands	range, dryfarmed crops, some coal
Intermixed sandstone hills and dissected shale hills	shallow and moderately deep, gently undulating and gently sloping to very steep, well-drained	range, dryfarmed small grains
Mountain soils	shallow to moderately deep, undulating to strongly sloping, well-drained soils on sedimentary highlands	range

Source: Soil Survey of Big Horn County Area, Montana (USDA and USDI in Cooperation with the Montana Agricultural Experiment Station, 1977)

## **Water Resource**

The water resources in Big Horn County are economically valuable, valuable as habitat, and scenic. These water resources form the basis for sustaining human life, agriculture, wildlife, recreation, and the fishery.

The high elevations in the southern and western portions of the county serve as the headwaters for many of the creeks and rivers which drain generally to the north and east dropping in elevation towards the Yellowstone River Valley. Three major rivers fed by numerous tributaries flow through the county, the Big Horn, the Little Bighorn, and the Tongue. The Big Horn and Little Bighorn have their headwaters in the Big Horn and Pryor Mountains. These two rivers meet near Hardin flowing north and east eventually draining into the Yellowstone River. The Tongue River enters Big Horn County from the south, fills the reservoir, and exits the county flowing north to where it too, joins the Yellowstone. Pryor, Lodge Grass, Soap, and Rosebud are the major Creeks in the county. The Crow Irrigation project controls Willow Creek Dam which creates a sizeable impoundment and is used for irrigation and recreation. The county contains over 1,000 miles of perennial streams.

There were approximately 3500 wells in Big Horn County in April 2013. Approximately 720 new wells were drilled between 2000 and 2013.

**Table 22: Water Well Information – Big Horn County:**

Number of wells in County	3302
Deepest well on record (feet)	2650
Shallowest well on record (feet)	1
Most recent well on record	4/25/2013
Oldest well on record	1/1/1897

**Water Well by Type of Use:**

UNKNOWN	205
RECREATION	1
INDUSTRIAL	27
OTHER	54
PUBLIC WATER SUPPLY	48
TEST WELL	41
UNUSED	110
MONITORING	574
COMMERCIAL	9
IRRIGATION	130
RESEARCH	202
GEOTHERMAL-EXTRACTION	1
COAL BED METHANE	65
GEOTECH	20
STOCKWATER	1136
DOMESTIC	941
* Total	3564

Source: Montana Groundwater Information Website:

<http://mbmggwic.mtech.edu/sqlserver/v11/reports/CountyStatistics.asp?MTCOUNTY=BIG+HORN>

The Montana Department of Natural Resources and Conservation (DNRC) maintains a listing of all dams in the county with a capacity of 50 or more acre feet of water. There are four major holding dams in Big Horn County: Yellowtail on the Big Horn (two dams) in extreme canyon lands, Tongue River in rough hills, and Willow Creek. These major dams were constructed for irrigation water storage and recreation. (Big Horn County PDM Plan)

In 1981, the Federal Emergency Management Agency (FEMA) completed mapping of the 100-year floodplain within the Town of Lodge Grass and for Big Horn County areas outside of the Crow and Northern Cheyenne Indian Reservations. Mapping of the Little Big Horn and Big Horn Rivers has been completed, but have not yet been accepted by FEMA. (Big Horn County PDM Plan)

The Crow Tribe Water Rights Settlement and Compact was signed into law by President Obama in 2010 and ratified by the Crow Tribe in 2011. Together, the Settlement Act and the Compact quantify the Tribe's water rights and authorize funding of \$131.8 million for the rehabilitation and improvement of the Crow Irrigation Project and \$246.4 million for the design and construction of a water system to serve numerous reservation communities, as well as funding totaling more than \$81 million for tribal water administration and for a portion of costs for the irrigation and municipal water systems. The Settlement also provides funding to boost energy development projects such as hydropower generation at Yellowtail Afterbay Dam, clean coal conversion, and other renewable energy projects. ([U.S. Department of Interior, April 27, 2012 news release](#))



Photo: Montana Department of Commerce

### **Fish and Wildlife Resources**

Big Horn County provides habitat for a wide range of fish and wildlife species. The fish and wildlife species serve as a source of food, serve as important amenities for residents, serve traditional cultural purposes, and as an attraction for sportsmen from outside the county.

