

Continental Divide-Creston Natural Gas Development Project Environmental Impact Statement

2008 Baseline Socioeconomic Technical Report

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Wyoming High Desert District – Rawlins Field Office

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This Baseline Socioeconomic Technical Report (STR) was prepared in 2008 in support of the Continental Divide – Creston Natural Gas Development Project (CD-C) Environmental Impact Statement. It provides an inventory and analysis of existing socioeconomic conditions at that time in the geographic area likely to be affected by development and operations of the Continental Divide – Creston Natural Gas Development Project. The socioeconomic trends and conditions described in this report have been monitored over time and updated. The updated trends and conditions are presented in **Section 3.15** of the Draft EIS.

The inventory and description of conditions is organized by the following major topics:

- Human Geography
- Economic Conditions
- Population and Demographics
- Housing
- Community Facilities and Services
- Local Fiscal Conditions
- Public Education
- Social Conditions and Affected Publics
- Environmental Justice

1. OVERVIEW

This Baseline STR describes existing social and economic conditions in and near the CD-C project area, the geographic area that would be most directly affected by the proposed CD-C project and alternatives. Natural gas development has been ongoing in the project area for over 50 years and currently the region is in the midst of a major economic expansion fueled by natural gas development and production. The recent and ongoing development has affected local social and economic conditions, both beneficially and adversely, and as such constitutes a part of the affected environment. This Baseline STR identifies these effects where information is available as they provide valuable insights into the potential effects of the CD-C Proposed Action and Alternatives and the cumulative context in which they would occur.

The recent expansion, which began in 2003 in Sweetwater County and about 2006 in Carbon County, followed a decade and a half of relatively stable economic conditions and declining population in both counties. The expansion is characterized by low unemployment, escalating wages, and intense labor competition. While residents and newcomers alike enjoy abundant employment opportunities and comparatively high wages and salaries in virtually every sector, employers in every sector have difficulty recruiting and retaining employees. In some cases the labor shortage fundamentally affects employers' capacity to do business. Some employers in the retail and service sectors have had to modify hours and ways of doing business in response to labor shortages.

A critical shortage of housing, particularly affordable housing, contributes to the labor shortage in communities in and near the study area, discouraging many new workers from establishing local residency. Many natural gas drilling and service workers travel to Carbon and Sweetwater counties for their work days and stay in local motels, RV parks, or employer-sponsored temporary-worker quarters, and return to homes outside the area on their days off. Communities near the project area and elsewhere in southwestern Wyoming are actively preparing and implementing plans to develop affordable housing to address this problem.

The rapid pace of population growth and presence of a large temporary and transient workforce complicates efforts by local governments in and near the project area to monitor the effective service area

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population and plan for future demands on facilities and services. Because local officials believe that recent population growth in these communities is not reflected in U.S. Census Bureau or state estimates; they have developed their own estimates based on utility estimates or housing counts. These estimates are all substantially higher than federal and state estimates, though even they do not include all of the temporary and transient portion of the natural gas development workforce.

Population growth, coupled with the many temporary and transient workers, has strained utility infrastructure and public services in the affected communities. Although some communities have surplus utility capacity, a legacy from the previous expansion, other communities have completed or are anticipating efforts to expand water, wastewater and/or solid-waste landfills to accommodate the growth-related demand.

The natural gas boom places new and increased demand on a variety of public services. Although most community services are affected by population growth, law enforcement, emergency response, and medical care facilities in particular have all seen increases in demand and changes in the type of demand related to the expansion. Hospital emergency room services have increased dramatically, in large part because many new community members and temporary workers do not have local primary-care physicians.

The expansion is also affecting community social conditions. Each community near the project area has undergone previous expansions and is therefore, somewhat conditioned and accustomed to an ongoing stream of temporary workers associated with oil and gas development, pipeline and ancillary facility construction, and maintenance and expansion of power plants and soda ash and fertilizer manufacturing facilities. But the level and duration of population growth and sheer numbers of temporary workers present in what had been relatively stable social settings (retail, government, recreational, and social) for the last 15 to 20 years has changed the nature of those settings from those with a certain level of stability and predictability to those in which many people are likely to be strangers. Some retail, dining, and recreational settings are felt by long-time residents to be dominated by newcomers.

One of the beneficial aspects of the gas expansion is that local government revenues in Carbon and Sweetwater counties have increased dramatically. Assessed valuation in Carbon County has tripled since 2000 and in Sweetwater County assessed valuation has doubled during the same period. Although major increases in assessed valuation have also occurred in Carbon County School District #1 and Sweetwater County School District #1, the districts do not receive a proportionate increase in revenue because of the provisions of Wyoming School Foundation Program. Municipalities also do not benefit directly from natural gas development and production located in the unincorporated areas of the counties. However, the counties and municipalities have also experienced dramatic increases in sales and use tax revenues associated with the expansion. These revenues, along with a portion of the severance tax and mineral royalty revenues collected by the state and distributed back to local governments have helped fund some infrastructure and service expansions required by the expansion. In some cases these incremental revenues have not been available in a timely fashion to fund the needed expansions.

2. HUMAN GEOGRAPHY

The CD-C project area is located in western Carbon and eastern Sweetwater Counties in Wyoming (see Figure 1). U.S. Interstate 80 (I-80) bisects the project area east-to-west. Along I-80, the eastern boundary of the project area is about 25 miles west of the City of Rawlins, the Carbon County seat. The western boundary of the project area is about 40 miles east of the City of Rock Springs in Sweetwater County. The Town of Wamsutter (Sweetwater County) is also located within the project area. The project area is sparsely populated; outside of Wamsutter there are very few occupied residences within the project area although some ranch facilities and rural subdivision lots are occupied on a seasonal basis.

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sparsely populated; outside of Wamsutter there are very few occupied residences within the project area although some ranch facilities and rural subdivision lots are occupied on a seasonal basis.

The Carbon County towns of Baggs and Dixon lie about 8 miles and 15 miles southwest of the project area, respectively, and the Town of Bairoil in Sweetwater County lies about 25 air-miles northwest of the project area, though it is not directly accessible via an all-weather road across the project area. The City of Green River, the Sweetwater County seat, lies about 10 miles west of Rock Springs, along I-80 and the Sweetwater County Town of Superior is about 38 highway miles to the east of the project area.

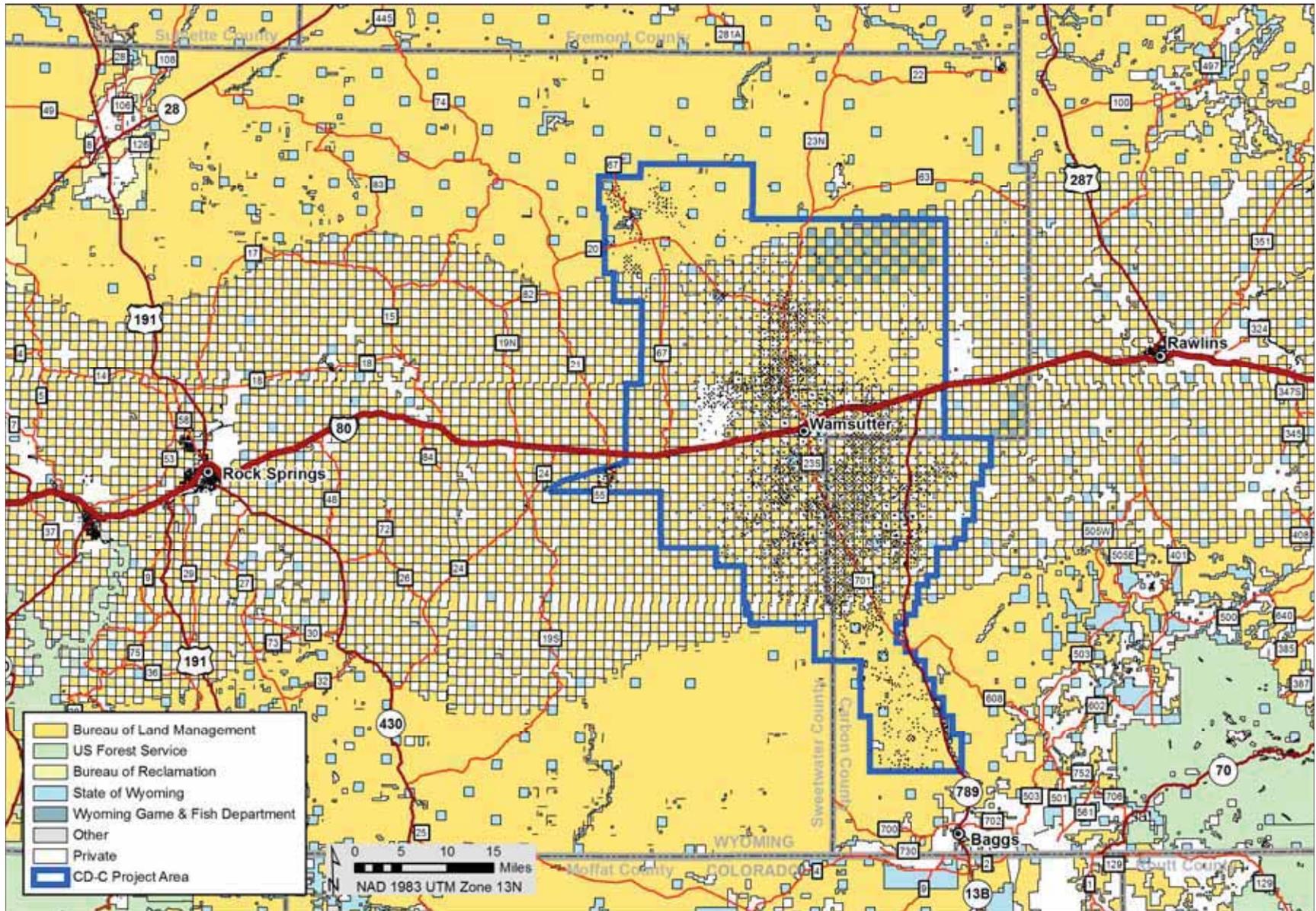
Oil and gas development has been ongoing in the project area since the 1940s. The project area contains several active gas fields and had about 2,500 producing natural gas wells in the spring of 2007. Consequently economic, demographic, fiscal, and social conditions in communities in and near the project area have been and continue to be shaped in part by oil and gas development.

Carbon County is Wyoming's third-largest county with a total land area of 5,096,960 acres, 60 percent of which is in public ownership. Sweetwater County is Wyoming's largest county with a total of 6,705,792 acres, 73 percent of which is owned by federal, state, and local governments.

The CD-C project area is located within the Great Divide Basin, in a broad intermontane ecoregion dominated by arid grasslands and shrublands and interrupted by high hills and low mountains (Omernik 1987). Human use of the area includes livestock grazing, outdoor recreation, and oil and gas development and production. The area is currently in the midst of a prolonged drought, which some observers believe dates back to the 1970s (Carrico 2007, Hansen 2007).

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Figure 1. Continental Divide–Creston Project Area and Surrounding Area



2.1 HUMAN SETTLEMENT

Sweetwater and Carbon counties share an economic heritage with other areas of the northern Great Plains, one in which agriculture (ranching) and the westward migration of pioneers played an important role in the region's initial post-European settlement and economic expansion. The development of the railroad across southern Wyoming in the late 1860s, subsequent homesteading and settlement, and construction of the transcontinental railroad ushered in the era of accelerated European settlement.

Section 3.13 (Cultural and Historical Resources) of the Continental Divide-Creston EIS provides a discussion of Native American habitation and use of the project area and describes early use of the area by people of European descent. Initial Euro-American contact in what is now Carbon and Sweetwater Counties was associated with the fur trade, but the railroad, coal mining, and ranching were the principal reasons for Euro-American settlement of the two counties.

The Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails, as well as the Overland Stage route traverse northern portions of Carbon and Sweetwater Counties, but few travelers on the trail settled in the area. The operation of the Pony Express and the development of a stage route across the counties resulted in some settlement at express stations and stage stops, but construction of the Union Pacific Railroad in the 1860s truly initiated settlement in the area. The construction and operation of the railroad coupled with development of coal mines, which both fueled locomotives and sent coal to markets via rail, served to establish viable communities in both counties. The railroads also reduced the time, cost, and hazards associated with shipment of livestock and wool to markets, which helped cattle and sheep ranchers who settled in the area to prosper.

Mineral and energy resource development – initially coal, but later oil and gas, trona, electrical power generation and uranium exploration – also helped shaped the area's economic history. The mining, oil and natural gas industries have also been important contributors to the regional economic base through their fiscal support for local government and education. Coal-fired electric power generation remains an important segment of the Sweetwater County economy, and wind power generation is increasingly important for both counties.

Today, the transportation sector in each county still includes the Union Pacific Railroad, but the flow of commerce and traffic across I-80 is also a major contributor to the economies of the two counties. More recently, travel and outdoor recreation have become important contributors to the local economies, spurred by the completion of the Flaming Gorge dam and establishment of the Flaming Gorge National Recreation area in the 1960s and completion of I-80 across the state in the early 1970s.

2.2 COMMUNITIES OF PLACE

Six communities are currently affected by natural gas development and production in the project area and will continue to be affected under the Proposed Action or alternatives. These are Rawlins, Baggs, and Dixon in Carbon County and Wamsutter, Rock Springs, and Green River in Sweetwater County. Although sharing some economic and social characteristics, each town is unique. Three other communities near the project area, the Carbon County Town of Sinclair and the Sweetwater County towns of Bairoil and Superior are not included in this assessment because land ownership and/or the location of these communities preclude substantial growth and other socioeconomic effects of the CD-C project.

2.1.3.1 Rawlins

Rawlins is the Carbon County seat and the county's largest community. Rawlins was established in 1867 and named after General John A. Rawlins who discovered a spring near the present-day townsite while surveying for the Union Pacific Railroad. Rawlins was established as a railroad town because of the availability of both water and coal in the area. Coal production was important for Carbon County from the 1880s through most of the 20th century, but most of the coal was produced in eastern Carbon County. Rawlins was also a major sheep-growing center, serving as a wool-shearing and shipping point for the thousands of sheep that wintered in the surrounding Red Desert and Great Divide Basin. The Union Pacific Railroad remains a key employer in Rawlins, employing about 195 people in 2006. Ranching, grazing, and related hay production remain an important part of the Carbon County economy and culture, but cattle outnumber sheep in the area around Rawlins today.

The Wyoming Department of Corrections has been a major employer in Rawlins for over a century, employing about 330 personnel in 2007. The Wyoming State Penitentiary was opened in Rawlins in 1901 and served as the state's prison until 1981 when a new prison was built just south of Rawlins. The old Wyoming Frontier Prison has been converted to a heritage tourist attraction.

Located in Sinclair, about six miles east of Rawlins, the Sinclair Oil Refinery was started by the Producers and Refining Corporation in the 1920s and later purchased by Sinclair Refiners Company. It has been a major employer in the area for over 70 years, employing 351 personnel in 2007.

Rawlins has been the commercial center for Carbon County's energy industry. During the 1970s and early 1980s, the population of Rawlins grew as a result of an energy resource boom, which included coal, oil, and uranium development in the area. Starting in the mid-1980s, Rawlins and much of Wyoming entered an economic downturn as a result of a precipitous fall in energy prices (Ducker 2007, Moulton 2005, Worthington, Lenhart and Carpenter, Inc. 1999).

Starting in about 2005, with the construction of new prison facilities and the acceleration of natural gas development in the areas of western Carbon and eastern Sweetwater counties, the economy and population of Rawlins began to expand. The location and expansion of natural gas production and service companies and the expansion of the Sinclair refinery have resulted in another expansion, characterized by labor and housing shortages. Rawlins and Carbon County have responded with a variety of planning, infrastructure, and affordable-housing initiatives. Today, Rawlins includes a mix of long-time residents, newcomers, and transient temporary workers who work in the surrounding natural gas fields and construction sites and stay temporarily in the town in single status.

2.1.3.2 Little Snake River Valley (Baggs and Dixon)

Settlement in the Little Snake River Valley (LSRV) by people of European descent was associated with cattle ranching. Cattle were first brought to the area in 1871, and have been associated with the dominant human land use since that time. There have been several periods of oil development in the surrounding areas between the 1950s and the early 1980s. More recently natural gas development has resulted in economic activity and employment for some valley residents. There have been several mining ventures in areas surrounding the LSRV and extensive coal deposits underlie much of the LSR basin. However, ranching is the enduring economic activity in the LSRV and ranching-related activities, such as rodeos and roping competitions, are among the important and enduring social interactions in the valley. Some of the ranches and grazing operations located in the LSRV have been in the same family for several generations

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Outdoor recreation (hunting in particular) is an important economic and cultural activity in the LSRV. Some ranchers lease their land to hunting outfitters, or allow hunting access for a fee. Outfitters, game processors, motels, cafés, and other businesses count on hunting for a substantial part of their annual income. Recently, a large landowner has developed a dude ranch south of Savery, which is east of Dixon near the Wyoming-Colorado state line.

The LSRV is a close-knit community, with many extended families living in the valley. LSRV residents have health care and commerce linkages to Craig, Colorado as well as to Rawlins. There is some housing growth in the LSRV and both Baggs and Dixon are embarking on infrastructure development projects. (Blevins et al. n.d., Corners 2007, Hicks n.d., Medicine Bow National Forest 2003, Stocks 2007).

2.1.3.3 Town of Wamsutter

Wamsutter began life in 1868 as Washakie, a rail station on the Union Pacific line known for its good artesian well – a necessity for steam engines. The name was changed when the Town incorporated in 1914. Wamsutter became the central wool-shipping center for the entire Red Desert region, where up to half a million sheep wintered annually (Lauritzen undated). Wamsutter also grew in response to the oil and natural gas industries and the pipelines and compressor stations that developed in the area to support these industries. Natural gas development has carried on to the present. Wamsutter hosted companies and workers for the construction of two major gas pipelines in 2005 and 2006, and BP established a major operations center on the northern edge of Wamsutter with an associated 250-bed temporary-worker housing facility. Several large natural gas service companies have established equipment and materials yards in the town and there are a number of modular dormitory facilities for natural gas workers in the town's mobile home parks.

Wamsutter is beginning to develop more highway-oriented businesses to capitalize on its location on I-80. Although not yet reflected in state or census statistics, recent population growth in Wamsutter has been substantial. Local officials believe that the town has more than doubled in resident population in the last several years; including the temporary and transient gas workers, that increase is even greater. The town has a variety of housing, planning, and infrastructure-development initiatives to accommodate current and anticipated population growth.

2.1.3.4 City of Rock Springs

As its name implies, Rock Springs was originally settled as a stage station near a spring that bubbled from rocks on a tributary of Bitter Creek. Because of the water, the stage station was developed as a stockade, way station, and trading post. The interrelated development of coal mines and the railroad led to emergence of Rock Springs as a community in the 1860s. Continued growth of the railroad and mines and a cattle boom in the 1870s helped the town prosper. The Union Pacific railroad attracted and imported workers from many countries to work in the area's mines. Today, Rock Springs celebrates its ethnic diversity with representatives of 56 different nationalities. Workers in the coal mines and railroad also joined labor unions and established a substantial union presence in the community.

Although substantial oil exploration occurred during the 1920s and 1930s, these efforts met with little success. Natural gas was discovered during the 1950s and the newly formed Mountain Fuel Supply Company constructed a pipeline from the area to Salt Lake City and became a major employer in Rock Springs.

Rock Springs boomed during the 1970s with the construction of the Jim Bridger power plant east of the city, the development and expansion of trona mines and soda ash-processing facilities west of Green River, and oil development in the area. Rock Springs' population essentially doubled between 1970 and

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1974, causing housing, infrastructure, and social problems for the city. After the completion of the power plant and the expansions at the trona mines, Rock Springs began to lose population. Softening of energy and trona prices further accelerated this population loss in the early 1980s, although construction projects at the Jim Bridger power plant, Western Wyoming State College, the Chevron phosphate fertilizer plant and the Exxon La Barge gas plant northwest of town provided a brief surge during 1984 and 1985. After this period, population continued its decline with some increases in the 1990s due to further expansions on the trona mines and natural gas development (Rhode 1999).

During the first years of the 21st century, natural gas development in the region generated new investment in Rock Springs by oil and gas services companies. As of January 2007, Sweetwater County's ten largest employers included two oil and gas service companies; four trona/soda ash companies; the Jim Bridger power plant; and Bridger Coal, owner of the mine that supplies the power plant (Sweetwater Economic Development [SWEDA] 2007). At the time of this assessment, natural gas development was the primary force driving growth in the city.

2.1.3.5 City of Green River

Green River was incorporated in 1868 in anticipation of railroad construction. Although the railroad bypassed Green River at first because it did not own the land in the town, it returned to Green River when water ran out at its alternate site. Green River later became the division point for the Union Pacific railroad and the town began to thrive. For many years the Union Pacific Railroad was the major employer in Green River. The discovery of trona-bearing formations in the late 1940s led to development of the soda-ash industry west of Green River. During the late 1960s and 70s, the soda-ash industry went through a major expansion, developing its own housing complexes and increasing the population of Green River from about 3,000 to over 13,000 (Lauritzen undated). Today, four companies mine and process trona: FMC Corporation, OCI Wyoming LP, General Chemical Corporation, Solvay Minerals Inc. A fifth, Church and Dwight Company Inc., processes trona into soda-ash products. These companies are the major source of employment for the city.

3. ECONOMIC CONDITIONS

Economic conditions and trends for the study area were identified based on reviews of data from the Sonoran Institute's *Economic Profile System*, available online at: <http://sonoran.org>, the U.S. Census Bureau, the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics, and other federal, state, and local sources as cited in the text.

3.1 EMPLOYMENT

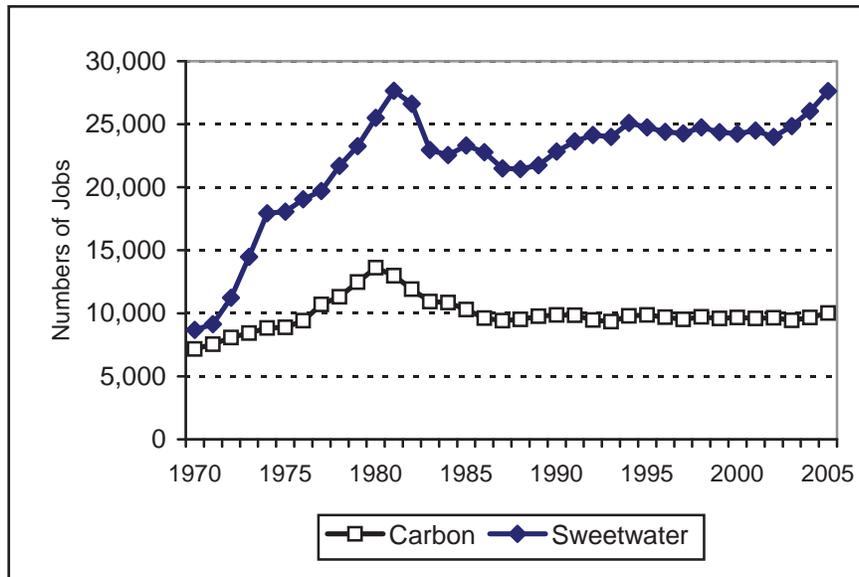
Since 1970, the Sweetwater and Carbon County economies each experienced a period of substantial growth, followed by economic contraction and adjustment, and a period of relatively protracted stability. Renewed energy resource development across southwest Wyoming in recent years has prompted substantial economic expansion, particularly in Sweetwater County, which functions as a regional service center for the coal and natural gas industries.

The Sweetwater County economy gained more than 16,800 jobs between 1970 and 1980, nearly tripling the total number of jobs in the county. The concurrent construction of a power plant, major expansions of trona and coal mining, and natural gas development in the surrounding region all contributed to the rapid expansion. It was during this period that Rock Springs along with Gillette and other cities in Wyoming came to define the contemporary use of the term "boomtown." A peak employment of 27,655 jobs occurred in 1981. Completion of power-plant construction and transitions in the natural gas and trona

industries from development to production brought about severe economic dislocation as more than 4,000 jobs were lost between 1980 and 1988.

Local economic development and diversification efforts, coupled with expansion in mining, energy resources, and the local trade and services industries, brought about a period of economic stability through the 1990s with total employment fluctuating around 24,500 jobs (Figure 2).

Figure 2. Total full and part-time employment, 1970–2005



Source: U.S. Department of Commerce, Bureau of Economic Analysis, 2007.

In 2002/03, natural gas development again became a driving economic force in Sweetwater County, prompted by national energy policy, record-high energy prices, and other factors. Nearly 3,700 jobs were added from 2002 through 2005, with preliminary data suggesting about 2,200 additional jobs added in 2006 (U.S. Bureau of Economic Analysis 2007, Wyoming Department of Employment, 2007).

In Carbon County, employment also climbed dramatically in the early 1970s, primarily due to energy resource development (coal, uranium and oil and gas). The net gain of 6,437 jobs from 1970 to 1980 represented a 90-percent increase in total employment. Like neighboring Sweetwater County, much of the gain in Carbon County was also transitory, such that nearly 4,200 jobs were lost during the early/mid-1980s, as both the local coal and uranium industries contracted. Until recently, the local economy remained relatively stable, at least in terms of employment, fluctuating at around 9,500 jobs. More than 400 new jobs were added between 2002 and 2005, but preliminary data indicate nearly 1,200 new jobs were added in 2006. (U.S. Bureau of Economic Analysis 2007, Wyoming Department of Employment, 2007)

The composition of the local economies during this period, in terms of covered employment, is evident in Table 1. Mining, construction, and transportation/warehousing are the primary sectors in Sweetwater County’s economic base. In addition to oil and gas development, the mining industry also includes two active coal mines and four trona mines. Trade, hospitality services, health care, education, and public sector employment, are also important economic sectors locally.

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Table 1. Full and part-time covered employment, by industrial sector, 2006

Industrial Sector	Sweetwater County		Carbon County	
	Number	% Total	Number	% Total
Private				
Agriculture, Forestry, Fishing, & Hunting	NR	NA	233	3%
Mining	5,664	23%	221	3%
Utilities	NR	NA	***	NA
Construction	2,353	10%	1,168	15%
Manufacturing	1,255	5%	401	5%
Wholesale Trade	706	3%	217	3%
Retail Trade	2,463	10%	771	10%
Transportation & Warehousing	1,167	5%	239	3%
Information	220	1%	76	1%
Finance & Insurance	405	2%	137	2%
Real Estate & Rental & Leasing	421	2%	79	1%
Professional & Technical Services	540	2%	129	2%
Management of Companies & Enterprises	58	<1%	***	NA
Administrative & Waste Services	684	3%	109	1%
Educational Services	NR	NA	***	NA
Health Care & Social Assistance	871	4%	405	5%
Arts, Entertainment, & Recreation	NR	NA	177	2%
Accommodation & Food Services	2,354	10%	1,091	14%
Other Services, Exc. Public Administration	914	4%	140	2%
Subtotal Private	20,764	85%	5,672	75%
Government	3,658	15%	1,910	25%
Total	24,422		7,582	

Source: Wyoming Department of Employment, 2007.

NR: Not reported due to confidentiality disclosure guidelines. There is a combined total of 689 jobs in these sectors, less than 3% of the total employment.

*** Not reported due to confidentiality disclosure guidelines. There is a combined total of 79 jobs in these sectors, just over 1% of the total.

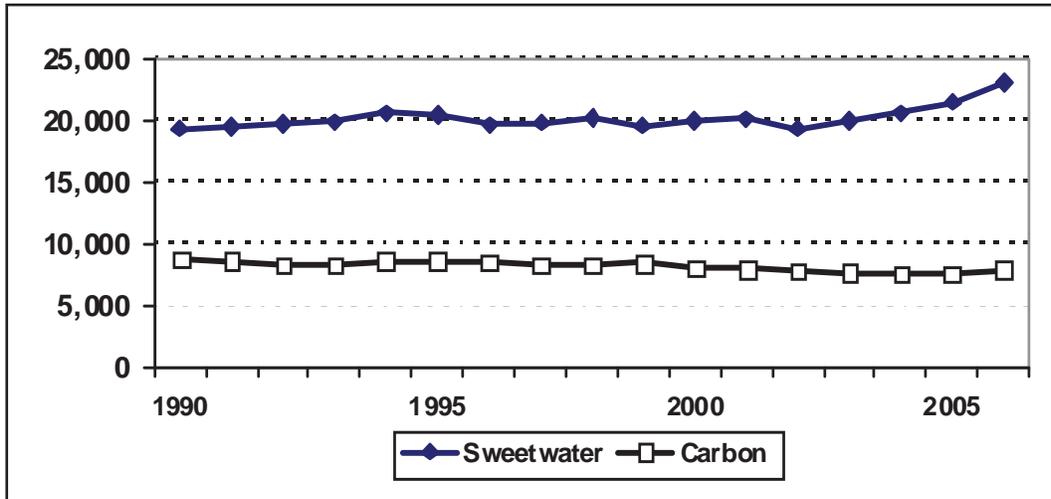
Despite the level of recent and ongoing energy resource development, the mining sector plays a more limited role in the Carbon County economy than that of its western neighbor. Pipeline and wind-energy facility construction; state government; health care; and the trade, accommodations, and food-service industries have also been important to the Carbon County economy.

3.2 LABOR MARKET CONDITIONS

Local labor markets have reflected the underlying economic and demographic conditions. From 1990 through 2002, the pool of residents employed or actively seeking work remained relatively steady in Sweetwater County. Fueled by expanded economic opportunities associated primarily with natural gas development, migration, and increases in labor-force participation among residents, the local labor force then expanded by almost 3,700 individuals, or 19 percent in five years.

In Carbon County, the local labor force underwent a slow but protracted decline from 1990 through 2004, shrinking by nearly 1,200 individuals or 14 percent. This period was also characterized by steady out-migration of former residents. Over the ensuing two years, the expanded labor opportunities associated with natural gas development attracted more than 350 additional individuals into the work force (Figure 3).

Figure 3. Local labor force trends: 1990–2006

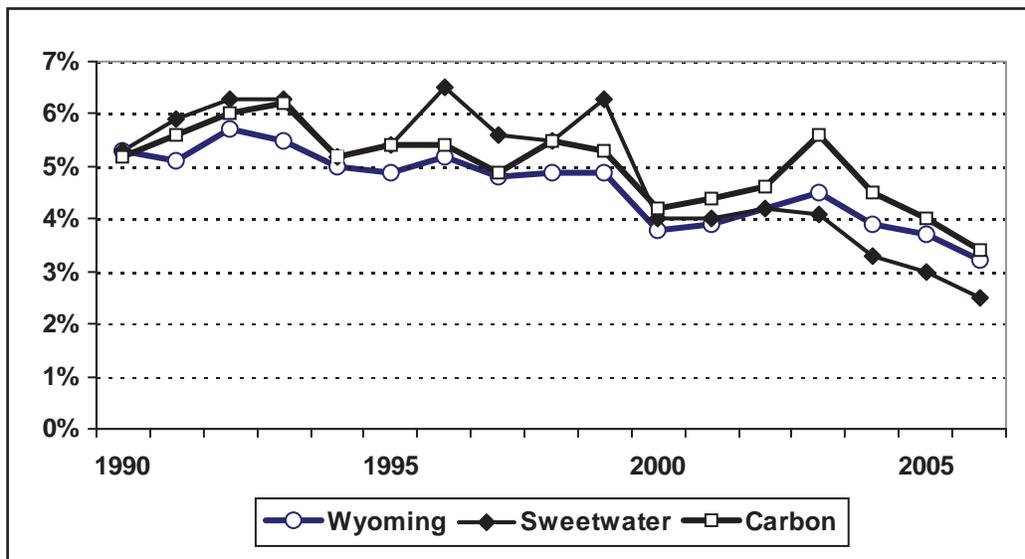


Source: U.S. Department of Labor, 2007.

A recent analysis of work-force trends in Wyoming suggests the annual data may not fully reflect the seasonal expansion of the labor force by commuters and non-residents who work locally for an extended period but do not establish “residence” locally. As a result, these individuals may not be fully captured by the statistical procedures used to estimate labor force.

Migration and commuting play significant roles in moderating local unemployment rates. Prior to the recent resurgence in natural gas development unemployment in the region since 1990 had generally been between 5.0 and 6.5 percent, on par or slightly above the statewide average (Figure 4).

Figure 4. Trends in local unemployment rates: 1990–2005



Source: U.S. Department of Labor, 2006.

Labor markets are very tight across the state, particularly in Sweetwater County, due to the high demand for labor associated with ongoing energy development. Average annual unemployment for 2006 had

dropped to a record low of 2.5 percent, representing fewer than 600 individuals unable to find work, or temporarily between positions. Carbon County also had record low unemployment in 2006; fewer than 300 unemployed representing 3.4 percent of the local labor force (U.S. Department of Labor, 2006). It is in fact likely that the effective unemployment rate is lower as the estimates of the local labor force that serve as the basis for calculating unemployment rates likely do not capture all non-resident laborers working in the area for an extended period but living in motels, RV parks, and other temporary housing.

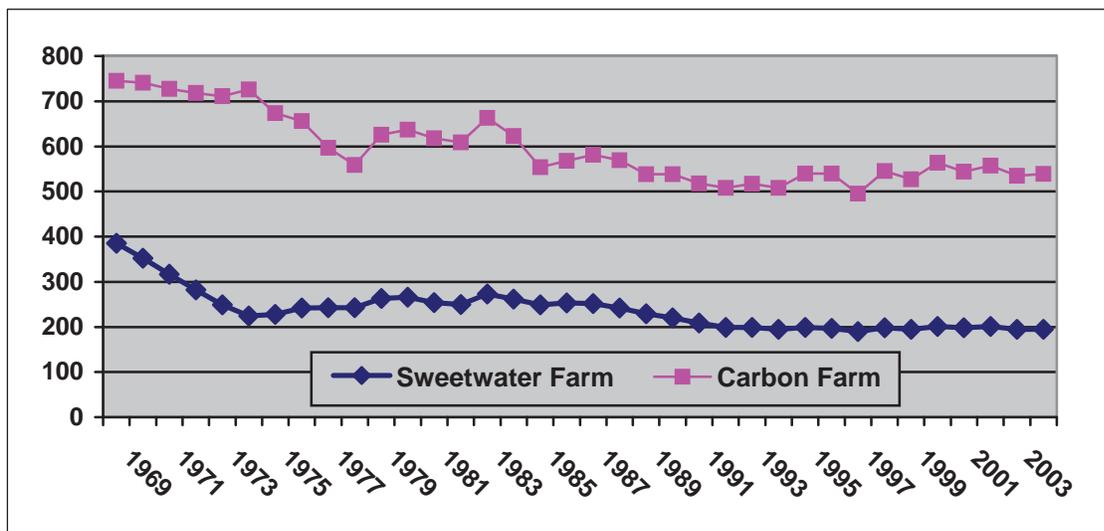
The tight labor market is reflected in acute, across-the-board labor shortages in Carbon and Sweetwater counties. All economic sectors appear to be affected by the high demand for workers. The labor shortage has resulted in higher wages, bonuses, and per-diem payments in the natural gas industry. High wages in the natural gas industry have resulted in job shifts and worker loss in other sectors of the economy, creating upward pressure on wages for both the private and public sectors. Even with the increase in wages, local and state government and private businesses are frequently short-staffed and experience high employee turnover. The shortage of affordable housing in Carbon and Sweetwater counties (discussed in Section 1.5) impedes recruitment of non-local workers, who frequently have difficulty competing for housing with higher-paid gas-industry workers. Natural gas service companies have been required to develop or contract for temporary housing for employees, many of whom are rotated in and out of the area on a temporary basis.

Employers in other sectors of the economy are in some cases constrained from doing business because of labor shortages. Some retail and service businesses have had to limit business hours and, in at least one case, temporarily cease doing business because of their inability to attract or retain employees.

3.3 AGRICULTURE

As shown in Figure 5, farm employment has been more or less on a downward trend in Carbon and Sweetwater counties since 1970. Carbon County farm employment decreased from 741 in 1970 to 564 in 2000, a 23 percent decrease over the two decades. Sweetwater County farm employment decreased from 552 to 201, a 43 percent decrease in the same period (Headwaters Economics 2007a and 2007 b).

Figure 5. Sweetwater and Carbon County farm employment: 1969–2000



Source: Headwater Economics 2007b.

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This trend has continued in both counties since 2000, with Carbon County farm employment decreasing by 16 jobs or about 3 percent between 2001 and 2005 and Sweetwater County losing another four jobs or 2 percent during this period, as shown in Figures 5 and 6.

As with other industries, the federal government conducts an economic census of agriculture every five years. Results of the 2002 census were the most current available at the time this report was prepared. A total of 460 operating farms and ranches were recorded in Sweetwater and Carbon County during that census, as shown in Table 2. These operations involved more than 3.8 million acres, equivalent to approximately one-third of the combined land area of the two counties. Most of the more-productive grazing and farmlands are located outside of the project area, in particular in the eastern portions of Carbon County.

Table 2. Overview of local agriculture, 2002 and 2005

	Sweetwater County	Carbon County
Number of farms	170	290
Land area in farms (acres)	1,480,246	2,329,571
Farm land – Percent of county area	22.1	46.1
Market value of agricultural products sold (2005)	\$5.97 M	\$52.21 M
- Livestock	\$1.09 M	\$50.13 M
- Crops	\$4.88 M	\$2.07 M
Farm operators with farming as a principal occupation	86	191
Total farm labor and proprietor's income (2005)	\$0.17 M	\$11.83 M

Source: U.S. Department of Agriculture, 2004 and U.S. Department of Commerce, Bureau of Economic Analysis, 2006.

M = Millions

In 2005, local ranches and farms reported total sales of \$58.1 million in agricultural products, with livestock sales the primary source of agricultural revenue in both counties. Gross annual agricultural sales in Carbon County in 2005 were nearly ten times the level in Sweetwater County. Despite adverse effects associated with extended drought, agricultural producers in Carbon County recorded a net \$11.8 million in income in 2005, while those in Sweetwater County realized a net income of just \$0.2 million and that only due to livestock sales that reduced overall herd size, which may compromise future recovery.

3.3.1 Grazing within the CD-C Project Area

Agricultural activities within the project area are limited to grazing on both publicly and privately owned land. According to Section 3.17 of the CD-C EIS, 17 allotments are permitted for grazing use within the project area. Many of these allotments extend beyond the boundaries of the project area. These allotments cover just over one million acres and are permitted for a total of 205,430 animal unit months (AUM) of grazing. Most of the allotments are used for cattle grazing, with a very limited amount used for sheep.

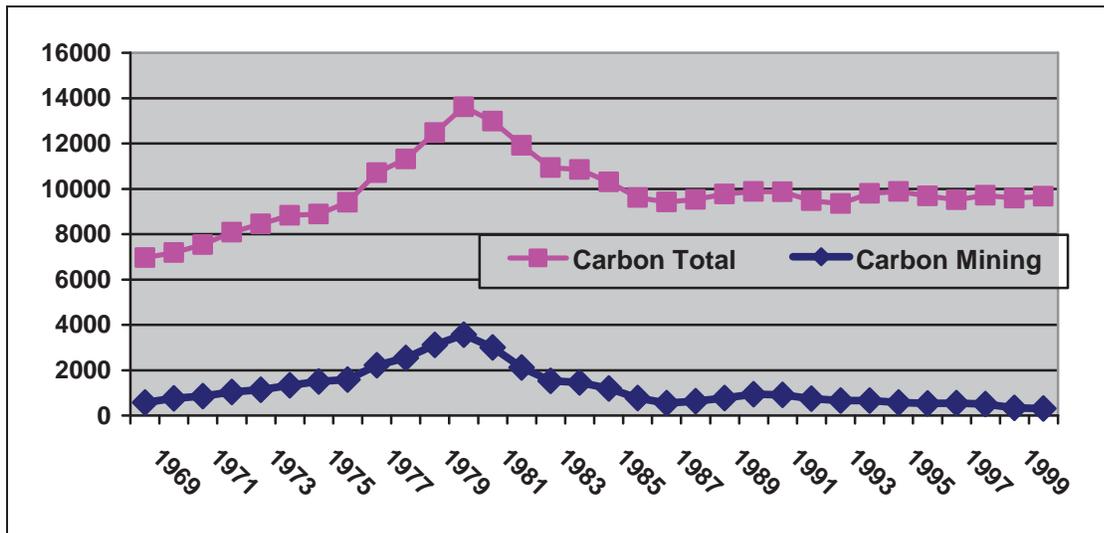
The Socioeconomic Profile prepared for the Draft EIS for the Rawlins Resource Management Plan estimated the economic value of a cattle AUM at \$31.80 and a sheep AUM at \$27.44 (USBLM 2003). Using the higher amount for cattle, the economic value of cattle grazing on the allotments included in the project area would be over \$6.5 million annually.

3.4 MINERALS SECTOR

Current and historical mining-sector activity in the study area includes trona mining in Sweetwater County, and coal, uranium, oil, and natural gas production in both counties.

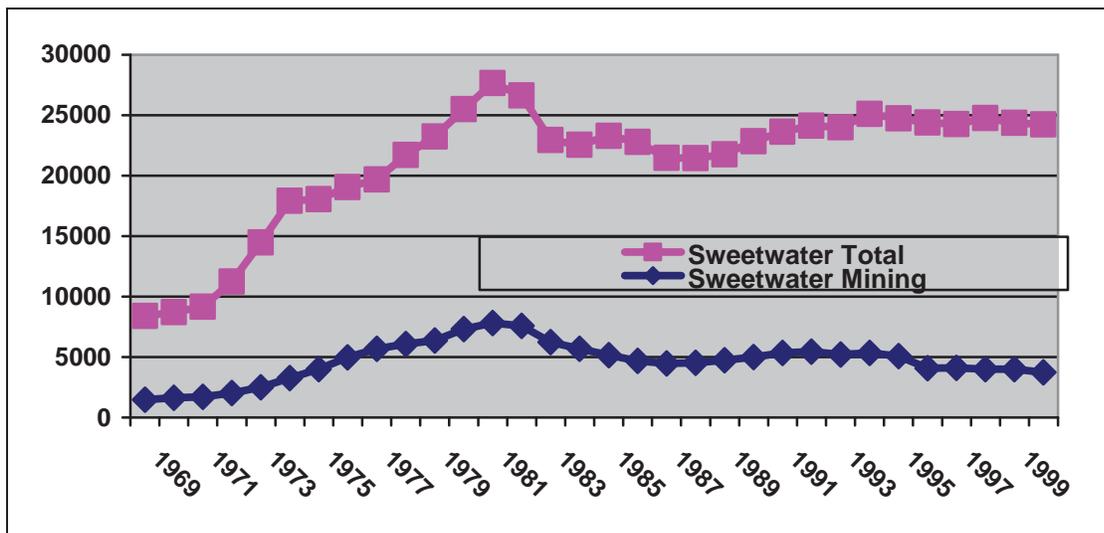
As shown in Figures 6 and 7, Both total and mining employment in Carbon and Sweetwater counties reflect the period of intensive energy and minerals development in the late 1970s and early 1980s and the ensuing slowdown as world energy prices fell. The decline in employment also reflects the completion of power plant and mine and processing-facility construction projects.

Figure 6. Carbon County total and mining sector employment: 1969–2000



Source: Headwater Economics 2007a.

Figure 7. Sweetwater County total and mining sector employment: 1969–2000

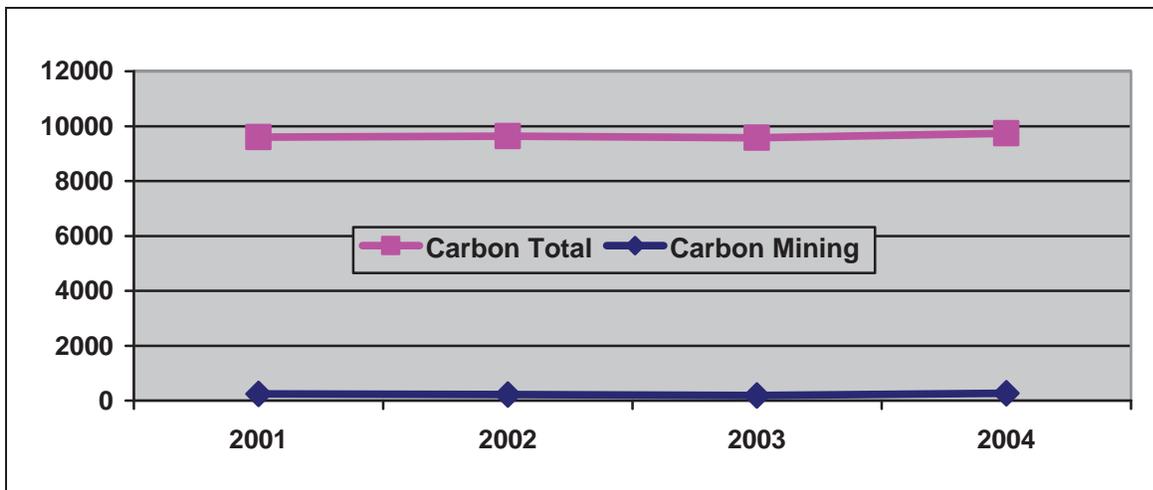


Source: Headwater Economics 2007b.

Assessing recent mining-sector employment in the study area is complicated by the nature of employment practices in the natural gas industry. Acute labor and housing shortages within the study area, coupled with the mobile nature of many natural gas service company operations, hampers the reporting and tracking of natural gas industry employees. Labor shortages have required some natural gas service companies to recruit and import workers from other parts of the country. These workers often relocate to the study area on a temporary basis; work at locations in several counties staying in temporary lodging near the work site and return home for extended periods of time. Consequently their employment may not be recorded in each county where their employment occurs, or if their employer is located outside the study area, these workers may not be recorded within the affected counties at all.

Figure 8 displays total and mining-sector employment for Carbon County from 2001 through 2004. Mining-sector employment continued to fall through 2003 and then began a gradual increase. These statistics do not reflect employment associated with the surge in natural gas drilling activity in the county that began in 2006. The BEA has withheld detailed mining-sector employment data for Sweetwater County during the 2001 through 2004 period due to regulations regarding the publication of data in instances where an industry’s local presence is concentrated in one or a few firms. Those statistics would show an increase in mining-sector activity corresponding to increases in regional drilling activity that began during 2004.

Figure 8. Carbon County total and mining sector employment: 2001–2004



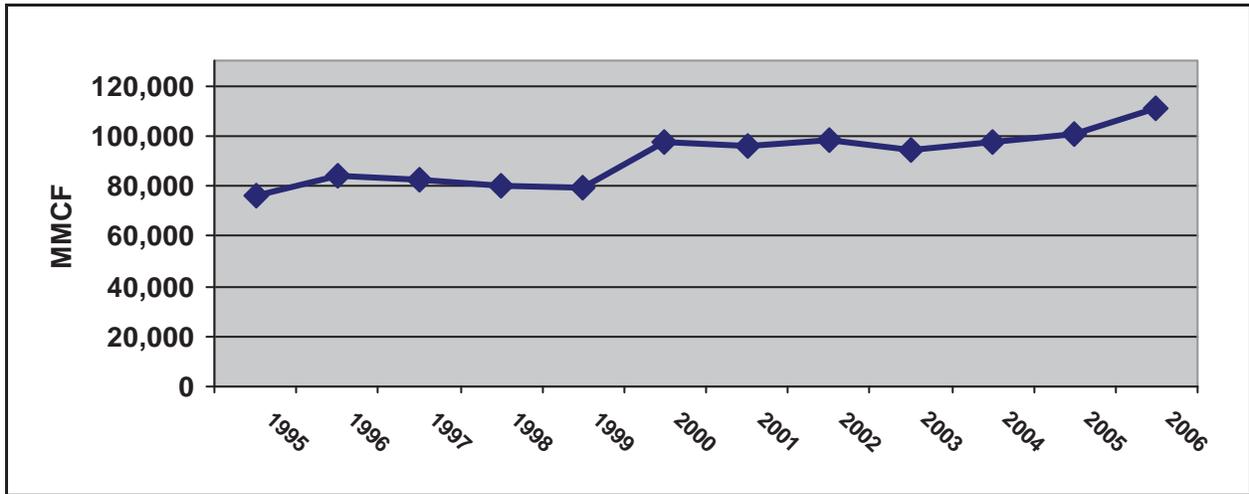
Source: Headwater Economics 2007a.