Important habitats in the county include river or riparian habitats, valley bottoms, uplands, and mountainous areas. Native rangelands provide the best wildlife habitats, dry cropland the worst. With the exception of migratory birds, grazing management practices limit the quantity and quality of forage available for wildlife.

The Big Horn River boasts a brown and rainbow trout fishery that is world-renowned and attracts a large number of nonresident fly fishermen. The River and associated wetlands provide important bald eagle wintering habitat, and the corridor also provides cover and forage for migratory birds and waterfowl such as ducks and geese, osprey, and neo-tropical songbirds. Geese have begun to stay year-round as the river has not frozen over as in years past (Slattery). The major wetland areas are located along the Big Horn and Little Big Horn Rivers. Activities proposed in wetland areas may require permits from the U.S. Army Corps of Engineers, the Tribe, Montana Department of Natural Resources and Conservation, and Montana Department of Environmental Quality.

The uplands of the Big Horn River are intensively farmed and irrigated. These uplands are home to white-tailed deer, antelope, turkey and game birds. The Pine Ridge area north and west of Hardin and the River boast an elk herd with several hundred head, a large variety of hawks, and several prairie dog towns.

The north end of the Big Horn Mountain Range occupies the south central portion of the county. This area, bordered by Big Horn Canyon on the west, is closed to non-tribal members and offers high quality habitat for a number of wildlife species. The Canyon area of the River and adjacent uplands provide habitat for bear, elk, mule deer and mountain lion.

The north end of the Pryor Mountains extends into the western edge of Big Horn County, and are also limited to Crow Tribal members within the reservation boundary. The Pryors are home to black bears, antelope, pheasant, golden eagles, small numbers of elk and mule deer, and a wild horse herd. The Wolf and Little Wolf Mountains occupy much of the eastern portions of the county and drain into Rosebud Creek and the Tongue River. The west side of the Wolf Mountains contains some elk habitat, black bears in ample numbers, upland game birds and turkeys. Rosebud Creek flows north and east in the valley to the east of the Wolf Mountains. The east side of the range consists of steep brushy draws which are good habitat for upland birds. Portions of the creek bottom are in alfalfa, and the bottomlands provide good riparian and white-tailed deer habitat.

The Little Bighorn River flows north from its Wyoming headwaters through the wide valley that forms the center of the county receiving the waters of Lodge Grass Creek at the Town of Lodge Grass. Both the upper Little Bighorn and upper Lodge Grass Creek offer good trout fishing, white-tailed deer and pheasant habitat. Moose are found occasionally along Lodge Grass Creek. Lodge Grass Storage Reservoir contains stocked populations of brown and rainbow trout. Although the reservoir has no angler facilities, it offers good fishing. The reservoir attracts migrating geese as well

Unlike the rest of the surface waters in the county, the Tongue River Reservoir contains a warm water fishery. Species present include walleye, crappie, bass, and Northern Pike. There is also a small coldwater trout fishery in the tailwater of the dam. The public has access to the reservoir at the Tongue River Reservoir State Park.

In 2013, Big Horn County has one special status specie, 35 species of concern, and 29 potential species of concern as identified by the Montana Natural Heritage Program (MTNHP). MTNHP serves as the state's information source for animals, plants, and plant communities with a focus on species and communities that are rare, threatened, and/or have declining trends and as a result are at risk or potentially at risk of **extirpation** in Montana. The Bald Eagle is the special status specie as it is protected by a 1940 Act of Congress. Of the 35 species of concern, none are listed by the US Fish and Wildlife Service as threatened or endangered under the Endangered Species Act. The sage grouse and artic grayling are listed as candidate species.

## Air Resource

Air quality in Big Horn County is generally good. According to the Montana Department of Environmental Quality, there are no non-attainment areas, or areas that violate federal air quality





standards, in Big Horn County. The Northern Cheyenne Reservation has been designated a Class I airshed, the highest level of air quality. Class I areas accommodate the smallest degree of air quality deterioration of all three airshed classifications. In Montana, the Class I airsheds consist of Glacier and Yellowstone National Parks, national wilderness areas, and the Northern Cheyenne, Flathead, and Fort Peck Indian Reservations.

## Vegetation Resource

The vegetation resource in Big Horn County is comprised of a variety of grasses, forbs, trees, and noxious weeds. This vegetation is important as ground cover, range for domestic and wildlife species, fuel wood, post and poles, and small scale commercial timber production.