3.4.1 Oil and Gas

Oil and natural gas exploration and production have been important but volatile elements of the Carbon and Sweetwater County economies for well over 30 years.

As shown in Figure 9, Carbon County natural gas production increased from 75,851 MMCF in 1995 to 110,671MMCF in 2006, or 46 percent. Carbon County oil production in 2006 was 1.9 million barrels or about 46 percent higher than the 1995 level of 1.3 million barrels. During 2006, there were 1,458 total producing oil and gas wells in Carbon County, and the county produced 5.5 percent of total gas produced in Wyoming and 3.6 percent of total oil.

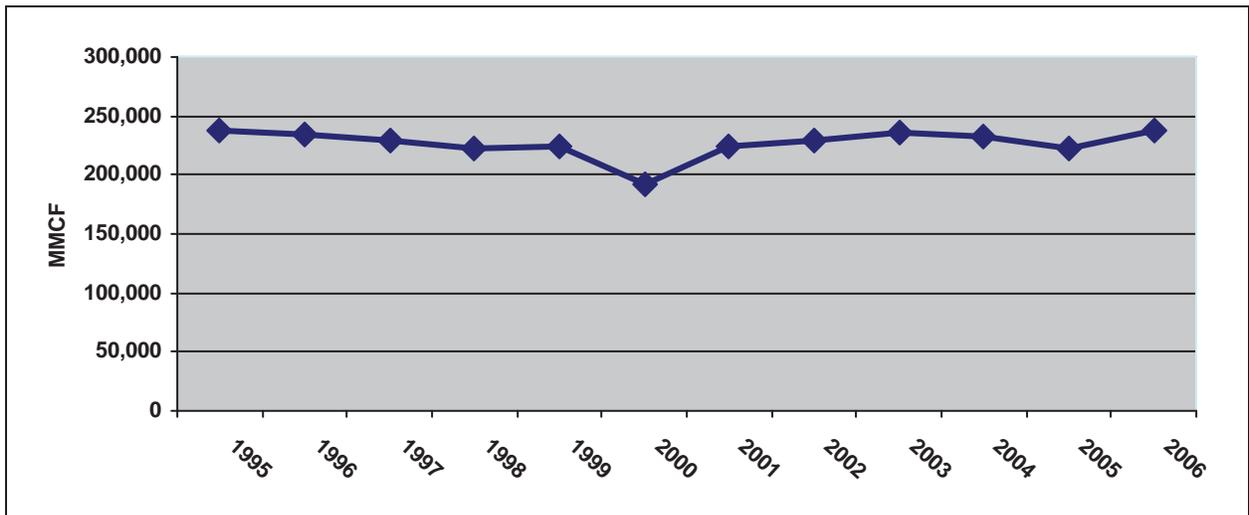
Figure 9. Carbon County natural gas production: 1995–2006



Source: WOGCC 1995–2003.

As shown in Figure 10, annual natural gas production in Sweetwater County decreased from 238,000 MMCF in 1995 to 192,000 MMCF in 2000, but returned to the 238,000 MMCF level in 2006. Sweetwater County production accounted for about 12 percent of all natural gas produced in Wyoming and about 10 percent of all oil during 2006. The county had 2,898 producing oil and gas wells in 2006 (WOGCC 1995-2006).

Figure 10. Sweetwater County natural gas production: 1995–2006

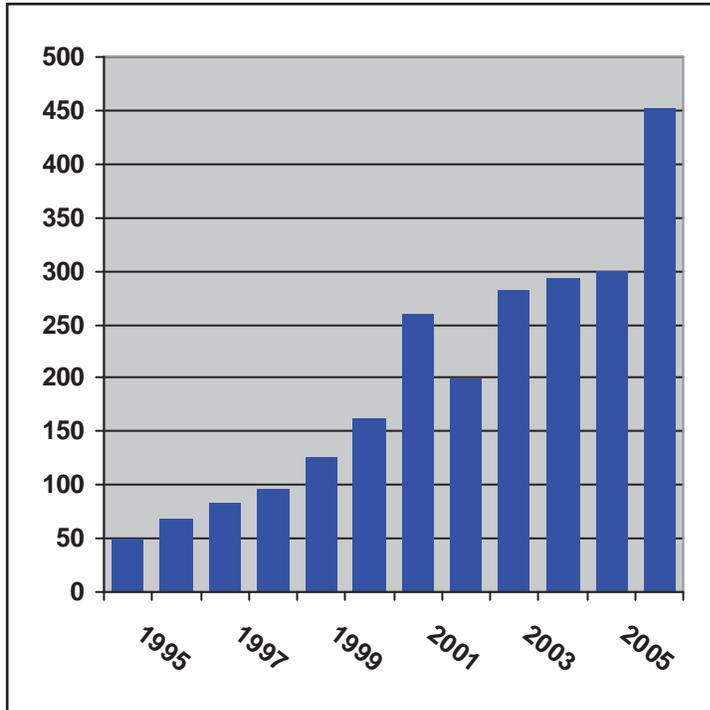


Source: WOGCC 1995-2002.

The outlook for future oil and gas production is in part reflected in the number of approved applications for drilling permits (APD) logged each year. The number of approved APDs has increased substantially in Carbon County in recent years, from 50 in 1995 to 451 in 2006 (Figure 11). This level of approved

permits is nine times that of the mid-1990s (WOGCC 1995-2003). Increased drilling activity generally leads to increased production in the county if drilling efforts are successful and commodity prices remain at economic levels.

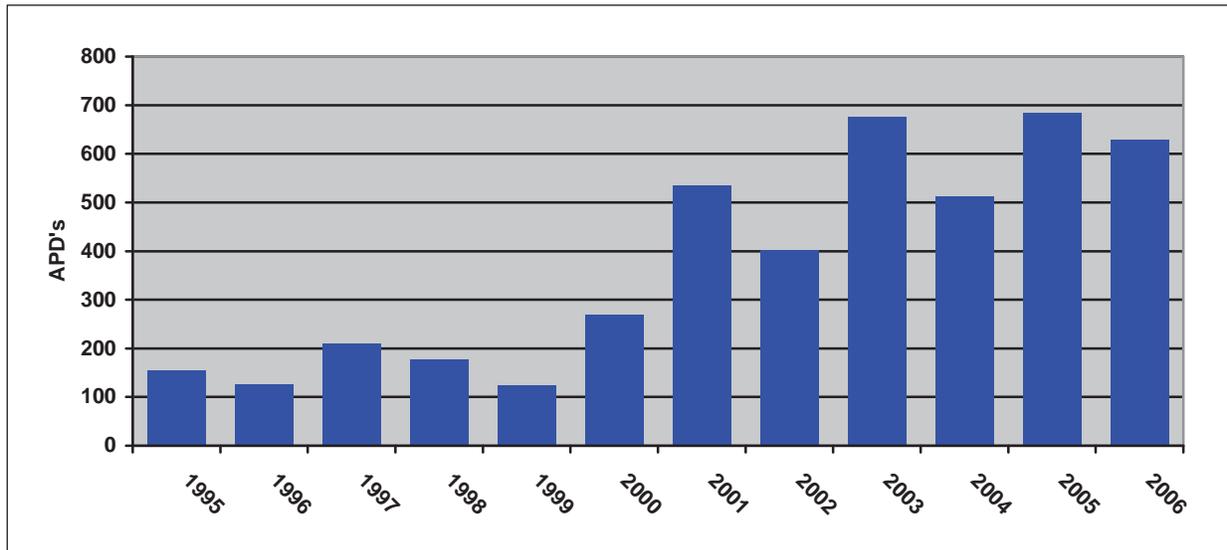
Figure 11. Carbon County approved drilling permits: 1995–2006



Source: WOGCC 1995–2003.

Sweetwater County approved APDs have shown some volatility but overall have increased dramatically in recent years (Figure 12), from 153 in 1995 to 629 in 2006 — a 300 percent increase over the period.

Figure 12. Sweetwater County approved drilling permits: 1995–2006

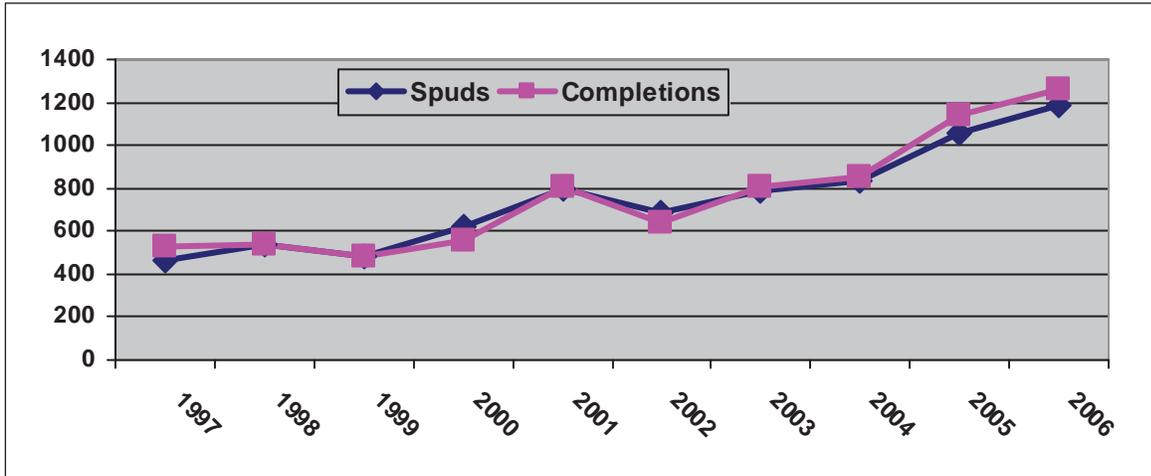


Source: WOGCC 1995-2006.

The Sweetwater County economy is affected by oil and gas activity occurring beyond county boundaries, however. Over the last decade, Rock Springs has emerged as the natural gas service center for southwestern Wyoming. A number of oil and gas service companies have established major service centers the Rock Springs area and these companies provide service throughout the region. Halliburton, Schlumberger, and B J Services have all established major yards in the Rock Springs area, employing a total of 1,360 employees in early 2007 (SWEDA 2007).

As shown in Figure 13, drilling activity in the general Rock Springs natural gas service area has increased from 526 spuds (the beginning of drilling operations) and 465 completions (installing well casing and wellhead to prepare the well for production) in 1995 to 1,258 spuds and 1,183 completions in 2006, a 139 percent increase in spuds and a 154 percent increase in completions during the period.

Figure 13. Well spuds and completions, Rock Springs five-county¹ service area: 1995–2006

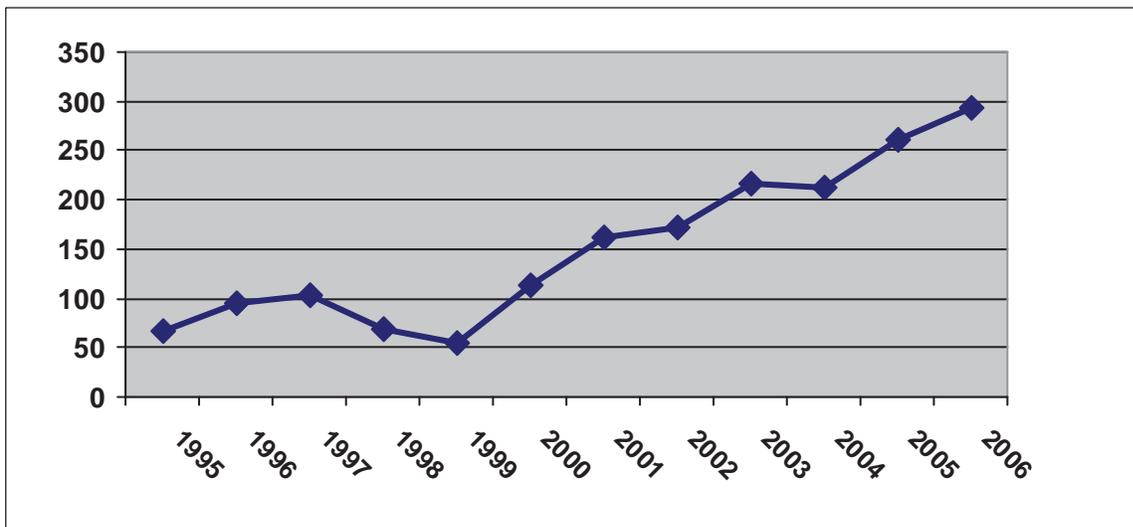


Source: WOGCC, 2007.

Natural Gas Activity within the CD-C Project Area

Natural gas exploration and development activity has been underway in the project area since the 1950s. Figure 14 displays the recent pace of drilling and completion activities in the project area. Gas well spuds increased from 67 in 1995 to 296 in 2006.

Figure 14. Recent drilling and completion activity within the CD-C project area



Source: WOGCC, 2007.

¹ Carbon, Lincoln, Sublette, Sweetwater and Uinta counties

Natural Gas Price Differential

In the years preceding this assessment, natural gas sales prices in Wyoming have been substantially lower than prices received for gas in other markets. This “price differential” is usually expressed as the difference between average Wyoming sales prices, e.g., prices at the Opal Hub, Cheyenne Hub or some combination of the two, and those at Louisiana’s Henry Hub. The Henry Hub is one of several reference pricing points for natural gas. Historically, the price differentials have been a result of constraints on natural gas transmission capacity to markets outside Wyoming. From January 2000 until the summer of 2007, the sales price differential between Wyoming gas and national averages ranged from a few cents to \$5.00 (Wyoming Pipeline Authority 2008). The price differential effect fluctuates substantially based on such factors as gas supply in Wyoming and weather and other demand factors.

This price differential for Wyoming is important because it affects ad valorem production and severance tax revenues and royalty income. The price differential also affects gas company development decisions. Although extension of the Rockies Express Pipeline to Midwestern markets in 2008 and 2009 is forecast to moderate the price differential substantially (Wyoming Pipeline Authority 2007) in the near term, the price differential is likely to continue to fluctuate over the long term as additional Wyoming gas supply comes online and additional transmission capacity to external markets is constructed in response to increases in supply.

3.4.2 Coal

Coal has played a major role in the settlement and development of Carbon and Sweetwater counties. Carbon County has had three major producing coal mines in the recent past: the RAG Shoshone #1 mine, which ceased production in 2000; Arch Coal’s Seminole #2 mine, which ended production in 2004; and Arch Coal’s Medicine Bow mine, which suspended production during 2005. Closure of these mines resulted in substantial economic dislocation in the Medicine Bow/Hanna/Carbon County area during the period from 2000 through 2005. The Medicine Bow mine resumed production in 2006, producing 28,000 tons with six employees (WMA 2007), and is poised to supply the proposed DKRW coal-to-liquids plant scheduled to begin construction in 2008.

There are two major producing coal mines in Sweetwater County. The Jim Bridger mine east of Rock Springs supplies the Jim Bridger power plant, producing 5.4 million tons of coal during 2006 with a workforce of 230. The Black Butte mine produced 3.4 million tons during 2006 with a workforce of 172. Employment at both Sweetwater County coal mines has fluctuated over the last ten years. The Jim Bridger mine has generally been reducing employees, from 390 in 1996 to 230 in 2006, while reducing annual production from 6.3 million tons to 5.4 million tons. The Black Butte mine increased employment during the same period, from 109 employees to 172 employees, while increasing production from 1.9 million tons to 3.4 million tons.

3.4.3 Trona

Trona is mined in Sweetwater County by four companies: FMC, General Chemical, OCI, and Solvay Minerals. Trona is used in the production of soda ash; an estimated 95 percent of all soda ash used in North America and 25 percent of the world’s total supply comes from trona mined in Sweetwater county. Annual trona production has fluctuated over the past ten years, with the 17.9 million tons in 2006 being substantially higher than the ten-year low point of 15.9 million tons in 2002. Employment at the four Sweetwater County trona mines fell from 3,022 in 1996 to 2,258 in 2006 (WMA 2007b).

3.4.4 Uranium

Although there are substantial uranium deposits in the study area, there are currently no producing uranium mines in Carbon or Sweetwater counties.

3.5 TOURISM, TRAVEL, AND OUTDOOR RECREATION

Tourism, travel, and outdoor recreation play an important role in the local economy, and outdoor recreation contributes to the quality of life of residents. Much of the tourism and travel in Carbon and Sweetwater counties is traffic passing through the region on I-80. However, a substantial level of local tourism also occurs, primarily outdoor recreation-oriented visits associated with hunting, fishing, boating, wildlife watching, or sightseeing. Major outdoor recreation attractions include the Flaming Gorge National Recreation Area; the Green River, Seminole, and Pathfinder reservoirs; the Medicine Bow National Forest; public lands open to ATV use; and public and private lands open to fishing and big and small game hunting. Much of the land within the project area is in the latter two categories (recreation resources and use in the project area are described in the Recreation Section [3.12] of the Continental Divide-Creston EIS); in contrast to the key destination-type attractions that are all located outside of the project area. Local events and cultural heritage sites also attract visitors.

An economic analysis of travel in Wyoming in 2005 estimated annual travel spending of \$144.3 million and \$113.9 million in Sweetwater and Carbon counties, respectively. That spending supported an estimated 1,930 jobs in Sweetwater County and 1,370 jobs in Carbon County (Dean Runyan Associates 2006). Analysis of the seasonal variations in employment in the accommodations and food-service sectors, and the comparative growth in spending in recent years, indicate that a significant portion of those totals reflect travel in the I-80 corridor and the impacts of energy workers residing temporarily in the communities, rather than more traditional destination-type tourism.² For instance, the variation between peak and low monthly employment in the Sweetwater County accommodations sector, which is the most sensitive to tourism, was about 15 percent compared to more than 28 percent statewide. And between 2002 and 2005, a period corresponding to the dramatic increase in natural gas development, estimated annual traveler spending increased by 44 percent in Sweetwater County and 39 percent in Carbon County, as compared to 23 percent elsewhere in the state. These indicators point to strong demand and potential competition between various segments of the travel/tourism markets, which translates into consistently high nightly room rates and occupancy levels for overnight lodging and strong demand for food services.

Local observations about the travel, tourism, and recreation economy in Carbon and Sweetwater counties help illuminate the findings of the Dean Runyan study. As noted above, the visitor economy in Carbon and Sweetwater counties is based on outdoor recreation and local events such as historic/cultural celebrations, competitions, conventions, and conferences. Sweetwater and Carbon counties do not have major tourism attractions such as Yellowstone and Grand Teton National Parks that attract destination visitors. Local tourism strategies in both counties include the promotion of outdoor recreation and events and promotion of natural features, recreation resources, and cultural heritage attractions in order to extend the stays of outdoor recreationists, event attendees, and I-80 travelers.

² "Travel" for the purposes of that analysis includes both business and pleasure travel by residents and non-residents that was more than 50 miles from the traveler's home. In the study area this would include spending by all travelers on I-80, as well as that by non-resident workers employed in the area on an extended basis but staying in local motels, hotels and campgrounds.

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The current natural gas expansion in Carbon and Sweetwater counties has had both beneficial and adverse effects on tourism and recreation-related businesses. In addition to the general across-the-board increase in business, the beneficial effects of the gas expansion include increases in customers and occupancy rates during the traditional winter and spring off-seasons, which increases the year-round profitability of businesses catering to travelers. High demand has also resulted in an increase in the number of lodging and dining establishments that increase the lodging and dining base for tourism and recreation visitors. High occupancy rates for lodging establishments has also resulted in a dramatic increase in lodging tax revenues; lodging tax revenues in Rawlins increased from \$110,000 to \$305,000 between FY 2002 and FY 2007 and from \$254,000 to \$582,000 in Rock Springs during the same period. Local tourism and recreation organizations have used these revenues to develop promotional materials and to promote events that bring visitors to the area and increase the average length of stay.

Adverse effects include the high occupancy rates in lodging establishments, particularly during summer months, which reduces lodging availability for recreationists, event attendees, and travelers on I-80. Most returning recreation visitors and event coordinators have adjusted to this situation by reserving blocks of rooms and notifying attendees of the necessity of advance booking.

Travel and tourism business, like most businesses in the study area have difficulty in recruiting and retaining employees during periods of energy expansion. Wages in the travel and tourism industry are typically below those of the natural gas industry, so it is difficult for travel/tourism businesses to compete for employees. As with most businesses in other sectors, the lower wages make competition for housing resources difficult, limiting the amount of non-local workers who can relocate to the area to accept employment in the travel and tourism industries (Radar 2007, Spicer 2008).

There has been recent concern about the effect that energy resource development may have on the amenity values of public lands and the resultant effects on tourism and recreation. Data on the contributions of such activity is unavailable on a consistent basis across all counties. Consequently, a simple proxy for tourism and recreation employment, based on total retail trade employment, combined with total services employment in 1990 and employment in accommodations and food services in 2005, was developed for this analysis. As shown in Table 3 below, employment in the designated sectors has grown more rapidly in Carbon and Sweetwater counties than in the peer group of all rural counties. In both cases, the demands associated with the energy industry, as well as pass-through travel on I-80 likely account for much of the change. And while these results do not preclude the potential that energy resource development has had some adverse impacts on tourism and outdoor recreation, it does suggest that the local gains in most businesses that serve tourism and recreation visitors exceed those that might have been expected absent energy resource development.

Table 3. Trends in Retail Trade and Service Employment

	All Rural	Carbon	Sweetwater
Private Employment (Pct. of Total)			
1990	69.3%	72.8%	81.4%
2005	74.2%	74.0%	83.9%
Retail and Services (Pct. of All Private) **			
1990	23.8%	23.4%	20.1%
2005	24.5%	28.5%	23.4%

** The retail and services shares included all services in 1990, but only the accommodations and food services in 2005. The change in accounting was necessitated by the switch from SIC to NAICS.

On a statewide basis, there is growing interest among tourism officials and the tourism industry concerning potential effects of the pace and level of gas development on vital tourism and recreation resources. These include natural resources such as wildlife, air quality, and viewsheds and the ability of tourism-related businesses to deliver basic services. Visitation levels at Wyoming's major tourist attractions do not appear to have been affected yet; 2007 was a record year for visitors to Yellowstone National Park (Casper Star Tribune 2008) and third-quarter lodging sales in Teton County, which serves both Yellowstone and Teton National Parks, grew by 14.7 percent over the previous year (WEAD 2007c). Tourism officials are nonetheless concerned about the potential long-term adverse effects of the combined loss of wildlife habitat and encroachment of gas fields on viewsheds near tourist destinations and along routes to those destinations. They are also concerned about the ability of travelers to major tourism destinations to find lodging in communities along routes to those destinations (Bryan 2008).

3.6 ENERGY DEVELOPMENT EFFECTS ON RETIREMENT MIGRATION AND NON-LOCATION-DEPENDENT BUSINESSES

Recent economic research has highlighted the role of amenity values of public lands in attracting retirement migration and non-location-dependent businesses for rural communities in the west, and some rural western communities have adopted attraction of retirement migration and non location-dependent businesses as a component of their overall economic development strategy. Public comments during the scoping for this EIS and on other natural-resource development actions in the region have expressed concern about the effects of energy development on the amenity values of public lands and the resultant effects on retirement migration, non-location-specific business attraction, and tourism/recreation visitation.

These topics, as related to the study area, are examined briefly below using an analytical framework combining comparative cross-sectional and time series analyses. A comparative approach is used because the primary subjects, e.g., retiree migration, non-location-specific business attraction, and tourism/recreation visitation are not directly observable or reported in available data. The analyses rely on county-level economic and population data from the U.S. Bureau of Economic Analysis and the U.S. Census Bureau for counties in Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming. The dataset spans the period 1990 to 2005. There are 249 counties in the six states. Of these, 198 are considered "rural" for the purposes of this analysis. The 51 counties excluded from the analysis included 43 counties with a population of 50,000 or more in 2005 and eight winter-resort counties, e.g., Pitkin, Colorado and Teton, Wyoming, whose economic structure is atypical of others in the region.

3.6.1 Per-Capita Personal Income

A common measure of economic health is per-capita personal income. Per-capita personal incomes have grown across the west. Between 1990 and 2005, average per-capita personal income across the 198 rural counties increased by 79 percent. The change in per-capita income in Carbon County over the same period was just slightly above that for all rural counties, in percentage terms. As a result, the margin in per-capita personal income for Carbon County residents climbed to a 19 percent margin above the overall average. Per-capita incomes in Sweetwater County grew by 108 percent during the same period, increasing the margin from 26 percent to 46 percent above the overall rural average (Table 4).

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Table 4. Comparative per-capita personal income, 1990 and 2005

	1990	2005
Average per-capita income All 198 rural counties	\$ 14,612	\$ 26,121
Carbon County		
Per-capita income	\$ 17,234	\$ 30,961
Percent of all rural	118%	119%
Sweetwater County		
Per-capita income	\$ 18,350	\$ 38,039
Percent of all rural	126%	146%

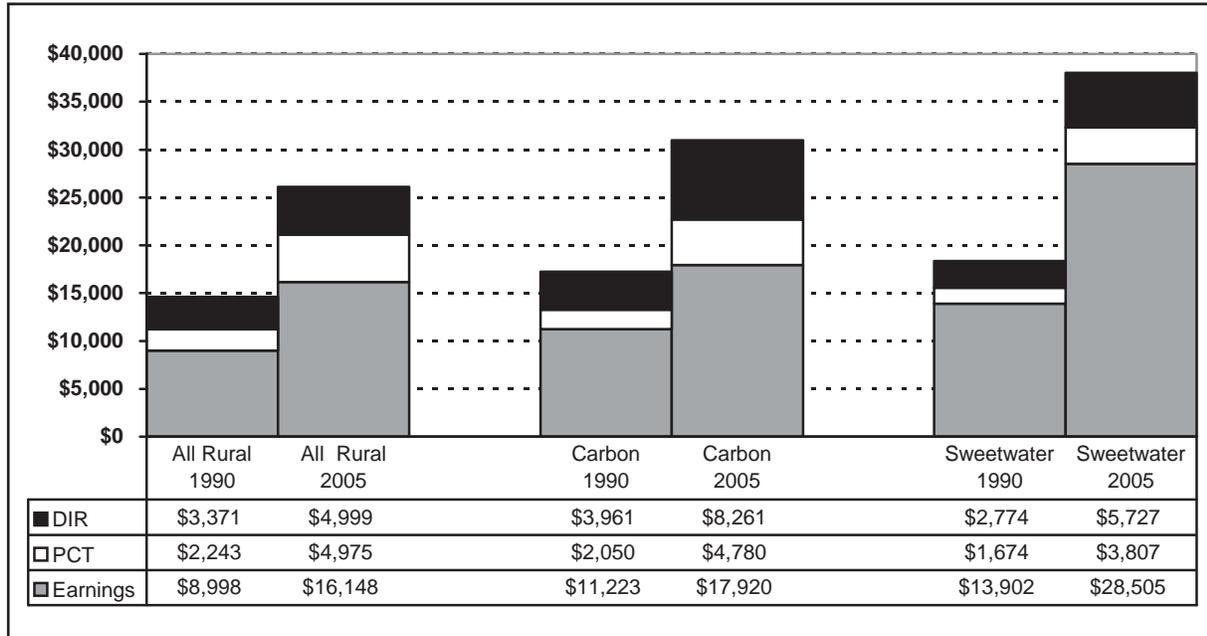
Source: U.S. BEA, 2007.

3.6.2 Contributions of Non-earned Income to Personal Income Growth

Higher wages and salaries were the major contributors to personal income growth during this period. However, non-earned income in the form of dividends, interest and rent (DIR), and personal current transfers (PCT), which includes unemployment, income maintenance, and retirement receipts, also increased rapidly. Such non-earned income, which tends to be positively correlated to retired populations, has become a topic of increased interest in rural economic development circles as it is seen as a mechanism to bolster local demand for retail trade and services.

An analysis of the constituents of local personal income across rural western counties reveals some differences in the absolute and relative contributions of earnings, DIR, and PCT (Figure 15). Across the rural counties, per-capita total personal income increased by \$11,509. Per-capita earnings, DIR, and PCT accounted for \$7,150 (62 percent), \$1,627 (14 percent), and \$2,732 (24 percent) of the net change, respectively. In Carbon County, DIR accounted for a larger role in the net change in income of \$13,727, \$4,300 (31 percent), compared to net earnings of \$6,697 (49 percent) and PCT of \$2,730 (20 percent). In Sweetwater County, earnings were the dominant factor, accounting for \$14,603 (74 percent) of the net increase of \$19,689. Although smaller in relative terms, the contributions of higher DIR and PCT were significant in absolute terms: \$2,953 and \$2,133, respectively.

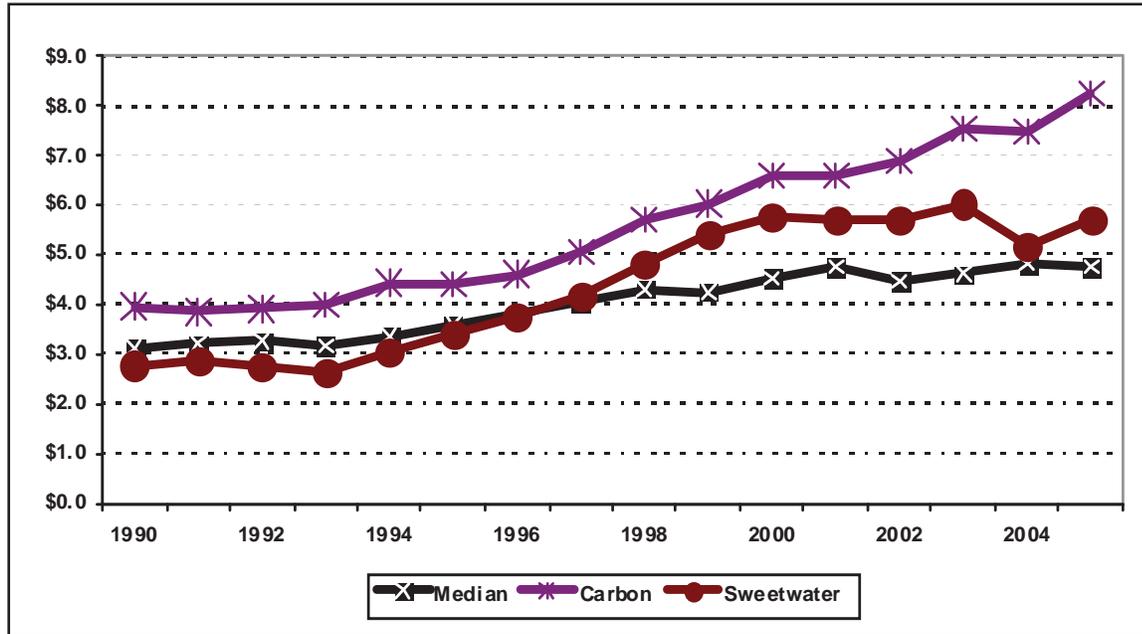
Figure 15. Major constituents of personal income, 1990 and 2005



Source: U.S. BEA, 2007.

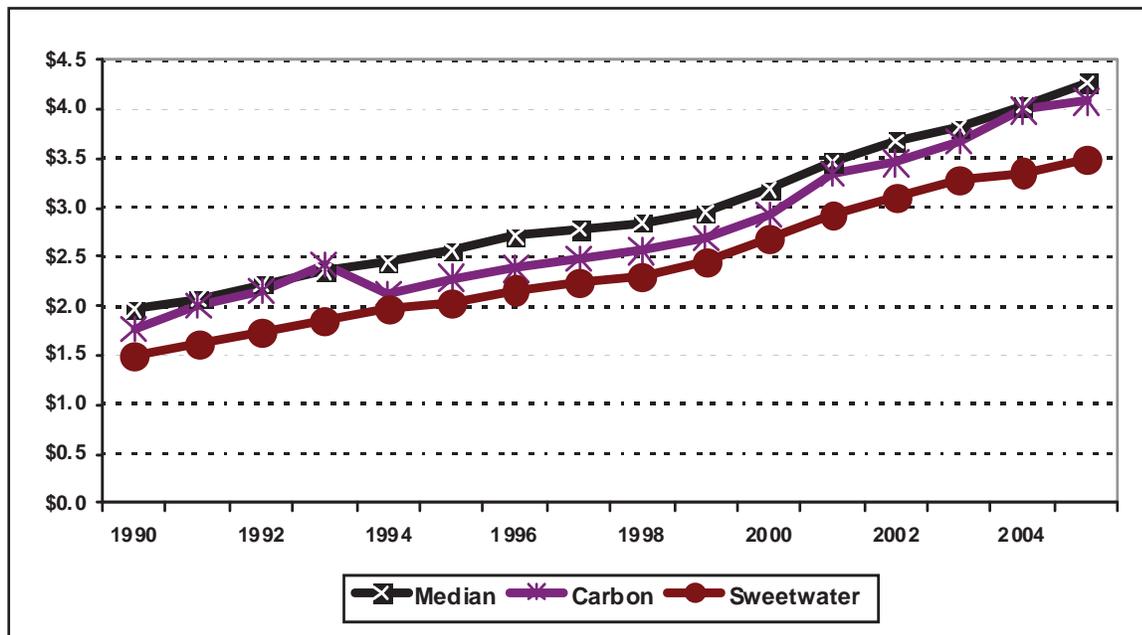
The growth trends in per-capita DIR and retirement income are shown in Figures 16 and 17 below. As shown, the pace of DIR growth in Carbon and Sweetwater counties has exceeded that of the peer group of rural counties, while the growth in per-capita retirement income has generally paralleled that for all rural counties. The latter is noteworthy given the high labor force participation in Sweetwater County and the large non-working population in Carbon County associated with the Wyoming State Penitentiary.

Figure 16. Per-capita dividends, interest and rent (DIR), 1990–2005



Source: U.S. BEA, 2007.

Figure 17. Trends in per-capita retirement and other income, 1990–2005



Source: U.S. BEA, 2007.

These trends suggest little or no difference in the influence of retirement income or migration within the region when compared to all rural counties.

Relatively few retirees relocate to Carbon and Sweetwater County from outside these counties. Some retirees move from smaller communities and ranches to Rawlins, Rock Springs, or Green River, and some retirees have accompanied family members relocating for employment purposes, but most of the growth in retirement appears to be associated with the aging of the resident workforce (Ducker 2007, Archer, 2007).

3.6.3 Non-Farm Proprietors and Non-Farm Proprietor Income

A common economic development goal for many rural areas is the attraction of location-independent professionals and professional service firms. Encouraging local start-ups is another common goal. Many of the individuals associated with such activities are proprietors, which as a group are important in the overall economy. The U.S. Bureau of Economic Analysis reports the number of farm and non-farm proprietors by county, using data from income tax records. The data are not reported by major industrial sector.

As a group, non-farm proprietors account for 22.8 percent of all jobs in the rural areas, up from 18.9 percent in 1990. Non-farm proprietors also accounted for an increasing share of total employment in Carbon and Sweetwater counties as shown in Table 5, although there are some key differences with respect to the two counties. Carbon County has experienced a more rapid rate of growth in the number of non-farm proprietors and such proprietors account for a larger share of employment when compared to the peer group of all rural counties. Because of the presence of the large trona and coal mines and soda-ash and fertilizer manufacturing, Sweetwater County has had relatively fewer proprietors and has seen lower growth in the number of non-farm proprietors and a substantially lower share of employment accounted for by such proprietors. The recent growth in energy development employment would contribute to the latter.

Table 5. Non-farm proprietors as a share of total employment

	All Rural	Carbon	Sweetwater
Non-farm Proprietors (Percent of Total)			
1990	18.9%	19.6%	12.9%
2005	22.8%	24.6%	13.9%

Source: U.S. BEA, 2007.

In addition to differences in the share of non-farm proprietors, there are noteworthy differences in non-farm proprietor earnings (Table 6). As shown, average annual incomes across the rural areas are substantially lower than in the urban and resort areas. Average annual income for non-farm proprietors in Carbon County, historically lower than the peer group, is now on par. However, the average income for non-farm proprietors in Sweetwater County is more than twice the average for all rural counties, and higher than even the averages for the urban and resort counties. The differences may indicate a higher tendency for part-time proprietors in rural areas as compared to Sweetwater County, or differences in the industries and activities in which non-farm proprietors are active in Sweetwater County.

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Table 6. Average income per non-farm proprietor, 1990–2005

	Rural	Urban	Resort	Carbon	Sweetwater	All
1990	\$ 12,107	\$ 12,961	\$ 14,048	\$ 10,768	\$ 23,869	\$ 12,381
1995	\$ 12,700	\$ 14,784	\$ 17,201	\$ 9,031	\$ 20,571	\$ 13,265
2000	\$ 14,356	\$ 19,071	\$ 21,252	\$ 13,195	\$ 33,387	\$ 15,545
2005	\$ 14,912	\$ 25,977	\$ 27,128	\$ 14,158	\$ 31,996	\$ 17,487
Change '90 to '05	123%	200%	193%	131%	134%	141%
Percent of Overall Average						
1990	98%	105%	113%	87%	193%	NA
2005	85%	149%	155%	81%	183%	NA

Source: U.S. BEA, 2007.

While the non-farm proprietor data reveal differences between Carbon and Sweetwater counties as compared to the peer group, they are inconclusive with respect to whether or not energy development stimulates or adversely affects the recruitment or operations of location-independent non-farm proprietors.

3.7 PERSONAL INCOME AND POVERTY

Residents of Sweetwater County had total personal income of \$1,446.2 million in 2005. The total personal income of Carbon County’s residents was \$471.5 million. Wages, salaries, and proprietors’ income accounted for the majority of total income in both counties, although non-labor earnings, including dividends, interest, and rent, were significant in both counties. Net negative residency adjustments, paid to workers whose permanent residence is elsewhere, were also registered in both counties. The net outflow was particularly noteworthy in Sweetwater County where a net outflow of nearly \$111 million occurred in 2005 (Table 7). Personal current transfer receipts are a significant source of income in the region, accounting for 10 percent of all income in Sweetwater and 15 percent of income in Carbon County.

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Table 7. Personal income, Sweetwater and Carbon Counties, 2005

	Sweetwater County	Carbon County
Derivation of personal income:		
Earnings by place of work	\$ 1,346.52 M	\$ 312.29 M
Net earnings adjustment for residency ¹	(110.70) M	(3.67) M
Dividends, interest, and rent	217.73 M	125.81 M
Personal current transfer receipts ²	144.74 M	72.79 M
Contributions for social insurance	(75.53) M	(35.72) M
Total personal income	\$ 1,446.19 M	\$ 471.51 M
Per-capita personal income (PCPI)	\$38,039	\$30,961
Wyoming statewide PCPI	\$37,305	\$37,305
Local PCPI / statewide PCPI	102%	83%

Source: U.S. Department of Commerce, Bureau of Economic Analysis, 2007.

M = Millions

¹ The net earnings adjustment for residency is the net inflow/outflow of earnings of local residents commuting to jobs in other counties, less earnings paid by local firms to workers commuting to work from other counties.

² Personal current transfer receipts are benefits received for which no current services are performed. Examples include unemployment, retirement and disability benefits, Medicare, and public medical and income maintenance. Pensions and annuities for private and government employee retirement plans are not included.

When taken on a per-capita basis, the personal income of Sweetwater County residents led the statewide average by a modest margin, about \$700 in 2005. The difference extends a long-established trend wherein per-capita personal income in the county has trailed the statewide average only four times since 1969. Per-capita personal income among Sweetwater County residents in 2005 was also more than 10 percent higher than the national average of \$34,471.

The relationship in Sweetwater contrasts with that in Carbon County where residents had an average income of \$30,961 per capita, about \$6,300 below the statewide average. In 1979, Carbon County residents enjoyed a per-capita income 18 percent above the statewide average. By 1984, local income had declined to the point of being on par with the statewide average. Local income growth since then has not kept pace with the statewide average, creating a “gap” that continues to grow.

The income disparities are also apparent in the 1999 median household income, which accounts for differences in household size: \$28,702 in Sweetwater, \$30,979 in Carbon, and \$33,024 statewide, compared to \$41,994 for the nation as a whole.

3.7.1 Poverty and Median Household Income

The national average for the incidence of poverty in 1999 was 11.9 percent (Table 8). The poverty rate for Wyoming was slightly lower at 11.2 percent. Relatively fewer people were in poverty in Sweetwater County (8.3 percent), with the incidence of poverty in Carbon County comparable to the national average. The comparative economic welfare of individuals and households is mirrored in the estimated median household incomes, with \$36,291 in Carbon County trailing both the statewide and national averages, while \$48,434 in Sweetwater County was 29 percent higher than the statewide average.

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Table 8. Incidence of poverty and median household income, 1999 and 2004

Area	1999		2004	
	Percent in Poverty	Median Household Income	Percent in Poverty	Median Household Income
Carbon County	11.9%	\$36,291	11.8%	\$40,750
Sweetwater County	8.3%	\$48,434	8.1%	\$54,700
Wyoming	11.2%	\$37,480	10.3%	\$43,785
United States	11.9%	\$40,696	11.8%	\$44,334

Source: U.S Census Bureau, 2006.

The favorable economic times tied to recent energy resource and mineral development in the region and across the state have boosted median household incomes and lowered local poverty rates slightly, even as the statewide rates declined by nearly a full percent.

3.8 COST OF LIVING

Per-capita and median household incomes provide one perspective on economic welfare. The cost of living provides a counterbalancing perspective. The Wyoming Department of Administration and Information compiles a quarterly Wyoming Cost of Living Index (WCLI) for 28 cities and towns across the state, at least one of which is located in each county. The index is based on the costs of 140 items and services, weighted according to their relative role in the typical consumer’s budget. Housing and transportation are the two largest categories, collectively accounting for over 65 percent of the total index. The statewide index is assigned a value of 100 and is the basis for computing the index value for the other locations.

Six communities registered index values of over 100 in the Fourth Quarter 2006 WCLI. Teton County/Jackson, with an index value of 133, rated the most expensive Wyoming community in which to live. Sweetwater County, the rating for which reflects a composite of prices in Rock Springs and Green River, ranked third highest at 107. The high cost of rental housing was a major contributor to that rating as the costs of food, apparel, and recreation were below the statewide averages. Carbon County, which reflects prices in Rawlins, ranked sixth highest at 103 with above statewide average costs in every category (WDAI 2007).

One indication of the effects of natural gas development on the cost of living in the study area is the recent increase in rental-housing rates, particularly in Carbon County. As shown in Table 9, the changes in Sweetwater County rental-housing costs exceeded the statewide average in every category between fourth quarter 2005 and fourth quarter 2006. Carbon County rental housing increases in the same period were remarkable, ranging from 23.9 percent in rental housing, 14 percentage points higher than the statewide average, to 125.5 percent in mobile home lot-rental costs, nearly ten times the statewide average.

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Table 9. Rental housing cost increase: Fourth Quarter 2005–Fourth Quarter 2006

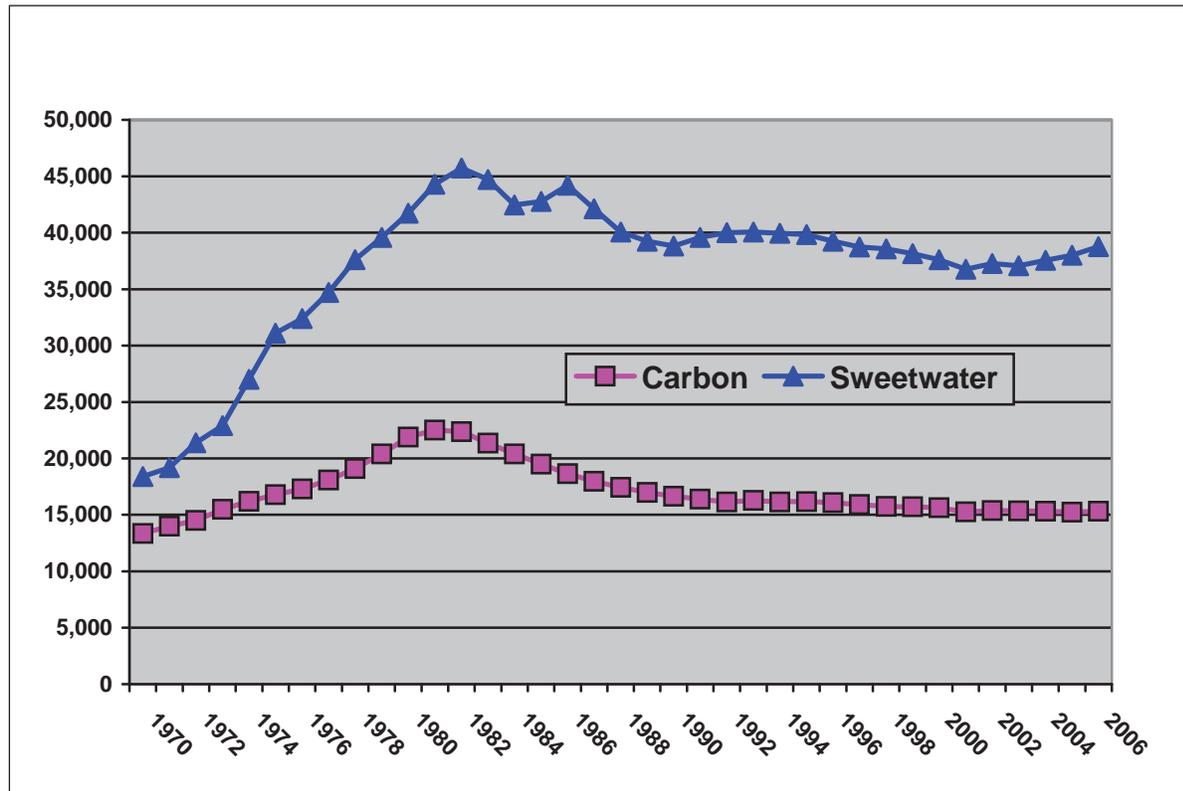
	Apartment	Mobile Home Lot	House	Mobile Home
Carbon County	52.5%	125.5%	23.9%	53.9%
Sweetwater County	10.0%	12.8%	19.2%	13.2%
Wyoming Statewide Average	8.4%	12.3%	10.0%	11.1%

Source: WDAI, 2007.