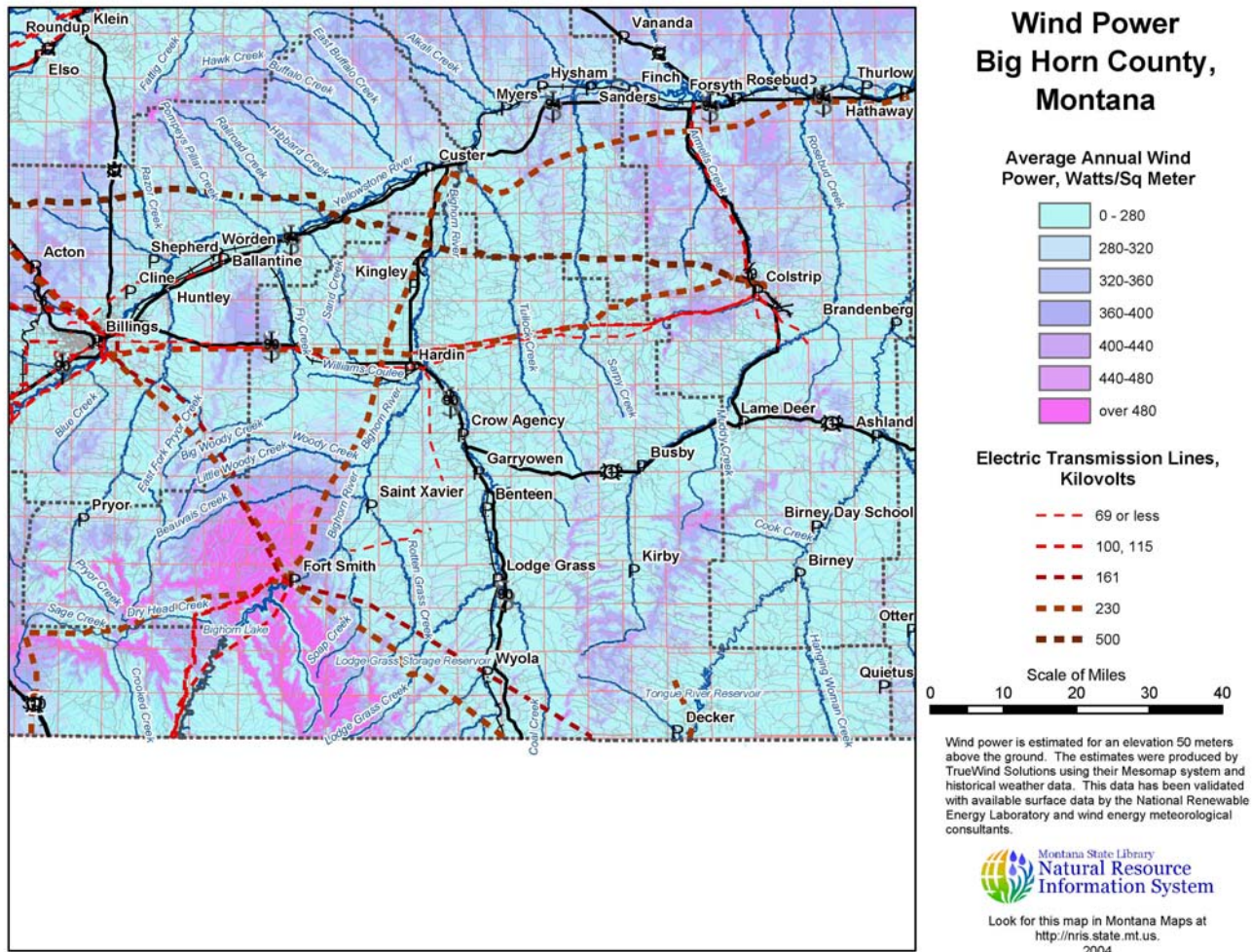
Natural vegetation varies by soil type and average annual precipitation. Natural historic vegetation found in the dryer 5 to 9 inch precipitation zone includes: bluebunch wheatgrass, needle and thread, western wheatgrass, blue grama, big sagebrush, rabbitbrush, winterfat, and various forbs. The majority of the county lies within the 10-14 inch zone. Natural plant communities are dominated by western and thickspike wheatgrass, bluebunch wheatgrass, green needlegrass, little bluestem, big sagebrush, winterfat, nuttall saltbush, and forbs. In addition to the grasses, sedge, willow, rose, chokecherry and buffaloberry are found along the bottomlands of the valleys. Snowberry, rose, brome and fescue grow in the higher elevations and precipitation zones.

Deciduous and coniferous species grow on higher elevation sites in the county in enough abundance for modest harvesting. Limber pine, Douglas fir and Ponderosa Pine are found in the Pryor Mountains at mid elevation sites from 4,800-6,600 feet. Cold moist sites at 6,500 feet and higher in elevation contain lodgepole pine, Englemann spruce, Douglas fir and subalpine fir. In the Wolf Mountains, the forest is almost exclusively Douglas Fir with some limber pine and juniper in the dry, rocky areas. Aspen, cottonwood, green ash and boxelder stands are confined to the stream bottoms and wet draws. Russian olive trees also thrive in stream bottoms and wet draws and can dominate over other species, and their sharp thorns can be a problem for livestock. The Big Horn Mountains contain Douglas fir, Englemann spruce, subalpine fir, ponderosa pine and lodgepole pine.

Several species of noxious weeds are found in different areas of the county. The county, Crow Tribe, and BIA operate weed control programs which consist primarily of spraying, but also include mowing and some biological control.

The Montana Natural Heritage Program maintains a data base of all plant species of special concern in the state of Montana. The Montana Natural Heritage has 14 species of special concern in the county, all vascular plants. Big Horn County has in the past contained only one location, which is the only known location in the state for three of these 14 species, the Western Centaury, the Nuttall Desert-parsley, and the Woolly Twinpod. Big Horn County is home to the majority of known locations for the Joe-pye Weed, Letterman's Needlegrass, and the Nannyberry. Additional information about the sensitive plants in Big Horn County and their occurrences can be found at the Natural Heritage Program website.

## Wind Resource



**Figure 23: Wind Power in Big Horn County**

Source: Montana Natural Resource Information System

Big Horn County has considerable wind power, particularly around Fort Smith. As shown on the Montana Natural Resource Information “[Montana Wind Power Map](#),” it is one of a handful of places in Montana with comparable wind power and access to existing power transmission lines, which is important for development of wind-generated electrical power on a commercial scale.

## Scenic Resource

One of the defining characteristics of Big Horn County is its expansive vistas and open spaces. The natural landscape offers sufficient diversity with its open valley bottoms, vegetated riparian zones, grassy uplands, breaks, and mountainous areas to be interesting to the eye. The highest sensitivity for visual quality exists around communities and along major transportation corridors such as Interstate 90, and State Highways 212 and 313. With a few exceptions such as Hardin, the small number of towns, and large scale mining operations, the landscape is rural agricultural in character and has experienced minimal disruption to the natural forms and patterns.

The county contains some exceptional scenic features. These include Big Horn Canyon and Big Horn Lake within the National Recreation Area, Tongue River Reservoir, Little Bighorn Battlefield, Rosebud Battlefield State Park, and the Big Horn, Pryor, and Wolf Mountain Ranges. Although the high visual quality of the county is hard to put a dollar value on, it remains a significant asset for both residents and visitors alike. Future development should recognize potential impacts to this important resource and avoid or mitigate them whenever possible.

## Cultural Resources

Cultural resources include sites of prehistoric, historic, cultural or spiritual importance. Big Horn County has thousands of sites that have been recorded and entered into the data base of the Montana State Historic Preservation Office (SHPO.) Each site is given a unique number as part of the Smithsonian numbering system, starting with the state of Montana number, the two letter county code, and then the individual site number. Sites registered with the National Register of Historic Places in Big Horn County include; churches, residences, residential and commercial districts, battlefields, a hotel, grain elevator, hospital, jail, store, ranch, and medicine wheel.

The county does not currently have specific subdivision regulation standards in place which can be used to protect sensitive cultural sites or areas on deeded ground. When the county receives a subdivision application, it is routed to the Crow Tribe Planning and Zoning Commission for comment. Conflicts between land use development and cultural sites have arisen in the past.

### Sources:

The primary source for the “Natural Resources” section was the 2002 Big Horn County Growth Policy, updated with information as noted below.

Big Horn County, Montana: Energy Conservation Plan 2009

<http://bighorn.mt.gov/Docs/Grants/Big%20Horn%20County%20Energy%20Efficiency%20Plan.pdf>

Montana Bureau of Mines and Geology website: <http://www.mbm.mtech.edu/gmr/gmr-statemap.asp>  
Montana Department of Environmental Quality, “Citizen’s Guide to Air Quality.”