4. POPULATION AND DEMOGRAPHICS

Figure 18 displays population statistics for Carbon and Sweetwater counties between 1970 and 2006. These statistics show the population effects of the mining and energy expansion, which began in the early 1970s, peaked in the early 1980s in both counties, and then began to decline. Carbon County population increased by 69 percent between 1970 and 1982 and Sweetwater County population increased by 149 percent. Sweetwater County experienced a brief resurgence of the boom in the mid-1980s during construction of the Exxon La Barge gas-sweetening plant, expansion of the Jim Bridger power plant, construction of the Chevron Phosphate plant east of Rock Springs, and expansion of Western Wyoming College.

Figure 18. Population, Carbon and Sweetwater Counties: 1970–2006



Source: Assembled from Wyoming Department of Administration and Information, Division of Economic Analysis U.S. Census Bureau reports. 1960, 1970, 1980, 1990 and 2000 population are Census data; other years are population estimates produced by U.S. Census Bureau; officially revised Census numbers are reflected in this table.

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Sweetwater County population showed modest upward trends in the 1990s resulting from a number of construction projects and ongoing maintenance of mining and energy facilities. The county’s recent natural gas-related growth surge began in 2004 (Table 10), though local resident population remained about 6,000 residents below the peak in 1981-82. Carbon County continued its downward trend for much of the 1990s, stabilizing between 15,000 and 15,500 during the first half of the decade beginning in 2000.

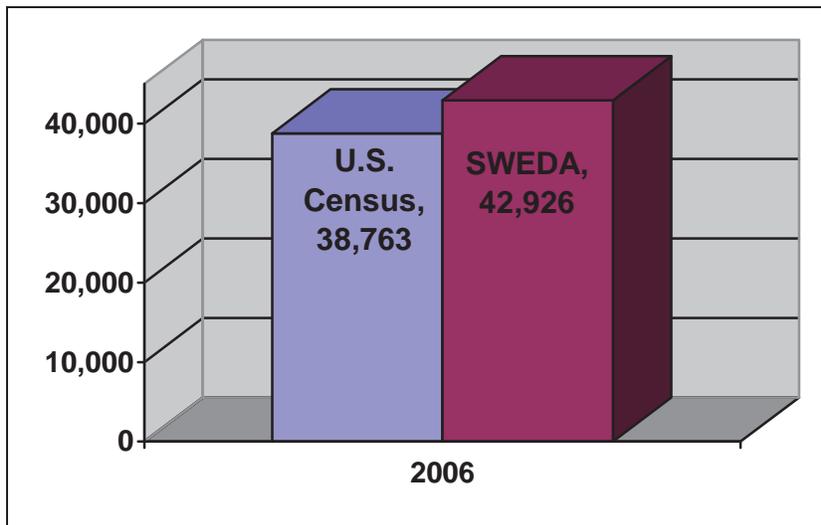
Table 10. Annual population estimates, Carbon and Sweetwater Counties: April 1, 2000 to July 1, 2006

	2000	2001	2002	2003	2004	2005	2006	Change	%Change
Wyoming	493,782	494,067	498,963	501,490	505,534	508,798	515,004	21,222	4.3%
Carbon	15,639	15,255	15,374	15,344	15,335	15,229	15,325	-314	-2%
Sweetwater	37,613	36,767	37,286	37,065	37,544	38,019	38,763	1,150	3.1%

Source: Population Division, U.S. Census Bureau March 20, 2007.

Sweetwater and Carbon County officials believe that U.S. Census population estimates do not fully reflect the population growth during the boom years. SWEDA developed population estimates for the county and its incorporated municipalities, based on residential utility hook-ups and an average persons-per-household estimate (2.58) obtained from the Wyoming Department of Research and Planning. As shown in Figure 19, the 2006 SWEDA estimate is over 11 percent higher than the Census estimate.

Figure 19. Sweetwater County 2006 population estimates: U.S. Census Bureau and SWEDA



Sources: Population Division, U.S. Census Bureau March 20, 2007 and SWEDA 2007. The Census estimate is for July 2006 and the SWEDA estimate is for December 2006.

The components of population-change statistics shown in Table 11 show net out-migration of population in both counties between 2000 and 2006. Again these statistics do not capture the large temporary population in both counties that accompanied the recent surge in natural gas development.

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Table 11. Components of population change for Wyoming and Carbon and Sweetwater Counties: April 1, 2000–July 1, 2006

	Total Population Change	Natural Increase			Net Migration		
		Total	Births	Deaths	Total	Net International Migration	Net Domestic Migration
Wyoming	21,222	15,734	41,063	25,329	6,934	2,323	4,611
Carbon	-314	292	1,180	888	-559	46	-605
Sweetwater	1,150	1,837	3,493	1,656	-597	254	-851

Source: Population Division, U.S. Census Bureau March 20, 2007, Compiled by Wyoming Dept. of A & I, Economic Analysis Division.

Table 12 displays population statistics for selected communities in Carbon and Sweetwater counties. Again these statistics do not reflect the increases in temporary population associated with the surge in natural gas development. In Carbon County, the population loss reflected in the statistics occurred in Rawlins and Sinclair; other areas of the county remained relatively stable with modest gains. In Sweetwater County, Rock Springs, Green River, and Wamsutter population statistics show modest gains, while Superior showed modest losses and Bairoil remained constant during this period. Other areas of the county had modest gains.

Table 12. Population estimates for selected Carbon and Sweetwater County municipalities: 2000–2005

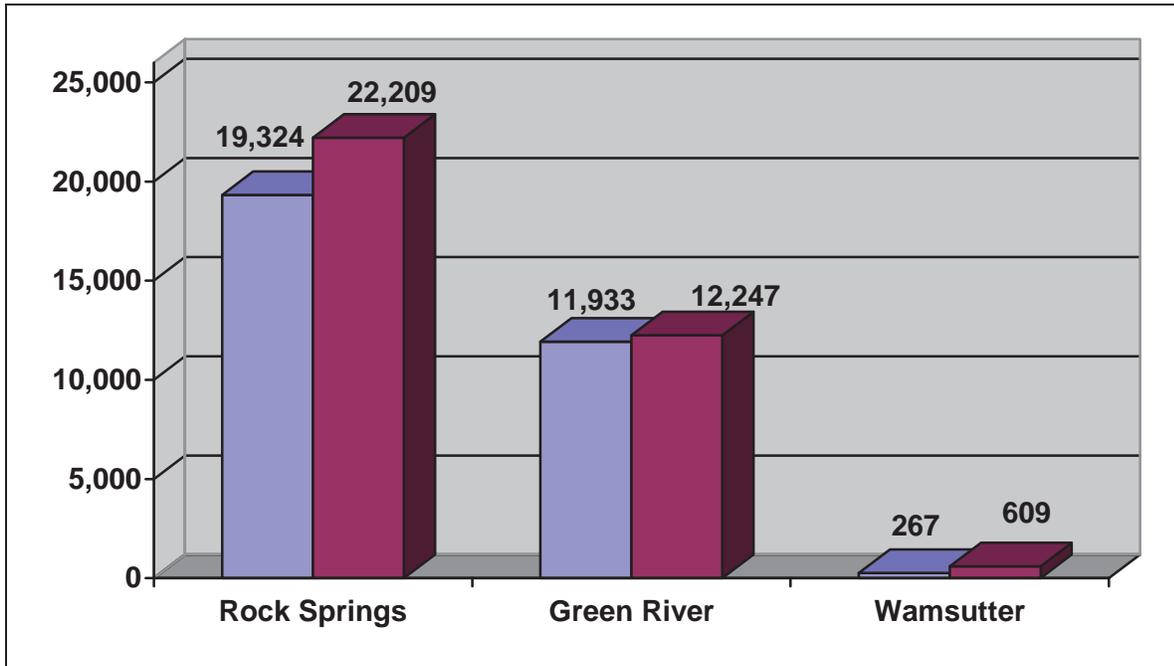
	2000	2001	2002	2003	2004	2005	2006	Change	% Chg
Carbon County									
Rawlins	9,006	8,655	8,725	8,702	8,692	8,658	8,621	-385	-4.3%
Sinclair	423	416	415	412	409	406	403	-20	-4.7%
Baggs	348	354	356	356	355	354	367	19	5.5%
Dixon	79	79	79	80	81	81	80	1	1.3%
Balance/County	5,783	5,755	5,807	5,812	5,809	5,832	5,854	71	0.01%
Sweetwater County									
Rock Springs	18,649	18,215	18,490	18,402	18,658	18,772	19,324	675	3.6%
Green River	11,808	11,518	11,658	11,582	11,740	11,787	11,933	125	1.1%
Wamsutter	261	256	261	261	264	265	267	6	2.3%
Bairoil	97	95	96	95	96	96	97	0	0%
Superior	244	237	240	238	240	239	240	-4	-1.6%
Balance/County	6,554	6,445	6,549	6,520	6,572	6,816	6,902	348	5%

Source: Population Division, U.S. Census Bureau Release Date: June 21, 2006, compiled by Wyoming Dept. of A & I, Economic Analysis Division.

There is substantial local disagreement with recent U.S. Census Bureau population estimates for communities in Sweetwater County and western Carbon County. Figure 20 below contrasts U.S. Census Bureau 2006 population estimates with those prepared by SWEDA. SWEDA’s estimates are 15 percent higher in Rock Springs, 3 percent higher in Green River and 128 percent higher in Wamsutter. Although

they have not prepared their own estimates, Rawlins and Baggs officials also believe that the U.S. Census Bureau estimates for 2006 substantially underestimate population in their communities, based on increases in utility hook-ups and building permits (Derragon 2008, Corners 2007).

Figure 20. Sweetwater County community 2006 population estimates: U.S. Census Bureau and SWEDA



Sources: Population Division, U.S. Census Bureau March 20, 2007, Compiled by Wyoming Dept. of A & I, Economic Analysis Division and SWEDA 2007. The Census estimate is for July 2006 and the SWEDA estimate is for December 2006. SWEDA estimates do not contain estimates for unincorporated taxing districts adjacent to the municipalities.

The U.S. Census Bureau also estimates the age and racial characteristics of population in counties (see Table 13). Based on the estimates for 2006, residents of Carbon County tend to be older than those in Sweetwater County, the State of Wyoming, and the United States overall. In Carbon County, nearly one of five residents is 65 years or older, as compared to less than one in eight in the State of Wyoming. The median age has increased slightly in the past six years.

The largest share of population in both counties are persons aged 18 to 64 years, and this group of working-age persons has increased more in the last six years than have the other age groups. In Carbon County, the number of persons aged 18 to 64 increased by 11.9 percent from 2000 to 2006, while the number of persons under age 17 decreased by 10.5 percent and the number of persons 65 years and older increased slightly, by 1.2 percent. In Sweetwater County, the number of persons aged 18 to 64 increased by 21.4 percent from 2000 to 2006, while the number of young persons under age 17 decreased by 4.0 percent and the number of persons 65 years and older increased by 6.4 percent. Increases in the number of working-age persons in these counties can be correlated to recent increases in jobs, particularly in the mining sector, which attracts a high portion of working adults. Also consistent with this pattern is the number of natural gas-related jobs attracting younger male workers who are unmarried or are not accompanied by school-age children. In addition, the number of mining-sector jobs has increased significantly in Sweetwater compared to Carbon County, which is also reflected in the significant increase in working-age adults in Sweetwater County as compared to Carbon County.

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Table 13. Age distribution and median age of resident population in 2006: Carbon & Sweetwater Counties, Wyoming and U.S.

	Under 18	18 to 64	65 & Over	Median Age 2000	Median Age 2006
Carbon	17.7%	62.6%	19.7%	38.9	41.1
Sweetwater	22.0%	64.6%	13.4%	34.3	35.4
State of Wyoming	23.6%	64.2%	12.2%	35.3	36.1
United States	24.6%	62.9%	12.4%	34.4	35.4

Source: U.S. Census Bureau, Estimates Program, 2007.

The racial and ethnic compositions of the local populations reflect the influences of migration, historical settlement patterns, and economic factors. From the 2000 Census, Carbon County’s resident population was 82.4 percent white and not Hispanic or Latino, with 17.6 percent of the population being made up of persons of other races, multiple races, and/or of Hispanic or Latino ethnicity. Sweetwater County had a larger share of the population that is white and not Hispanic or Latino, with 86.9 percent of the population as non-Hispanic white and 13.1 percent of the population being made up of persons of other races, multiple races, and/or Hispanic or Latino ethnicity. Though the percentage share of racial and ethnic minorities in these two counties was higher than for the State of Wyoming as a whole, the percentage share of racial and ethnic minorities in these two counties was much lower than that for the United States. The largest racial and ethnic minority group in both counties was Hispanic and Latino, making up 13.8 percent of the Carbon County population and 9.4 percent of the Sweetwater County population (Table 14).

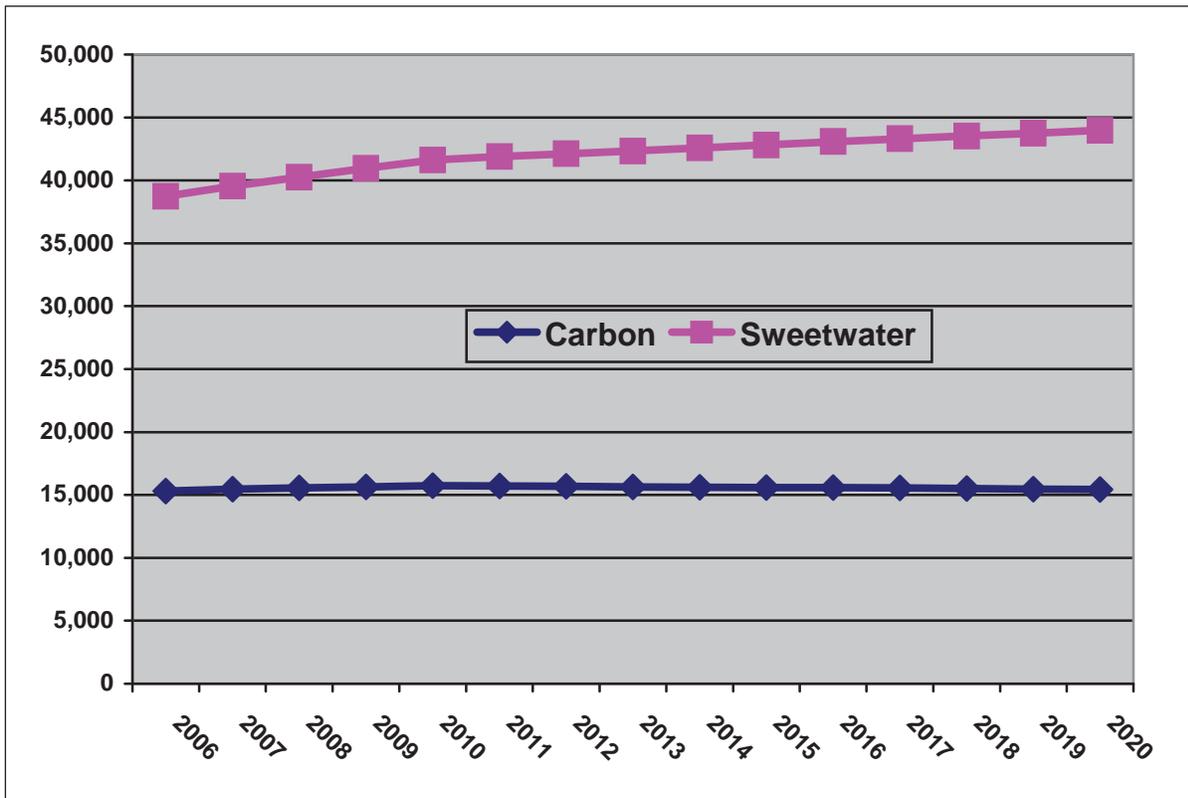
Table 14. Racial and ethnic population composition as a percent of total population, 2000: Carbon & Sweetwater Counties, Wyoming and U.S.

	White and not Hispanic or Latino	American Indian and Alaska Native and not Hispanic or Latino	Other Races, Two or More Races, and not Hispanic or Latino	Hispanic or Latino Ethnicity
Carbon County	82.4%	1.1%	2.6%	13.8%
Sweetwater County	86.9%	0.8%	2.9%	9.4%
State of Wyoming	88.9%	2.1%	2.6%	6.4%
United States	69.1%	0.7%	17.6%	12.5%

Source: U.S. Census Bureau, 2000 Census, Summary File 1, 2001.

The Economic Analysis Division of the Wyoming Department of Administration and Information prepares population forecasts for Wyoming and its counties and municipalities. The most recent forecasts (see Figure 21) at the time of this assessment show Carbon County population remaining relatively stable, between 15,320 and 15,730 over the next 15 years, with modest (less than 3 percent) growth during the next five years. The forecasts show Sweetwater County population trending upward, increasing from 38,740 in 2006 to 43,990 in 2020—an increase of 5,250 or 14 percent during the 15-year period. Local officials believe these forecasts do not adequately reflect the level of natural gas development anticipated to occur during this period.

Figure 21. Population forecasts for Carbon & Sweetwater Counties: 2006–2020



Source: Wyoming Department of A & I, Economic Analysis Division (<http://eadiv.state.wy.us>), December 2006.

Note: 2006 to 2020 state and county population forecasts were developed based on trends of demographic and economic variables.

5. HOUSING

This section provides information about conventional and temporary housing resources in the study area. For this assessment, conventional housing includes single and multifamily residences and mobile homes. Temporary housing includes motels, hotels, recreational vehicle parks, and temporary living facilities. Most housing within the study area is located within communities. Rural subdivisions exist in both counties, but both counties discourage rural residential subdivisions of substantial size or density.

Housing, particularly affordable housing, is one of the two key issues routinely cited by the local officials, service administrators, and local residents interviewed for this assessment. In fact, affordable housing or the lack thereof affects employment recruitment and retention, the second key issue cited by interviewees. The lack of affordable housing in the area also contributes to the single-status worker phenomenon, wherein workers relocate to the study area in single status, in part because they cannot find suitable affordable housing to accommodate their households. The high proportion of single-status gas-field workers and the resulting scarcity of other household members results in fewer workers to fill secondary jobs. Potential non-local secondary workers have difficulty relocating to communities in the study area because their lower earnings place them at a competitive disadvantage with the higher-paid gas-field workers for available housing. This phenomenon compounds the shortage of workers in the study area, as discussed in Section 1.2.2.1.

5.1 CARBON COUNTY

The 2000 Census tallied 8,307 housing units in Carbon County, 74 percent of which were occupied and 26 percent of which were vacant. Nearly half of the vacancies were homes held for seasonal use. Some of the remaining vacancies were homes in substandard condition. Of the occupied units, 71 percent were owner-occupied and 29 percent were renter-occupied (Table 15). In the intervening years since the 2000 Census, occupancy rates have risen substantially, with communities in the western part of the county reporting virtually no vacant habitable units at the time of this assessment.

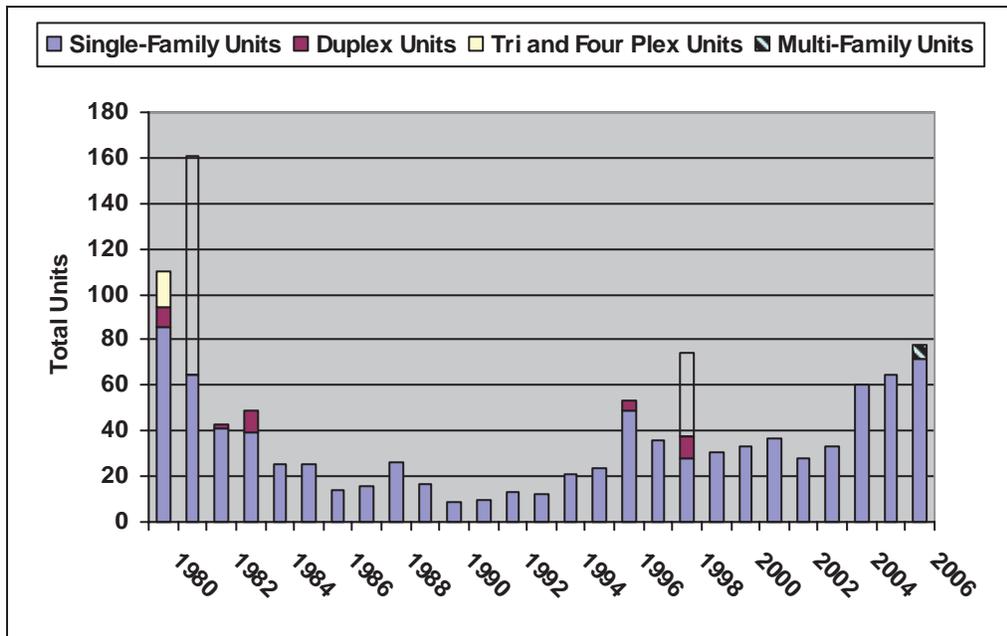
Table 15. 2000 Census, Carbon County housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
8,307	6,129	2,178	1,050	4.7	16.9	4,354	1,775

Source: U.S. Census Bureau, Census 2000.

Figure 22 displays annual residential housing-unit building permits for Carbon County from 1980 through 2007. The bulk of permits were issued in the early 1980s with a brief surge in building in the mid- to late 1990s. Since 2000, county building permits averaged 50 per year, although the number of permits issued has climbed steadily during 2004 - 2006. In 2006, 78 building permits were issued for residential units in Carbon County. Of those 72 (92 percent) were for single family homes.

Figure 22. Annual residential building permits, Carbon County: 1980–2006**



** Permits for new residential units issued by the county and local municipalities.

Sources: 1980–2005: Wyoming Housing Database Partnership, Carbon County Profile, Table II.4.5, Building Permits and Valuation, 1980–2006, downloaded May 11, 2007; 2006: WEAD. Annual Total Residential Building Permits for Wyoming and Counties, accessed July 16, 2007.

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In recent years, several large, temporary living facilities have been built for workers near the gas fields in Carbon County. A temporary living facility developed along WY 789 north of Dad for Devon Energy currently houses about 80 workers and can be expanded to house a total of 150 workers (Adams 2005). A second camp has been developed along WY 789 for Nabors Drilling and a third camp has recently been proposed.

5.1.1 City of Rawlins

Information about housing conditions in Rawlins was obtained from the 2007 Rawlins Housing Assessment (Kirkham & Associates LLC 2007) and from other primary and secondary sources as cited. The housing assessment is intended to assist city officials, community leaders, and developers in planning for infrastructure and housing development in response to current and future growth.

The 2000 Census counted 3,860 housing units in the City of Rawlins, 86 percent of which were occupied and 14 percent of which were vacant. Eighty percent of the city's housing stock is at least 30 years old. Houses vacant for seasonal use total just over one percent of total housing. Some of the remaining vacancies were homes in substandard condition. Of the occupied units, 68 percent were owner-occupied and 32 percent were renter-occupied (Table 16).

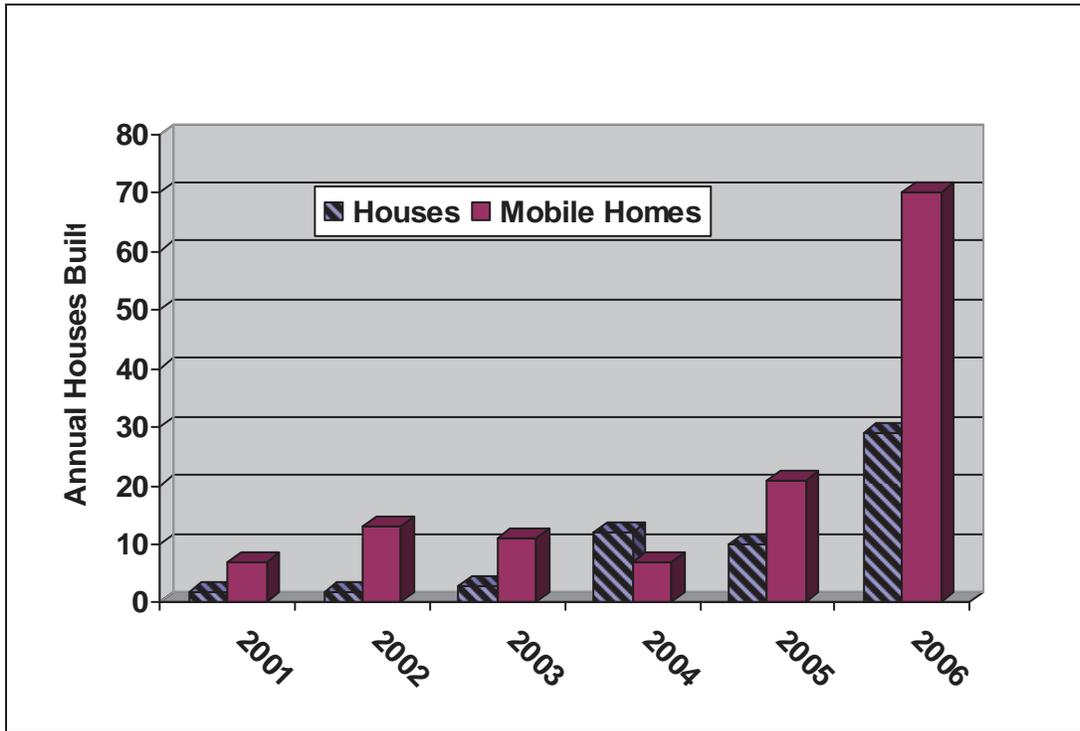
Table 16. 2000 Census, Rawlins housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
3,860	3,320	540	50	4.1	17.3	2,247	1,073

Source: U.S. Census Bureau, Census 2000.

Figure 23 displays the number of residential building permits and mobile home set-up permits within the City of Rawlins for 2001 through 2006. Residential building permits increased from two in 2001 to 29 in 2006. Mobile home set-ups increased from seven in 2001 to 70 in 2006. The increase in mobile home placements is associated with the expansion of two mobile home parks (RDT 2007).

Figure 23. Rawlins residential building permits and mobile home set-ups: 2004–2006



Source: RDT, 2007.

Rawlins has 11 apartment complexes with a total of 439 units. The newest of these is an 85-unit complex built in 1997, although the Bitter Creek low-income rent-assisted apartments were rehabilitated in 2003. The Wyoming Housing Database Partnership estimated that rental housing vacancies were less than 1 percent in December 2006. According to the 2007 Housing Assessment, there have been no apartment vacancies over the past year and most complexes had waiting lists ranging from five to 75 applicants. Adjusted for duplicate applicants, it is estimated that there was a total of 131 applicants on waiting lists during the summer of 2007. Monthly rental rates for apartments ranged from \$358 (subsidized) to \$1,800. Estimated average rental rates for apartments in Carbon County were \$619 in the second quarter of 2006, about 13 percent higher than the statewide average. Average rents in the first quarter of 2007 were estimated at \$781. One of the low-income apartment complexes is moving to a market-based rent structure no longer accepting U.S. housing and Urban Development rent vouchers from low-income residents. This could displace 52 low-income families. The 2007 Housing Assessment estimates that the city needs 170 additional multi-family units, of which 100 should be rent-assisted. The Wyoming Department of Corrections is considering renovating a modular facility at the Wyoming State Penitentiary Complex for use as short-term dormitories for newly-hired employees.

Rawlins has 19 mobile home parks but had virtually no vacancies during the summer of 2007. In recent years, three mobile home parks with a total of 146 pads were converted to lot ownership where the mobile home owner also owns the lot. The 2007 Housing Assessment projects demand for three new mobile home parks in Rawlins by 2010.

The 2007 Rawlins Housing Assessment defines affordable housing as being priced at \$160,000 or below, although lower-income buyers would need assistance to purchase a house at the higher end of this range. Average housing construction costs were estimated upwards of \$160 per square foot during summer of

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2007, which would yield a construction cost as high as \$192,000 for a modest 1,100 to 1,200 square-foot home.

The 2007 Housing Assessment estimated that Rawlins would need an additional 72 homes per year for the next three years. As of the summer of 2007, no new subdivisions had been approved within the City of Rawlins since 1998. There were approximately 100 vacant lots in subdivisions during the summer of 2007 (Mika 2007). According to the 2007 Housing Assessment, all available vacant lots have been purchased by contractors and developers. There are about 30 vacant infill lots in the City and about 50 substandard housing units that are uninhabitable (*ibid*). The city is exploring the feasibility of demolishing vacant substandard units and placing affordable modular housing on the lots. The first project in this initiative involved two city-owned lots. The city also purchased an unimproved 50-acre tract that it intends to use for affordable housing. Current estimates are that 300 to 400 single-family, townhouse, and apartment units could be developed on this parcel at a sales-price range of \$190,000 or less. A 100-unit subdivision is proposed north of the Highland Hills neighborhood.

Rawlins has 22 motels with a total of over 1,000 rooms. During winter months, some motels offer weekly or monthly rates and are typically filled with energy industry workers. Discounted rates are rarely offered during summer. Although most of the larger motels try to reserve some rooms for travelers, most motels fill early during summer months.

Rawlins has no housing dedicated for seniors and no housing facilities for the homeless.

5.1.2 Baggs

The 2000 Census counted 197 total housing units in the Town of Baggs, 75 percent of which were occupied and 25 percent of which were vacant. Houses vacant for seasonal use totaled 4 percent of total housing. Of the occupied units, 73 percent were owner-occupied and 27 percent were renter-occupied (see Table 17).

Table 17. 2000 Census, Baggs housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
197	147	50	8	0.9	23.1	107	40

Source: U.S. Census Bureau, Census 2000.

There have been some additions to the housing stock in Baggs since 2000 and additional housing is planned. A developer is planning six lots within the town and another developer purchased 16 lots adjacent to the town and has connected the subdivision to the town's water and wastewater mains. Most housing in the Baggs area is manufactured housing and mobile homes. There is little available rental housing and rents have increased dramatically in recent months (Corners 2007).

In the Baggs area, temporary housing resources include two motels with a total of 64 rooms and a 26-space mobile home park equipped to accommodate RVs and mobile homes. Within the park there are several mobile homes for rent, but again, these are rarely vacant.

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5.1.3 Dixon

The 2000 Census counted 67 total housing units in the Town of Dixon, 61 percent of which were occupied and 39 percent were vacant. Houses vacant for seasonal use totaled 21 percent of total housing. Of the occupied units, 93 percent were owner occupied and 7 percent were renter occupied (see Table 18).

Table 18. 2000 Census, Dixon housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
67	41	26	14	0.0	0.0	38	3

Source: U.S. Census Bureau, Census 2000.

5.2 SWEETWATER COUNTY

The 2000 Census enumerated 15,921 total housing units in Sweetwater County, 89 percent of which were occupied and 11 percent were vacant. Houses vacant for seasonal use totaled about 1.5 percent of total housing. Of the occupied units, 75 percent were owner-occupied and 25 percent were renter-occupied (Table 19).

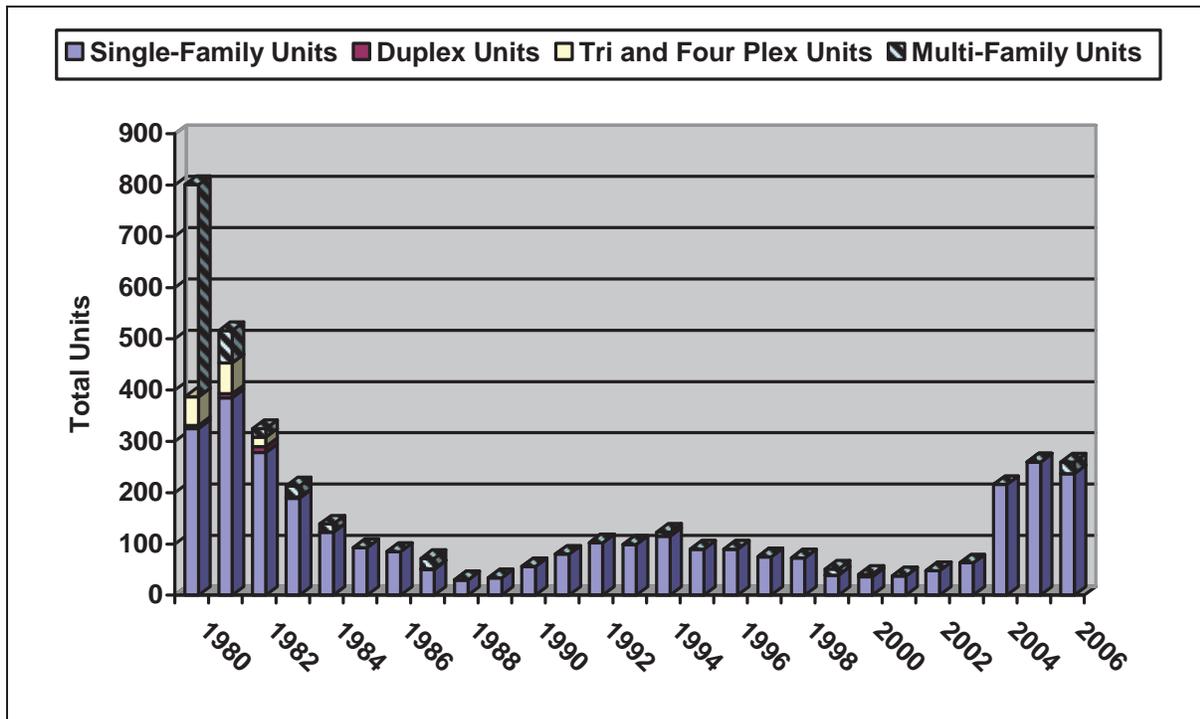
Table 19. 2000 Census Sweetwater County Housing Profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
15,921	14,105	1,816	243	2.6	16.2	10,586	3,519

Source: U.S. Census Bureau, Census 2000.

Figure 24 displays annual building permits for Sweetwater County from 1980 through 2006. In the first few years of the 1980s Sweetwater County was adding housing to accommodate energy and mining workers. Sweetwater County entities issued a total of 2,224 building permits from 1980 through 1987. Housing demand declined sharply during the economic contractions that followed the completion of construction at the power plant and major capital expansions at the trona mines. Consequently, total county building permits averaged less than 70 per year for the next 16 years. New residential construction increased dramatically in 2004, totaling over 200 units annually from 2004 through 2006.

Figure 24. Annual Sweetwater County building permits: 1980–2006 **



** Permits for new residential units issued by the county and local municipalities.

Sources: 1980–2005: Wyoming Housing Database Partnership; 2006: WEAD.

The Wyoming Housing Database Partnership estimated that rental housing vacancy rates in Sweetwater County were less than 1 percent in December 2006. The tight housing market is reflected in rising rents; the average apartment rental rate rose from \$512 in the second quarter of 2005 to \$684 in the second quarter of 2006, an increase of almost 34 percent in one year. Average rental rates of detached single-family homes increased approximately 21 percent during the same period while the average monthly rent for mobile homes increased almost 13 percent and the average rent for a mobile home lot rose by 11 percent. As elsewhere in southwestern Wyoming, the shortage and high cost of rental housing is a constraining factor on employee relocation and on the ability of people on low or fixed incomes to acquire and retain rental housing.

One large temporary living facility has recently been developed just north of the Sweetwater County community of Wamsutter. ESS Support Services, under contract to BP, has developed a 250-bed facility with food service, housekeeping, and recreation facilities. The Wamsutter Base Camp is open to BP employees and contractors. The facility is permitted for 500 beds and will expand as demand emerges. ESS provides transportation to and from work sites and the Rock Springs airport. The facility also provides catering services for rig moves and other gas-field events (Van Rensburg 2007).

5.2.1 City of Rock Springs

The 2000 Census counted 8,359 total housing units in Rock Springs, 88 percent of which were occupied and 12 percent of which were vacant. Houses vacant for seasonal use totaled less than 1 percent of total housing. Of the occupied units, 72 percent were owner-occupied and 28 percent were renter-occupied (Table 20).

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Table 20. 2000 Census, Rock Springs housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
8,359	7,348	1,011	63	3.1	18.2	5,274	2,074

Source: U.S. Census Bureau, Census 2000.

Rock Springs has seen dramatic changes in housing conditions since the 2000 Census, particularly in the past three to four years, driven primarily by the increase in demand associated with natural gas development.

The City of Rock Springs issued a Final Housing Plan (the Housing Plan) in September of 2007 to inform the community about anticipated housing needs and potential housing development opportunities in the city (City of Rock Springs Housing and Community Development 2007). The Housing Plan identified 1,560 acres of land used for residential purposes and 8,899 housing units located within the city during January of 2007 (see Table 21). Table 21 displays the distribution of housing units by type within the city. Single-family units were the predominant form of housing with 60 percent of all housing being single-family detached units.

Table 21. Rock Springs total housing units by housing type: January 2007

Housing Unit Type	# Housing Units	Percent of Total
Detached Single Family	5,319	60
Attached Single Family	886	10
Mobile Homes	1,447	16
Apartments	1,247	14
Total	8,899	100

Source: City of Rock Springs Housing and Community Development 2007.

The number of housing units in Rock Springs grew by about 8 percent, 685 units, between 2004 and January 2007 according to the Housing Plan. This generally coincides with the period of intensified natural gas development in the region.

The January 2007 inventory conducted for the Housing Plan identified 705 vacant residential lots, but noted that these lots were not all available for sale and development. The City approved 33 new subdivisions between January 2004 and May of 2007. Of those, 25 subdivisions were for residential development with the potential to create over 2,000 residential lots. If all subdivision applications submitted to the Rock Springs Planning Department as of June 2007 were approved, an additional 1,385 new residential lots within the City would be available for development.

The average price of an improved residential property (a lot with a house) in Rock Springs during 2006 was \$175,500, about 28 percent higher than the 2004 average of \$137,500. The average price for unimproved residential property (a vacant building lot) increased from \$48,958 in 2004 to \$160,989 in 2006, or 229 percent. According to the Housing Plan, these increases can largely be attributed to a shortage in available housing inventory and strong housing demands from an incoming workforce.

Although not establishing an affordable housing threshold, the Housing Plan suggests that given the relatively high per-capita personal incomes in Rock Springs (\$38,039 in 2005), many local workers in Rock Springs could afford an average-priced home, if it were available.³ In addition, given the relatively large number of two-income households (43 percent in 2000), many households with members earning below-average incomes could also afford the average-priced home, if it were available.

The Housing Plan forecasts future demand for housing units for purchase based on the plan’s population projections for the 2007–2017 period, the 2000 average household size of 2.48 persons per household, and various assumptions concerning housing preferences. The Housing Plan forecasts demand for 1,539 new housing sales units and 1,100 new rental units by 2017. The Housing Plan also forecasts increased demand for senior housing, housing for persons with disabilities, and low-income households. This demand is based on a Rock Springs population forecast of 27,113 persons by 2017, contrasted with the Wyoming Economic Analysis Division forecast of 21,474 persons by 2017.

5.2.2 Green River

The 2000 Census counted 4,426 total housing units in Green River, 94 percent of which were occupied and 6 percent of which were vacant. Houses vacant for seasonal use totaled less than 1 percent of total housing. Of the occupied units, 76 percent were owner-occupied and 24 percent were renter-occupied (see Table 22).

Table 22. 2000 Census, Green River housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
4,426	4,177	249	25	1.2	10.2	3,169	1,008

Source: U.S. Census Bureau, Census 2000.

Like all other communities in the CD-C study area, Green River’s housing conditions have changed substantially since the 2000 Census. A total of 159 housing units were constructed between 2000 and May of 2007. As of September 2007 there were only 59 available residential lots within the City of Green River (Wyoming Business Council 2007, Brown 2007). However, a total of 420 housing units are proposed for the next three years and subdivisions containing 550 to 800 lots are currently in the conceptual stage of development (Green River Futures 2007).

5.2.3 Wamsutter

The 2000 Census counted 148 total housing units in Sweetwater County, 68 percent of which were occupied and 32 percent of which were vacant. Houses vacant for seasonal use totaled less than 1 percent of total housing. Of the occupied units, 67 percent were owner-occupied and 33 percent were renter-occupied (Table 23).

³ Housing affordability and the ability to qualify for home mortgages are subject to other criteria in addition to earnings.

Table 23. 2000 Census, Wamsutter housing profile

Total Housing Units	Total Occupied	Total Vacant	Vacant for Seasonal Use	Home-owner Vacancy Rate	Rental Vacancy Rate	Home-owner Occupied Units	Renter Occupied Units
148	100	48	1	13	41	67	33

Source: U.S. Census Bureau, Census 2000.

Housing conditions in Wamsutter have also changed dramatically in recent years. A July 2007 count identified 20 single-family housing units, two multifamily units, 39 modular units, 117 mobile homes, 49 RVs, and 19 four-person dormitory units. Wamsutter had no available rental units during the summer of 2007 (Carnes 2007).

Three new residential subdivisions, with a total of about 60 lots, are planned for Wamsutter. The developers are also building homes on these lots. The Town is attempting to purchase 40 acres on the west side of town from the BLM for residential development. Two new motels are also planned. An existing mobile home park is planned for conversion to commercial lots and an RV park (Carnes 2007).

6. COMMUNITY INFRASTRUCTURE AND SERVICES

This section describes the current condition of community infrastructure and services likely to be directly affected by the Proposed Action and alternatives.

6.1 CARBON COUNTY

Carbon County provides law enforcement and emergency response services to the eastern portion of the project area and provides services to direct and secondary CDC-related establishments, workers, and their households who reside in Carbon County. Carbon County services are generally headquartered in Rawlins, in the Carbon County Court House, the Carbon Building, the County Road and Bridge Shop and the National Guard Armory. Road and bridge maintenance, one of the county services most affected by natural gas development and production activities, is discussed in the Transportation section of this assessment.

6.1.1 Carbon County Sheriff’s Office

The Carbon County Sheriff’s Office provides law enforcement services throughout Carbon County, including certain services in incorporated municipalities. In and near the project area, the Sheriff’s Office provides patrol services, civil service, traffic enforcement, response to accidents and emergencies, criminal investigation, coordination of local search and rescue, and responds to calls for other law enforcement-related services. The Sheriff’s Office provides dispatch services for most of the county, including the project area, and operates the Carbon County Jail, which provides detention services for the entire county. The Sheriff’s Office, jail, and dispatch facilities are located in Rawlins.

As of July 2007, the Carbon County Sheriff’s Office had the following staff:

- 17 sworn officers including the Sheriff and Under sheriff
- 23 detention deputies
- One court security officer

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- Two detectives
- Seven full-time and 3 part-time dispatch staff
- Six support staff
- Two victim's advocates

There are two deputies allocated to the Baggs area south of the project area and deputies are also stationed in Hanna, McFadden, and Saratoga. New sheriff's office employees who relocated to the area often have difficulty finding affordable housing; at the time of this assessment a lack of affordable housing has kept a new deputy from relocating to Baggs. The combination of law enforcement academy and on-the-job training required to prepare a new officer for duty generally takes six months.

The recently constructed Carbon County detention facility has 78 beds including some dedicated for female inmates. Adolescent detainees must be transported to a facility in Casper. The jail has been in operation for just over two years and recent jail occupancy has been in the mid-50s range. The Sheriff's Office believes that the facility may reach capacity sooner than its intended target of 10 to 15 years.

The Sheriff's Office has recently seen an increase in calls to respond to industrial accidents, vehicle accidents, crime, and traffic infractions in the part of the county that includes the project area and other natural gas fields. The increase in calls reflects, in large part, the increase in industrial and human activity in this remote rural area. Carbon County Road 701, known locally as the Wamsutter/Dad Road, lies entirely within the project area and is the busiest road in the county. The Sheriff's Office, working in cooperation with the Carbon County Road and Bridge Department, recently posted a 45 mph speed limit on CR 701, with a 30 mph limit on certain curves. The road department installed signs and the Sheriff's office routinely monitors speed on the road. These actions are intended to reduce accidents and reduce wear and tear on the road resulting from excessive speed, particularly associated with heavy trucks.

Like many communities, Carbon County has experienced a surge in methamphetamine use in recent years. The Sheriff's Department, in cooperation with the Rawlins Police Department and other agencies, formed a Drug Task Force and engaged the community in a multi-faceted effort to address the problem. This effort includes education and prevention measures, rigorous prosecution of offenders, and expanded treatment options. As a result, the Sheriff's Office believes that methamphetamine use has recently diminished in Carbon County (Morris 2007).

6.1.2 Emergency Management and Response

Carbon County Emergency Management coordinates emergency response services within the county. Emergency response services in western Carbon County, including the project area, are provided by fire departments and ambulance services from Rawlins, Baggs, and Wamsutter. These services are described in the sections dealing with each community.

The emergency management coordinators for Carbon and Sweetwater Counties are in the process of establishing cooperative emergency-response staging locations in the Wamsutter area. This would allow employees working in remote areas to meet emergency responders at predetermined areas to guide them to remote accident locations.

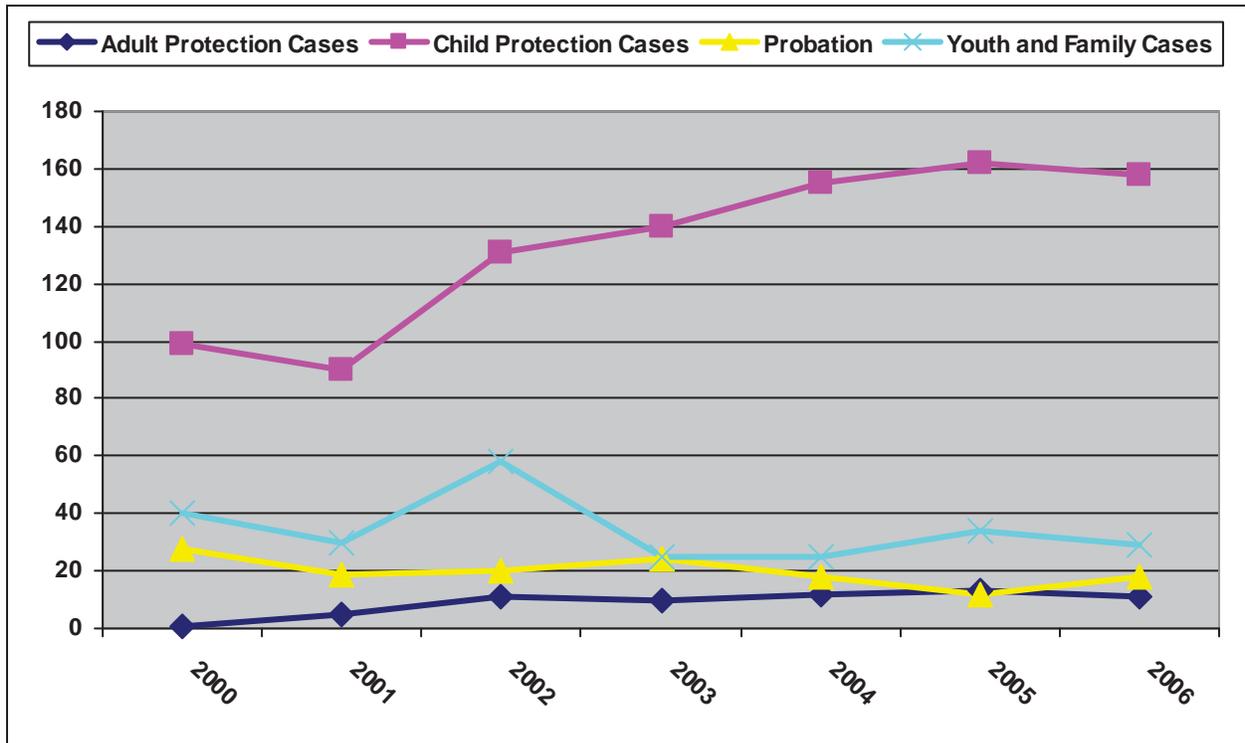
6.1.3 Family Services

The Wyoming Department of Family Services provides Early Childhood Development Services, Juvenile Services, Protective Services, Economic Assistance, and Child Support in Carbon County.