<http://deg.mt.gov/airmonitoring/citguide/understanding.mcp>

Montana Groundwater Information Center.

<http://mbmggwic.mtech.edu/sqlserver/v11/reports/CountyStatistics.asp?MTCounty=BIG+HORN>

Montana Natural Heritage Program. <http://mtnhp.org/> website

U.S. Bureau of Land Management. Reasonable Foreseeable Development Scenario for the Billings/Pompeys Pillar Resource Management Plan, Billings Field Office.” 2010

[http://www.blm.gov/pgdata/etc/medialib/blm/mt/field\\_offices/billings/rmp.Par.22975.File.dat/RFD.pdf](http://www.blm.gov/pgdata/etc/medialib/blm/mt/field_offices/billings/rmp.Par.22975.File.dat/RFD.pdf)

Slattery, Mary. Big Horn County Planning Board Member. August 26, 2013 email.

U.S. Department of Interior, April 27, 2012 news release)

<http://www.doi.gov/news/pressreleases/Crow-Tribe-United-States-and-State-of-Montana-Sign-Historic-Water-Compact.cfm>



## **APPENDIX A**

### **Status of 2002 Big Horn County Growth Policy Implementation Strategies**

**2013 Status Report on Implementation of  
2002 Big Horn County Growth Policy  
Goals, Objectives, and Implementation Measures  
(Actions that have been completed are highlighted in orange)**

Strategy	Status
<b>Goal 1: Land Use and Development</b>	
1a. Support Voluntary Conservation Easements	Not completed. No written policy adopted but the Planning Board has reviewed several conservation easements in past 10 years.
2a. Compatibility of use measures	No Action.
2b. Information to citizens wishing to conduct neighborhood planning and/or citizen-initiated zoning districts	No Action; no citizen interest
2c. Track statistics annually on acres of land approved for subdivision, #lots, etc.	Not completed, but the county clerk and recorder has initiated a system that would facilitate this review.
2d. Cluster Development	Completed. The Subdivision Regulations now include provision for Cluster Development. <sup>1</sup>
3a. Continue to notify ditch/canal companies of subdivision applications	Ongoing.
3b. Subdividers to clarify irrigation water rights	Completed. <sup>2</sup>
4a. Continue to implement county weed plan	Ongoing with regard to subdivision review, but the county weed board has not been active in years.
4b. Ensure new subdivision and new development does not increase weed spread	Ongoing
4c. Coordinate with other governments on mapping weeds, etc.	Not completed.
5a. "Way of the West" Publication	Completed
6a. County comment on state and federal proposals	As opportunity has arisen
6b. County to advocate balance between energy development and long-term land use	Ongoing.
<b>Goal 2: Water Resources and Development Along Rivers and Streams</b>	
1a. Keep development out of floodplain, wetlands, and riparian areas	Partially completed. <sup>3</sup> Floodplain regulations and waste-water treatment requirements followed.
1b. Riverbank setback guidelines	Partially completed. Planning Board drafted regulations which were not adopted by the County Commissioners.

<sup>1</sup> Cluster Development is now in the subdivision regulations, but the incentives for preserving open space are negligible.

<sup>2</sup> Irrigation Water Rights: Subdivision regulations revised in 2010 to require all subdividers to indicate how existing water rights will be appropriated among subdivision property owners.

<sup>3</sup> Floodplain Development. The county does have floodplain regulations but these do not preclude structures in the floodplain nor do they specifically address wetlands or riparian areas.