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The recent increase in natural gas development activity has not had a substantial direct effect on Carbon County Division of Family Services (DFS) caseloads, in large part because most of the workers relocate to the County in single status (Johnson 2007, McClaren 2007). Growth from natural gas development has, however, resulted in increased social stress in the community, which may indirectly affect certain populations. Chief among these is an increase in housing cost, which particularly affects people in low- and fixed-income categories. Figure 25 displays new cases for four categories of DFS services including Adult Protection, Child Protection, Probation, and Youth and Family⁴ services. Except for Child Protection cases, Carbon County DFS cases have been relatively stable in recent years. The increases in Child Protection caseloads are in line with statewide trends.

Figure 25. New Carbon County DFS cases, by category: 2000–2006



Source: Shaver, Chad. Project Analyst, Wyoming Department of Family Services, Protective Services Division. Special Data Request from WYCAPS-ADHOC, provided July 22, 2007.

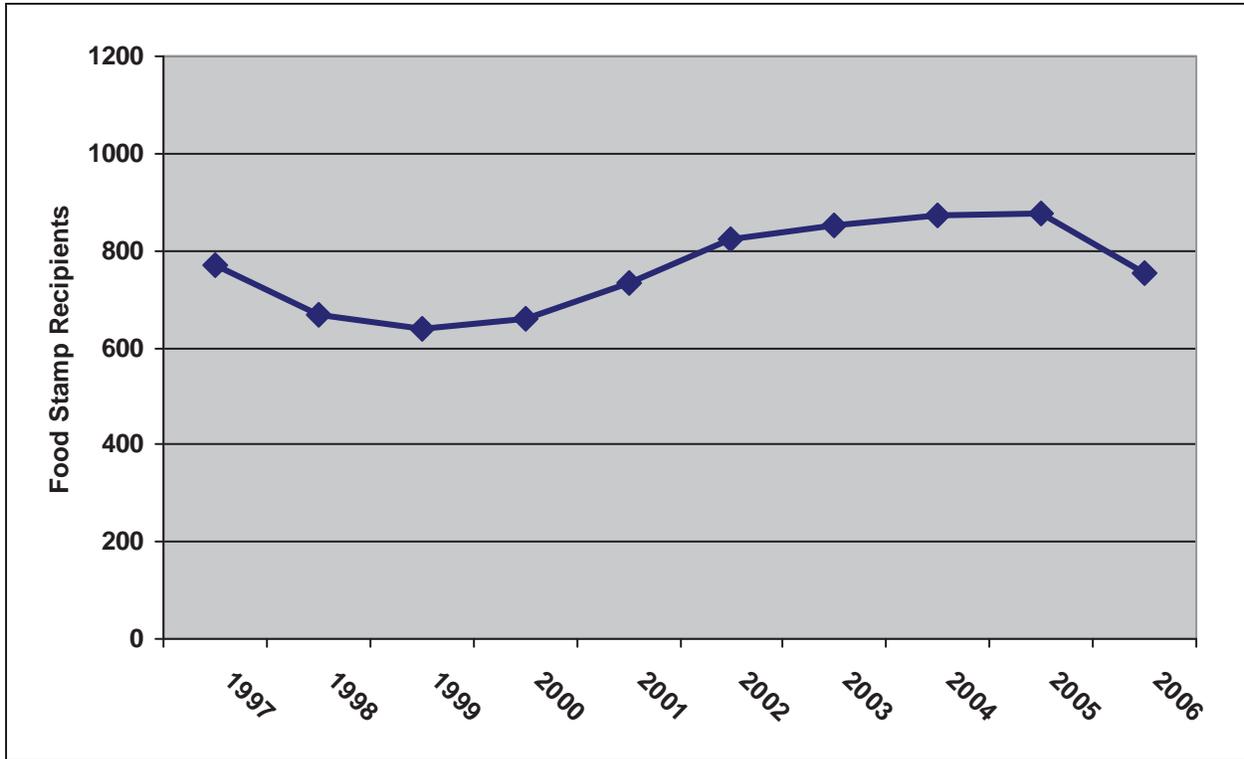
Two factors that affect DFS caseloads in Carbon County and the agency's ability to serve its clients include the location of Rawlins on I-80, which results in some cases involving transient travelers, and a shortage of foster homes in the county. The latter results in some children removed from their homes being sent outside the county, which complicates the delivery services to those children and their families. The Carbon County office of DFS has experienced increases in the numbers of cases associated with methamphetamine use, which frequently results in children being removed from the home. Two factors have begun to show promising results in dealing with methamphetamine users: the Carbon County

⁴ Youth and family cases are those which there is no neglect or abuse but support services are needed to prevent further problems that could lead to abuse, neglect or some type of court action i.e., counseling, substance abuse treatment etc.

methamphetamine task force emphasis on education and prevention measures, and the rigorous prosecution of offenders combined with expanded treatment options. Additionally, the Carbon County Counseling Center has expanded its ability to serve methamphetamine users.

DFS benefits, such as food stamps, Medicare, and day care, have been minimally affected by energy development. This is again because relatively few relocating gas-field workers have been accompanied by households. There has been a slight increase in Medicaid recipients recently but food stamps (Figure 26) and day-care services have not been substantially affected (Schmeling 2007).

Figure 26. Carbon County food stamp recipients: 1997–2006



Sources: U.S. Census Bureau, Small Area Estimates Branch, 2006. U.S. Census Bureau, Population Division, Estimates Program, 2000 and 2006. Wyoming Department of Family Services, Special Data Request, 2007.

Note: Census Bureau food stamp data for 1995 to 2004 are from point-in-time counts most often for the month of July of each year. 2005 and 2006 Food Stamp Recipient data are point-in-time counts for December of each year.

6.1.4 Memorial Hospital of Carbon County

Memorial Hospital of Carbon County (MHCC) is a 45-bed acute-care facility, designated as a Community Trauma Hospital by the state of Wyoming. A Community Trauma Hospital must have a surgeon on staff. MHCC offers the following services:

- Emergency room, staffed 24 hours/day, seven days/week with an emergency-care physician, a registered nurse and emergency medical technicians
- A five-bed intensive care unit
- Two operating rooms

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- Two labor/delivery/recovery/post-partum care rooms
- A full-service medical laboratory
- Medical imaging (MRI, CAT scan, mammograms, conventional X-ray)
- Pediatric care
- Obstetrics, ambulatory surgery
- Long-term care
- Home health services
- In-home care
- Two satellite health clinics (Rawlins and Hanna)
- Ambulance services

The emergency room was constructed and the lab and X-Ray facilities were renovated in 1998. The MRI was installed in 2001. Currently MHCC hopes to build a new intensive care unit, renovate the operating rooms and other areas of the hospital, conduct an energy savings study and purchase some equipment. The Carbon Council of Governments has approved these projects for funding from a proposed one-cent capital facilities sales tax, which requires voter approval.

The hospital provides home health services (an average of 450 visits a month) throughout Carbon County and community-based, in-home health services to 150 clients. Each client is visited one to three times per week, depending on need. This latter service is funded by a grant from the State of Wyoming.

MHCC also conducts a Community Health Fair each year and operates a Caring Program, which provides \$350,000 in free care annually to low-income residents of the county.

The Wagon Circle Health Clinic in Rawlins is staffed by a family-practice doctor and an orthopedic surgeon. The clinic in Hannah is staffed by a physician's assistant and visited by a physician once a week.

Currently Rawlins has 11 doctors, including:

- Five family practitioners
- Four emergency room physicians
- One orthopedic surgeon
- One general surgeon

MHCC is losing the general surgeon and would like to recruit two more family practitioners to adequately serve the community. Recruiting doctors to Wyoming is complicated by the fact that there are no monetary caps on damages for malpractice lawsuits. A lack of affordable housing in the community adds to the difficulty of recruiting physicians and staff, but the hospital owns a 40-room nurse's dorm where new employees and contract staff can live for up to six months for free.

MHCC's Outpatient Clinic is also staffed by 25 visiting specialists who travel to Rawlins once weekly to once monthly depending on their specialty and need. Visiting specialists include:

- Cardiologist
- Urologist
- Ophthalmologist
- Audiologist
- Internist
- Gastroenterologist

MHCC uses medical staffing agencies to supplement its own medical staff employees.

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Average occupancy in MHCC's acute beds is about 34 percent, or just over 15 of the hospital's 45 beds. About 80 percent of all patients are seen in the outpatient clinic. Currently the hospital has adequate staffing to serve 33 percent more patients than it currently sees.

Although some local patients travel to hospitals outside the county for specialized care, MHCC estimates that is currently capturing about 64 percent of the local healthcare market. Some non-locals seek care at MHCC, including travelers on I-80 and non-local gas-field workers (Kostic 2007). Until recently, non-local surgeons were allowed to perform surgeries at MHCC. Recent changes in federal regulations require patients to have surgery procedures done at the hospital where the surgeon is on staff.

MHCC had positive net income during the 2004 and 2005 fiscal years. In 2005 MHCC received 33 percent of its revenue from federal Medicare and 14 percent from state-administered Medicaid (Dingus 2006). Currently the hospital has no debt and a 3.3-percent operating margin, which is considered excellent for a rural hospital.

The current natural gas drilling and field development expansion is having two effects on MHCC. First, more temporary and non-local workers are seeking care in the emergency room because they do not have primary-care physicians in the area. Second, the hospital's uncollected patient fees are increasing, particularly in the operating room, in part because although the natural gas companies and major service companies provide health insurance, many of the smaller contractors do not.

6.2 RAWLINS

The City of Rawlins is located about 20 miles east of the eastern border of the project area. Rawlins is the Carbon County seat and largest community in the county, housing many project area workers and also companies that provide services to the gas companies, in the project area and elsewhere in the region. Rawlins is also home to the Wyoming State Penitentiary and a service center for travelers on I-80.

The Wyoming Economic Analysis Division estimated that Rawlins had a 2006 population of 8,621 (WEAD 2007); however, local officials believe that there are substantially more people living in the community. In addition to residents living in conventional housing, a substantial number of workers are living temporarily in motels, mobile homes, and RV parks. These temporary residents as well as the more long-term residents are considered when Rawlins assesses its demand for community facilities and services.

The City's municipal staff includes about 130 employees, adding about 40 seasonal workers during the summer months. During the summer of 2007, the City would have hired additional seasonal workers, had they been available (Mika 2007).

6.2.1 Rawlins Public Works

In the summer of 2007, the Rawlins Public Works Department employed 52 staff in eight divisions: central shop (maintenance of city vehicles and rolling stock), facilities maintenance, grounds maintenance, solid waste, streets, water and wastewater treatment, and utilities (water distribution and wastewater collection).

6.2.1.1 Rawlins Water System

The Rawlins water system, which also provides treated water for the town of Sinclair, was developed in the 1970s with a target capacity of about 17,000 residents. The system includes an eight-million-gallon-per-day (MGD) treatment plant, which registered a 2006 peak daily usage of 4.45 MGD. Consequently the water treatment plant could accommodate a service population almost double the current population at current usage rates. Rawlins maintains 85 miles of water distribution lines. There are four storage tanks, with a combined capacity of 6 million gallons for the City of Rawlins and a 0.8-million-gallon tank for Sinclair. There is also a raw-water storage reservoir that feeds the treatment plant. Rawlins has ample water rights in the North Platte River and in springs and wells to serve both current and anticipated future water needs (Stolns 2007).

6.1.2.2 Rawlins Wastewater System

The wastewater system for Rawlins was also designed for a target population of 17,000. The maximum capacity of the treatment plant is 342.183 million gallons; current usage is 171.075 million gallons, about half of maximum capacity. The system has three aerated lagoons, two settling lagoons, and two storage lagoons. In order to achieve maximum capacity several lagoons would need to be cleaned and restructured. There are currently 65 miles of wastewater collection lines within the city (Ibid.).

6.1.2.3 Rawlins Solid Waste Disposal

Rawlins operates its own landfill, which has a remaining life of approximately five years under current fill rates. The City is currently trying to obtain an additional section of land from the BLM to expand the landfill. Rawlins, along with Casper, Douglas, and other east-central Wyoming communities, is participating in the Wyoming Integrated Solid Waste Management process as a member of the East Central Solid Waste Management Area. The objectives of the Integrated Waste Management process are to:

- establish waste management goals and objectives,
- identify alternatives that may achieve the goals and objectives,
- conduct a detailed analysis and comparison of the alternatives,
- select appropriate programs, and
- implement the programs selected.

The East Central Solid Waste Management Area planning process is scheduled for completion on July 1, 2009. One option under consideration is the development of a central landfill served by transfer stations and bailing operations in other communities in the district (Ibid.).

6.1.2.4 Rawlins Streets

Rawlins currently maintains 68 miles of city streets. Of the total, approximately 40 miles are in need of repair. The Public Works Department performs maintenance services on city streets and contracts with asphalt companies for street overlays. The rising cost of asphalt and fuel are affecting the amount of repair and overlay work that the Public Works Department can perform (Ibid.). The Carbon County Council of governments has tentatively approved \$6 million in revenue from a proposed one-cent capital facilities task, which would require voter approval.

6.2.2 Rawlins Police Department

Law-enforcement services for the City of Rawlins are provided by the Rawlins Police Department. Current staffing for the department includes:

- 22 sworn officers, including the chief
- Two administrative staff
- Two records clerks
- Eight dispatchers
- Two victim advocates
- Two animal-control officers
- One code-enforcement officer

The Rawlins Police Department (RPD) operates the Rawlins Dispatch center and is implementing enhanced 911 services for the southwestern portion of the county. The dispatch center is the public safety access point for cell phone calls. In 2006, the dispatch center answered 250,000 phone calls and the RPD made 35,000 individual contacts. Individuals taken into custody by the RPD are booked into the Carbon County jail.

The Rawlins Police Chief has seen a transition in the most common types of offenses in recent years – from traffic offenses to fights and domestic violence. Drug abuse has also become a serious issue in the county. The chief estimates that one-quarter to one-third of all arrests are drug-related. As noted in the discussion of the Carbon County Sheriff's office, the RPD participates in the Drug Task Force and has seen a decrease in methamphetamine-related use in the last year, attributable to the education and awareness efforts as well as the rigorous prosecution of offenders and expanded treatment options.

RPD facilities are adequate for current needs, but there is a need for improved training facilities for follow-up and advanced training (Reed 2007).

6.2.3 Rawlins Fire Department

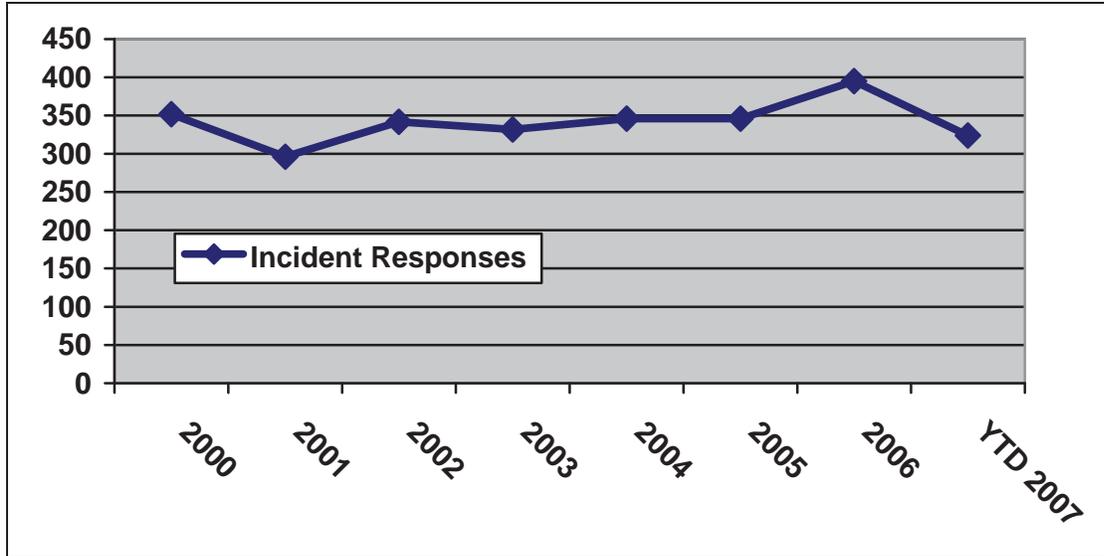
The Rawlins Fire Department (RFD) provides fire suppression and rescue services within the city and within a 60-mile radius of the city including incidents along I-80 and WY 789. RFD responds to Level A hazardous material incidents throughout the county. The department has mutual-aid agreements with other municipalities in the county, and provides training and conducts joint exercises with companies at some natural gas facilities. RFD personnel conduct semi-annual fire safety inspections and reviews building plans for all public-access structures within the city. The department offers a variety of fire-prevention and public education programs for people of all ages. RFD is also responsible for issuing building permits and conducting inspections for construction within the city.

RFD currently has 20 volunteers and positions for ten paid staff, including the chief. Currently the department is trying to recruit staff for two of the paid positions. Staff recruitment and retention has been difficult lately given the high wages and salaries paid in the gas fields. RFD has lost several staff and has had fewer applicants for vacant positions. Volunteer recruiting and retention is also becoming more difficult because many Rawlins residents spend long hours working and traveling to job sites in the gas fields and correspondingly have less time to spend on community work including volunteering for the fire department. The remote job sites also increase the response times. Volunteers respond to Station #1 for fire calls outside of the city; for calls within the city the paid staff takes the equipment to the incident location and the volunteers respond directly to the incident location in their own vehicles (Hannum 2007).

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Figure 27 displays RFD incident counts from 2000 through October 10, 2007. Incident responses have been trending upwards since 2001 and it is likely that total 2007 responses will continue the trend.

Figure 27. Rawlins Fire Department annual incident response: Jan. 1, 2000–Oct. 10, 2007



Source: Rawlins Fire Department Annual Incident Type Reports, 2000 through YTD 2007.

RFD currently has four pumpers, a wildland response unit, a ladder truck, a fully equipped rescue unit, a combination utility vehicle/crew transport for extrications/wildland response, an incident command trailer, a HAZMAT response trailer, and a motor home outfitted as a safety house, which is used for public education, primarily in schools.

The department has two fire stations in Rawlins, both of which are staffed on an around-the-clock (24/7/365) basis. Station #1 serves as the headquarters for emergency response and includes the RFD administrative offices, sleeping quarters, meeting room, and equipment maintenance area. Station #2 serves the southern part of Rawlins and the Wyoming State Penitentiary. It houses a first-response engine, HAZMAT response equipment, office, sleeping quarters and a training center. Station #2 is also manned by paid firefighters on a 24/7/365 basis. RFD also operates a training center, which includes a four-story drill tower, two burn rooms, smoke training, confined space training, and fire apparatus certification facilities (RFD 2007). The city may need to construct new fire stations to maintain its ISO insurance ratings, depending on the level and location of new development that occurs.

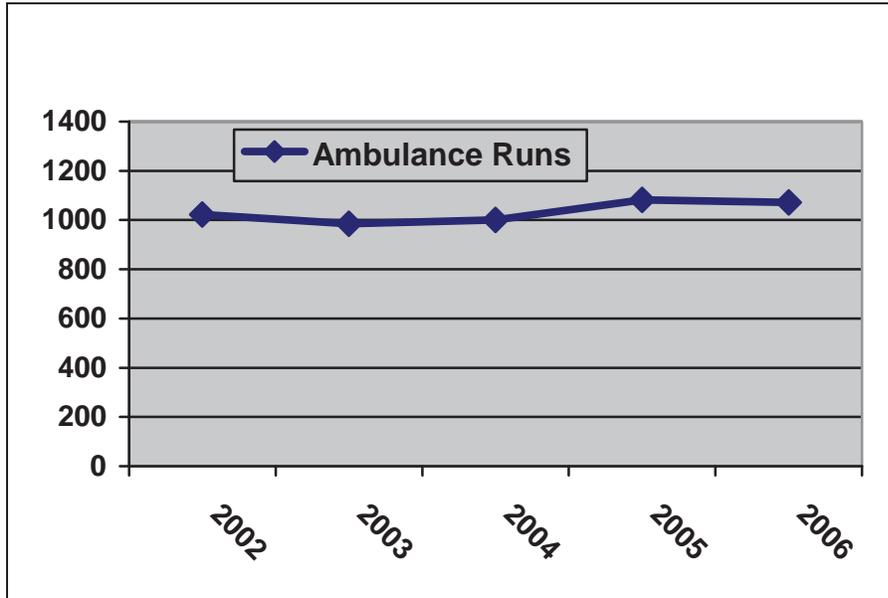
6.2.4 Rawlins Ambulance

Memorial Hospital of Carbon County provides ambulance and emergency medical services in the northern and western part of Carbon County, including part of the project area. County and municipal officials and fire department/emergency response officials in Carbon County are also working to form a joint powers board to provide ambulance service to south-central Wyoming. MHCC maintains three ambulance crews and has positions for 20 EMTs. The crews are composed of full-time employees and per-diem employees who work on an intermittent basis. One crew is always on duty and a second crew is on call. There are three four-wheel-drive ambulances based at the hospital in Rawlins. The MHCC

emergency room doctor trains EMTs throughout the county (except for the Little Snake River Valley) and Wamsutter. Recently the ambulance service has averaged 75 runs per month (Carter 2007).

Figure 28 below displays MHCC ambulance runs for 2002 through 2006, which have averaged around 1,000 to 1,100 every year.

Figure 28. MHCC ambulance runs: 2002–2006



Source, Carter 2007.

6.3 BAGGS

The Town of Baggs is located about seven miles from the southeast border of the project area, on WY 789. According to the Wyoming Economic Analysis Division, Baggs had a 2006 population of 367, although local officials believe the effective service population to be substantially higher. The Town has six full-time employees including a Town Clerk, an assistant clerk, two public works employees and two police officers. The Town hires two temporary employees during summer months (Corners 2007).

6.3.1 Baggs Water System

Baggs recently completed a \$2 million upgrade to its water treatment plant designed to meet future demand. The system can treat 250 to 300 gpm (up to 0.4 MGD) and is sized for anticipated growth over the next 20 years at historic growth rates of one to two percent. The town obtains water from wells and has 300 acre feet of water rights in the recently completed High Savery Reservoir; water from the reservoir is transported through the Little Snake River to Baggs. The town cannot begin using that water each year until irrigators call for water from the reservoir. Baggs intends to replace its water transmission and distribution systems over the next several years, financed by the proceeds from a one-cent capital improvements sales tax, if approved by voters (O’Neill 2007).

6.3.2 Baggs Wastewater System

The Baggs wastewater treatment system includes a four-cell aerated lagoon system, one of which is not currently in use. The system has capacity to treat about 100,000 gallons per day. The pumps for the lagoon system are aging and one is scheduled for replacement. The wastewater collection system is comprised primarily of old vitrified clay piping and experiences problems due to high ground-water tables. Baggs' consulting engineers have recommended a capacity study and evaluation of inflow and infiltration into the sewer lines (O'Neill 2007). Baggs recently received a \$2 million capital improvements grant from the Wyoming State Land Investment Board which is being used to fund both water and wastewater system improvements, but must provide \$600,000 in matching funds to receive the grant.

6.3.3 Baggs Law Enforcement

As noted above, the Town of Baggs has two police officers. Two Carbon County Sheriff's Deputies are assigned to Baggs, although one of the deputies had not been able to find housing in the area during the summer of 2007. Two Wyoming Highway Patrol officers also live in the town.

6.3.4 Baggs Fire Department

Baggs has an all-volunteer fire department with nine registered firefighters and two fire trucks. The department responds to fire calls in the county including lands within the project area and on BLM and National Forest lands, as well as within the town. Some of the fire department volunteers work in the gas fields, making it difficult to have enough volunteers to respond to emergencies during work days.