Strategy	Status
1c. Work with Crow and Northern Cheyenne on floodplain maps	Ongoing
2a1. Viewshed setbacks for Big Horn River south of Hardin	Partially completed. Planning Board drafted regulations which were not adopted by the County Commission.
2a2. Design guidelines for new construction to retain viewsheds along Big Horn River south of Hardin	Partially completed. Planning Board drafted regulations which were not adopted by the County Commission.
2b. Work with state on river water quality education for fisherman, guides and outfitters	Ongoing. Brochures, booklets, workshops available.
3a. Work with state and tribes on public education regarding water quality and enforcement of existing laws	Ongoing. Same as 2.b.
3b. Work with public water and sewage districts and assist in providing resources	Ongoing
3c. Support and coordinate training for water and sewer operators – apply for grant funds to assist	Partially completed. Crow Agency operators now trained and others in county being trained.
4a. Subdividers provide information on groundwater and surface water impacts	Completed
4b. Be supportive of studies on water quality	Ongoing
<b>Goal 3: Local Services</b>	
1a. Encourage development in areas easily accessed by public services	Ongoing, but hasn't been an issue as there has been little development over the past 10 years.
1b. Support community infrastructure improvements	Ongoing. County provides assistance where it can for grants, etc. for water/sewer, etc.
2a- Establish requirements for fire facilities for new development	Partially Complete. Basic standards in Subdivision regulations.
2b. Work with NRCS and others to provide wildland fire mitigation measures.	Ongoing. County updated their Pre-Disaster Mitigation Plan and Community Wildfire Protection Plan in 2013
2c. Capital improvements plan for firefighting equipment and capability	No action.
3a. Better coordination among law enforcement jurisdictions	Incomplete. This appears to be an ongoing issue.
3b. Inform residents about how laws apply on Indian Reservations, including emergency contact info for law enforcement.	No Action
3c. Better record-keeping on law enforcement statistics	Incomplete
3d. Provide for law enforcement in underserved areas.	Incomplete
4a. Inventory of county's capital assets, develop annualized life cycle costs	Incomplete
4b. Continue road and bridge inventory and develop 5 year plan	Incomplete
4c. Road development policy for not accepting private roads into county system	Incomplete

Strategy	Status
4d. Improve and maintain road signs. Place roads signs at all intersections	Ongoing
4e. Rural addressing – Inform public	Complete but ongoing
4f. Policy on frequency and distribution of new accesses onto county roads	Incomplete
5a. Solid waste collection system review –	Ongoing
5b. Solid waste sites clean, avoid over-filling and wrong materials	Ongoing
5c. Developers to estimate impacts	Partially complete. <sup>4</sup>
6b. Determine financial impacts of new development – assess need to develop impact fees	Partially complete. Addressed somewhat in subdivision regulations. No assessment to date for impact fees.
6c. Annual review of subdivision fees	No Action, but has been little subdivision activity in past 10 years.
7a. Study feasibility of model building code standards	Incomplete
<b>Goal 4: Economy</b>	
1. Update and implement Big Horn county Economic Development Master Plan	Partially complete. Only as part of the multi-county RC&D CEDs 5 year update.
2a. Economic Task Force	Incomplete
3a. Work with Hardin to identify location for new airport.	Complete
3b. Support efforts to bring passenger rail to county	Ongoing
<b>Goal 5: Cultural Resources</b>	
1a. Develop criteria for determining development effects on cultural resources and incorporate into subdivision regulations.	Incomplete
1b. Written policy for County to submit subdivision applications to Crow, Northern Cheyenne, and county Historic Preservation Officer.	Partially complete. Policy in place but not written.
2a. Improve landowner awareness of need to record historic sites	Incomplete
2b. Identify methods to retain integrity of historic sites	No Action
<b>Coordination with Other Jurisdictions</b>	
a. County to host an annual session for all communities to identify issues and receive land use planning info	No action
b. Sponsor annual discussion of community infrastructure needs	No action
c. Obtain facilitation and technical support to address areas of jurisdictional overlap – with focus on law enforcement	No action

<sup>4</sup> Solid waste: Addressed as requirement in subdivision regulations, but not for other types of development.

Strategy	Status
d. Meet regularly with tribal, state, federal land managers to discuss respective land use plans, projects, etc.	As need arises, no regular meetings
<b>Coordination with Hardin City-County Planning Board</b>	
a. Host a workshop for city-county and county planning boards for better understanding of their roles	No Action
b. Assess need for staffing City-county planning board	Continue with contracted staff
<b>Coordination with Crow and Northern Cheyenne</b>	
a. Work with tribes to identify how best to contact adjoining landowners on subdivisions when lands	Incomplete
b. Work toward similar shared land use planning, subdivision and sanitation review	No action
c. Work with Northern Cheyenne to identify how Northern Cheyenne development near Tongue River Reservoir would affect or be affected by County emergency and other services	No action. Appears development is on hold for now.
<b>Implementation</b>	
Planning Board annual review of growth policy, implementation status, and need to update growth policy	Initially was done, but was not continued