6.3.5 Noyes Medical Clinic and Ambulance Service

Medical services in Baggs are provided at the Noyes Clinic, which is currently staffed by a physician's assistant (PA), supervised by a doctor in Craig, Colorado. The PA is supported by five full-time and one part-time staff, most of whom perform both medical and administrative duties. Carbon County currently funds the clinic directly, but is in the process of creating a rural health-care district to fund the clinic. The clinic is currently looking for a physician or an additional PA. Patient visits have increased substantially during recent years, attributed to the expansion in natural gas development. The clinic hopes to expand the services it offers once the rural health-care district is in place.

Emergency response is provided by ten volunteer EMTs and one first responder who staff two county-owned ambulances, one of which is a four-wheel-drive vehicle. The ambulances respond to accidents in the southwestern part of the county and about 30 miles north along WY 789 (Jones 2007). Seriously injured or ill patients are transported to Craig or Rawlins, depending on the location of the patient. Casper-based Flight-for-Life is also available if needed. The clinic intends to purchase an additional 4WD ambulance with revenues from the rural health care district.

6.4 DIXON

6.4.1 Dixon Water System

The Dixon water system currently treats 60 gpm and is under an EPA Administrative Order. A pilot test of a membrane system was just completed and an evaluation of treatment technologies is being

conducted. The new system will be capable of treating 100 gpm which will provide the needed capacity for 20 years of growth (O'Neil 2007).

6.4.2 Dixon Wastewater System

The Dixon wastewater system is a single-cell lagoon that is permitted for 50,000 GPD and occasionally exceeds permitted capacity limit. The system has severe inflow and infiltration problems that would prevent substantial additional development without major improvements (O'Neil 2007).

6.5 SWEETWATER COUNTY

Sweetwater County provides law enforcement and emergency-response services to the western portion of the project area and provides services to direct and secondary CDC-related companies, workers, and their households who reside in Sweetwater County. Sweetwater County services are generally headquartered in Green River although some of the key services such as the Sheriff's Office and the Road and Bridge Department are headquartered in Rock Springs.

6.5.1 Sweetwater County Sheriff's Office

The Sweetwater County Sheriff's Office (SCSO) provides law enforcement, animal control, and dispatch services to the unincorporated portions of Sweetwater County and detention services for the county and its municipalities. The Sheriff's Office has the following staff:

- 45 sworn officers including the Sheriff and Under sheriff
- Ten dispatchers
- Two community service officers
- Three animal control officers
- Two administrative staff
- Five records staff
- 32 detention staff

There is a deputy stationed in Wamsutter and one in Farson, and the Town Marshal in Bairoil is a reserve deputy. Sweetwater County provides housing for Sheriff's deputies in Wamsutter and Farson.

During the summer of 2007, the Sheriff's Office had filled all authorized deputy positions, but had five vacant detention positions. Current cost to hire, equip, and train (excluding Law Enforcement Academy costs) a new staff is \$108,000 for a deputy, \$52,000 for a detention deputy and \$49,000 for a dispatcher. Although the Sheriff's Office has been able to recruit and retain deputies, the pool of applicants for new positions has decreased in recent years.

The Sweetwater County Detention Facility has a design capacity of 208 prisoners. It can also house 50 juveniles (32 males and 18 females). Recent occupancy has averaged about 110 prisoners. The county jail was designed to allow for expansion on the same site while maximizing use of existing administrative facilities. Arresting officers in municipalities are responsible for transporting prisoners to the county detention facility in Rock Springs.

Drugs, particularly methamphetamine, are a growing problem in Sweetwater County, as they are in much of the country. The SCSO estimates that 75 percent of the county detention facility population is involved with drugs (Jackson 2007, Claman 2007).

6.5.2 Emergency Management and Response

The Sweetwater County Emergency Management Agency (SCEMA) is a division of the Sweetwater County Sheriff's Office (SCEMA 2007). SCEMA operates under the guidelines of the Department of Homeland Security, Office of Domestic Preparedness, Federal Emergency Management Agency, Wyoming Office of Homeland Security, Wyoming Emergency Management Agency, the Environmental Protection Agency (EPA) and the Federal Communications Commission.

Under the direction of the Sweetwater County Emergency Management Coordinator, SCEMA analyzes hazards, assesses local emergency response capabilities, plans for potential events including emergency response, recovery from, and mitigation against the potential emergency/disaster. SCEMA coordinates with response agencies, industry, elected officials, and volunteer agencies to accomplish their mission of limiting injuries, loss of life, and damage to property. SCEMA also coordinates the Local Emergency Management Committee, which brings together emergency-response professionals in the community for the purpose of information, training, discussions, and education of the public about hazardous substances, emergency planning, health, and environmental risk.

SCEMA administers the Sweetwater County 911 service, which includes Enhanced and Wireless Phase I 911. Enhanced 911 allows a 911 dispatcher to identify the caller's telephone number and address from a land-line telephone. Wireless Phase I 911 allows the dispatcher to identify the telephone number of the cell phone and the approximate location of the caller. Currently, not all cellular companies route their cell phone 911 calls through the system, so dispatchers may not receive all telephone numbers or approximate locations. Within the southern parts of the project area, 911 calls are sometimes received in Craig, Colorado, which can complicate and delay emergency response.

In addition to the Sweetwater County Sheriff's Office, the Rock Springs Police Department and the Green River Police Department also operate dispatch centers. The three entities are conducting a joint needs assessment regarding the consolidation of dispatch services in the county. One objective is to replace the current 911 emergency system with one that accommodates Phase II wireless and geographic information systems to help locate mobile phone callers. SCEMA is participating in the program to establish emergency response staging areas in the project area (Valentine 2007).

6.5.3 Sweetwater County Solid Waste Disposal District #1

Sweetwater County Solid Waste Disposal District #1 was created to oversee local landfills in Rock Springs, Reliance, Superior, and Point of Rocks (SCSWDD#1 2007). The Rock Springs landfill has 30 years of remaining life at current fill rates and the district recently purchased an adjacent 320 acres, which will provide an additional 70 years or a combined 100 years of remaining life at current fill rates (Sugano 2007). SCSWDD #1 also provides funding to the Ray Lovato Recycling Center and to the cities of Rock Springs and Green River to conduct a Household Hazardous Waste Collection Event that alternates between the two cities. The District is authorized to assess a maximum 3-mill tax levy to support its operations. The 2007 levy is 1.58 mills.

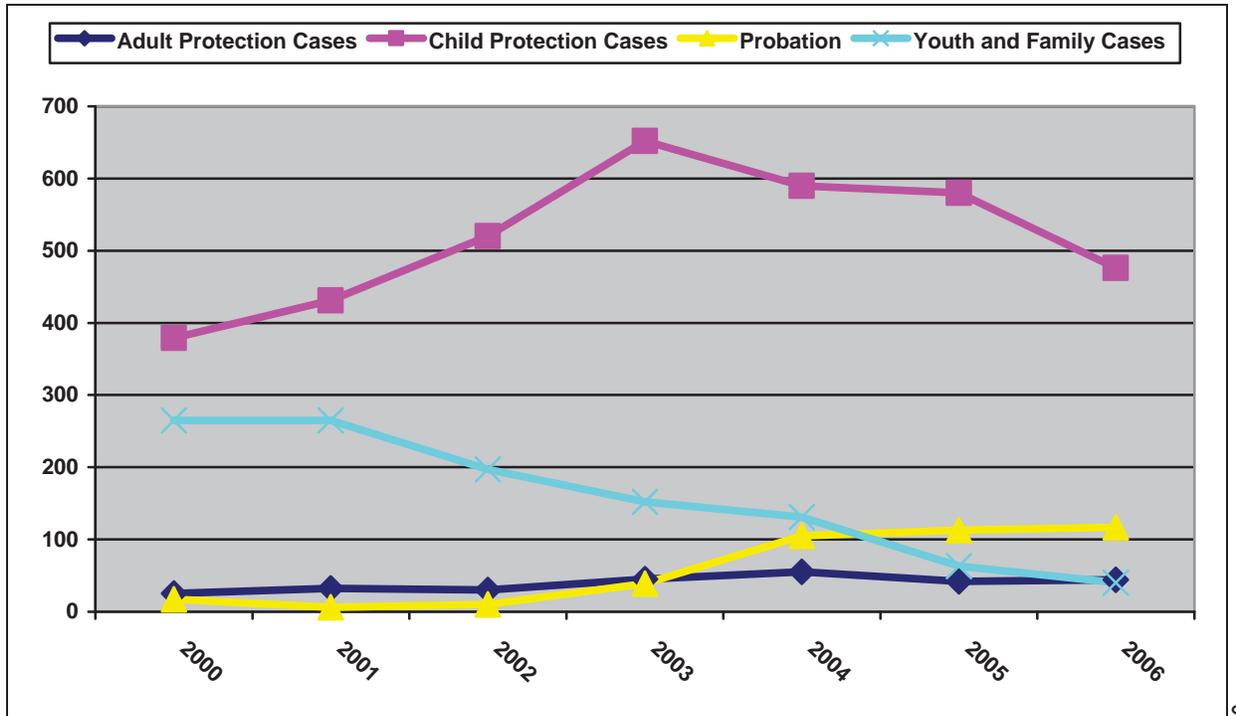
SWCSWDD #1 has joined with SCSWDD #2 (Wamsutter/Bairoil) and the City of Green River to conduct integrated solid waste planning, which may result in the development and operation of transfer stations in some other municipalities in the county and transportation of solid waste to the Rock Springs landfill.

6.5.4 Family Services

The Wyoming Department of Family Services provides early childhood development services, juvenile services, protective services, economic assistance, and child support in Sweetwater County, from the DFS offices in Rock Springs.

Figure 29 displays new cases for the four categories of DFS services including Adult Protection, Child Protection, Probation, and Youth and Family services.

Figure 29. New Sweetwater County DFS cases, by category: 2000–2006

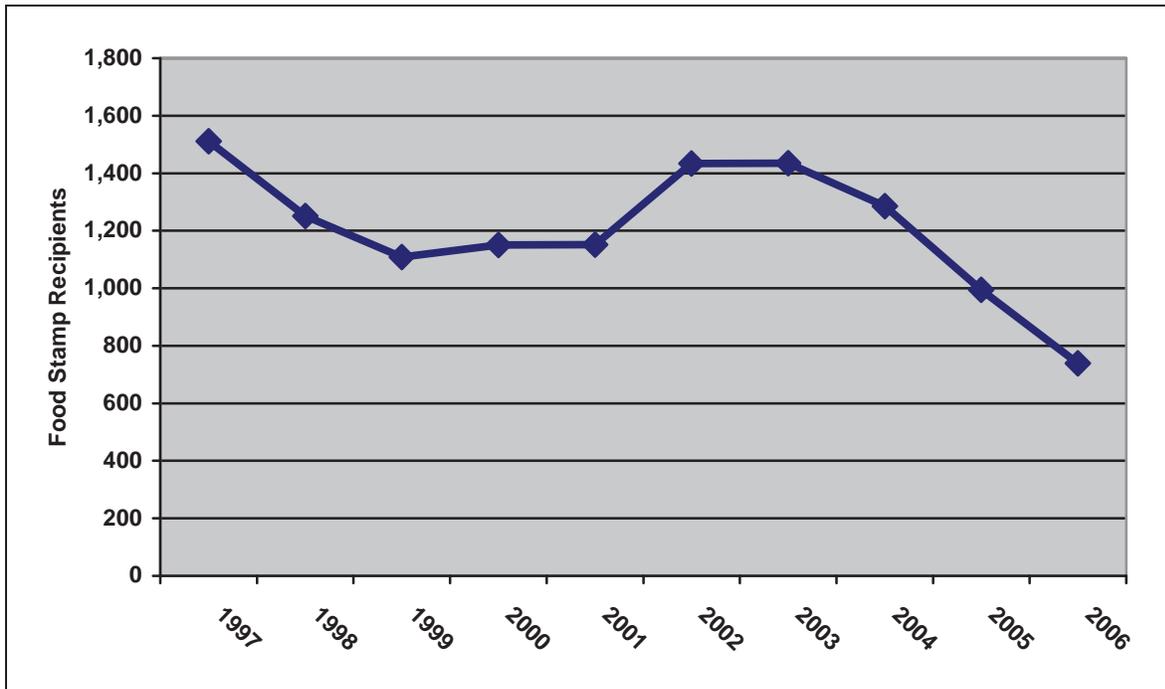


Source: Shaver, Chad. Project Analyst, Wyoming Department of Family Services, Protective Services Division. Special Data Request from WYCAPS-ADHOC, provided July 22, 2007.

To date, natural gas development has had limited direct effect on DFS caseloads. But the effects of natural gas development on housing availability and affordability are stressing low-income families, resulting in some overcrowding, families living in motels or sub-standard housing, and some low-income families being priced out of the housing market altogether. It also complicates some DFS neglect cases where children have been removed from households because mothers cannot gain permanent custody of their children unless they are able to demonstrate appropriate living conditions, which is difficult for single-parent families under current conditions (Shineberg 2007).

Figure 30 displays the number of Food Stamp recipients in Sweetwater County from 1997 through 2006. Food stamp cases have decreased dramatically in recent years, primarily because applicants other than single-parent households must be actively looking for work to receive food stamps, and Sweetwater County has a surplus of jobs (Carpenter, Pauline 2007).

Figure 30. Sweetwater County food stamp recipients: 1997–2006



Sources: U.S. Census Bureau, Small Area Estimates Branch, 2006. U.S. Census Bureau, Population Division, Estimates Program, 2000 and 2006. Wyoming Department of Family Services, Special Data Request, 2007.

Note: Census Bureau food stamp data for 1995 to 2004 are from point-in-time counts most often for the month of July of each year. 2005 and 2006 Food Stamp Recipient data are point-in-time counts for December of each year.

6.5.5 Memorial Hospital of Sweetwater County

Memorial Hospital of Sweetwater County (MHSC) is a non-profit, 99-bed, rural acute-care facility located in Rock Springs. The hospital and its laboratory are Joint Commission⁵ accredited.

Services available at MHSC, which is designated by the State of Wyoming as an Area Trauma Hospital, include the following:

- Emergency services, with 11 emergency beds serving approximately 23,000 emergency patients annually
- A 33-bed surgery unit and surgical specialties including general, orthopedic, plastics, OB/GYN, urology and vascular, therapeutic anesthesia, and endoscopy procedures
- Surgical services with skilled nursing care and ancillary services for patients requiring elective or emergency surgery
- Intensive Care, with a six-bed ICU
- Cardiopulmonary
- Medical imaging: ultrasound, nuclear medicine, mammography, CT, MRI, and general radiology

⁵ The Joint Commission is an independent, not-for-profit organization that evaluates and accredits health care organizations and programs in the United States.

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- Medical clinic
- Laboratory, with clinical testing for both in-patients and out-patients, and DOT drug testing for local businesses; registered laboratory personnel perform approximately 35,000 tests each month in chemistry, hematology, coagulation, serology, microbiology, blood banking, and histopathology
- Dialysis
- Diabetes education
- Sleep disorder lab

MHSC is currently undergoing a \$50 million expansion that will add approximately 54,000 square feet of new construction, renovate 64,000 square feet of existing space, and quadruple the capacity of the hospital's emergency room by June 2008 (MHSC 2007). Other improvements will include:

- A new Emergency Department with all private exam/treatment rooms
- A Women's Center with three labor and delivery rooms and all private post-partum rooms
- A Women's Imaging Center with mammography, ultrasound, and stereotactic breast biopsy capabilities
- Private same-day surgery rooms
- Expansion of the dialysis treatment center
- Expansion of out-patient surgical areas to include a large endoscopy suite

The expansion is part of MHSC's strategy to become the regional health care center for southwestern Wyoming. The hospital recruited nine new physicians during 2007 and hopes to recruit an additional seven to eight physicians in 2008. The newly recruited physicians are on the staff of MHSC and are establishing private practices in the community.

The current gas expansion in southwestern Wyoming has resulted in increased use of MHSC's emergency room, and increased uncollected debt attributed to the large number of workers who do not have health insurance as well as an increase in charity-care cases. The increase in emergency room visits is largely attributed to non-local workers who do not have primary-care physicians in the area. This has increased wait times in the ER, particularly for people with more routine health care needs, as the ER staff will always treat patients with acute or critical needs before those with more routine issues.

Uncollected patient fees have increased to about nine percent of total fees in recent years as compared to six percent in previous years. The Sweetwater County Commissioners have allocated additional funds – between \$500,000 and \$700,000 per year in recent years – to assist with the hospital's charity care and uncollected patient fees.

6.6 ROCK SPRINGS

The City of Rock Springs is located about 40 miles west of the project area's western border. Rock Springs is Sweetwater County's largest community and has emerged in recent years as a regional service center for natural gas development in southwest Wyoming. According to the Wyoming Economic Analysis Division, Rock Springs had a 2006 population of 19,324 (WEAD 2007). SWEDA estimated Rock Spring's December 2006 population at 22,209 based on Pacific Power residential electric accounts within the city and a household size of 2.58. Based on the same information and assumptions, the unincorporated area around Rock Springs had an estimated population of 4,773 in December 2006 (SWEDA 2007). The actual number of people residing in Rock Springs, including temporary workers in motels and RV parks, was substantially higher than these estimates during 2006 and has continued to grow in 2007.

6.6.1 Rock Springs Public Works

6.6.1.1 Rock Springs Water System

Rock Springs obtains treated water from the Green River/Rock Springs/Sweetwater County Joint Powers Water Board. Water is pumped from Green River to Rock Springs through two water mains, one a 30-inch and the other a 20-inch line. The city's water storage and distribution system has eight storage tanks with a total capacity of 12,000,000 gallons. There are over 120 miles of water lines ranging from four inches to 30 inches in diameter. There are 6,500 connections with an average daily use of 10.0 MGD in the summer and 3.0 MGD in the winter. The Water Department has nine employees including two meter-readers (City of Rock Springs 2007a). The water storage and distribution system can accommodate a population of about 35,000 (30 percent above the current service-area population) although there are water distribution problems that need to be addressed in certain parts of the service area (Walker 2007).

6.6.1.2 Rock Springs Wastewater System

At the time of this writing, the Rock Springs wastewater treatment plant is undergoing an 18-month, \$12.5-million expansion. When completed, the plant will have capacity to treat 4.2 MGD and meet the State's clean water requirements (City of Rock Springs 2007b). Currently, the wastewater treatment plant processes 2.6 to 2.7 MGD and serves a population of 24,000 to 25,000. The expanded plant has planned treatment capacity for a population of 35,000 and was designed to accommodate a second plant on the same site, if required (Gaviotos 2007). The Rock Springs Public Services Department is also completing major improvements to a wastewater collection main and lift station which serve the Foothills area of town, the location of much of the new residential development. The department is also conducting a modeling program to identify other wastewater collection problems in the older part of the city (Walker 2007).

6.6.1.3 Rock Springs Streets

The Rock Springs Street Department maintains street surfaces, sidewalks, curbs and gutters, performs alley grading, storm-drain cleaning and maintenance, city light maintenance, drainage ditch cleaning, street-sign installation and repair, street sweeping, and snow and ice removal (Rock Springs 2007c). Developers are required to provide streets within new subdivisions. The City tries to assist with the development of arterial and collector streets that provide access to subdivisions, to assist in making residential construction more affordable. Securing funding for new arterial and collector streets is a substantial problem for the city (Walker 2007).

6.6.2 Rock Springs Police Department

The Rock Springs Police Department employees the following staff:

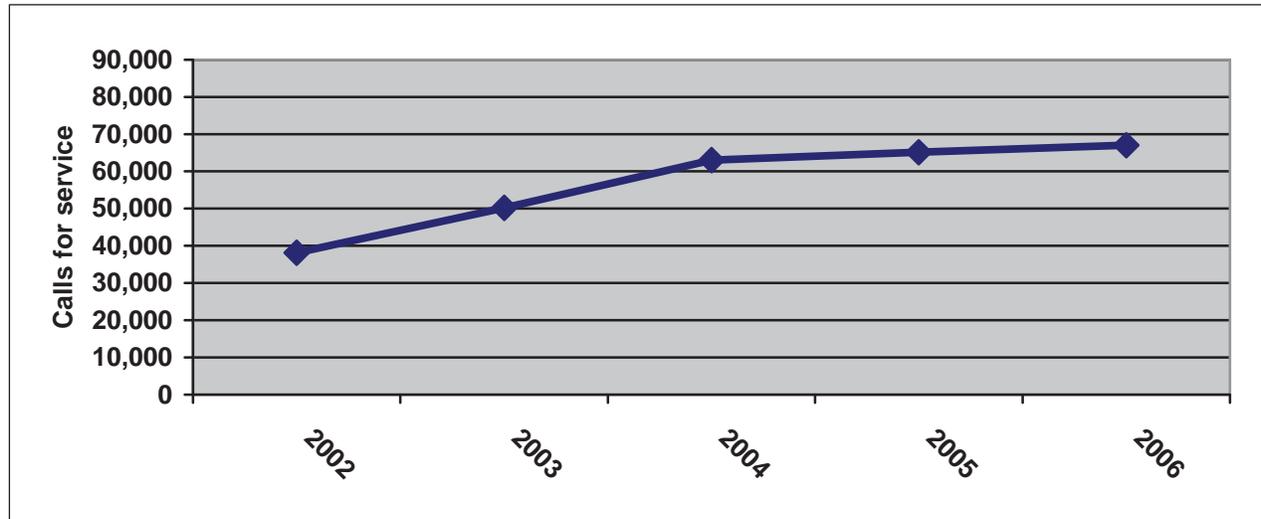
- Operations Division: 45 sworn officers including the Chief of Police, two commanders, sergeants, detectives, misdemeanor investigators, and officers assigned to school positions.
- Services Division: 22 civilian positions including ten dispatchers, five records technicians, three animal-control positions, two community-service officers, and two administrative assistants.

Preparing an officer for patrol duty requires about one year of law enforcement academy and on-the-job training and about \$135,000 for salary, vehicle, equipment, and training costs. The Rock Springs PD has had good retention of officers, in part because the department tries to recruit Wyoming residents.

Rock Springs operates its own communications and dispatch facility, which also dispatches fire and ambulance services for the city. Inmates are housed at the Sweetwater County Detention Facility (Lowell 2007).

Rock Springs has seen substantial increases in calls for service over the past four years, increasing from 38,154 in 2002 to 67,022 in 2006, a 76 percent increase (see Figure 31). This is in contrast to the 20 percent growth in Rock Springs population over the same period, using the 2002 census figure and the 2006 SWEDA population estimate.

Figure 31. Rock Springs Police Department calls for service: 2002–2006



Source: Rock Springs 2005, Lowell 2007.

Much of the increased crime in Rock Springs in recent years has been in categories other than major crimes. According to the 2005 Rock Springs Police Report, Part I Crimes⁶ increased by only 9 percent between 2003⁷ and 2006, while Part II⁸ crimes increased by 52 percent between 2002 and 2006. The most dramatic increases in crime in Rock Springs between 2002 and 2006 have been associated with drug arrests (429 percent), alcohol violations (77 percent), and traffic crashes (56 percent). Also during this period, arrests have increased by 90 percent, and the number of summons written increased by 130 percent (Rock Springs 2005, Lowell 2007).

6.6.3 Rock Springs Fire Department

Rock Springs Fire Department (RSFD) has three fire stations, all of which are staffed on a round-the-clock basis. The RSFD has 35 trained firefighters, about two-thirds of whom are also qualified as advance life-support EMTs. The department responds to an average of 100 calls per month with an average response time of less than four minutes. RSFD responds to fires, medical emergencies, vehicle crashes,

⁶ Includes murder, rape, robbery, assault, burglary, larceny, and motor vehicle theft.

⁷ 2002 statistics were not available.

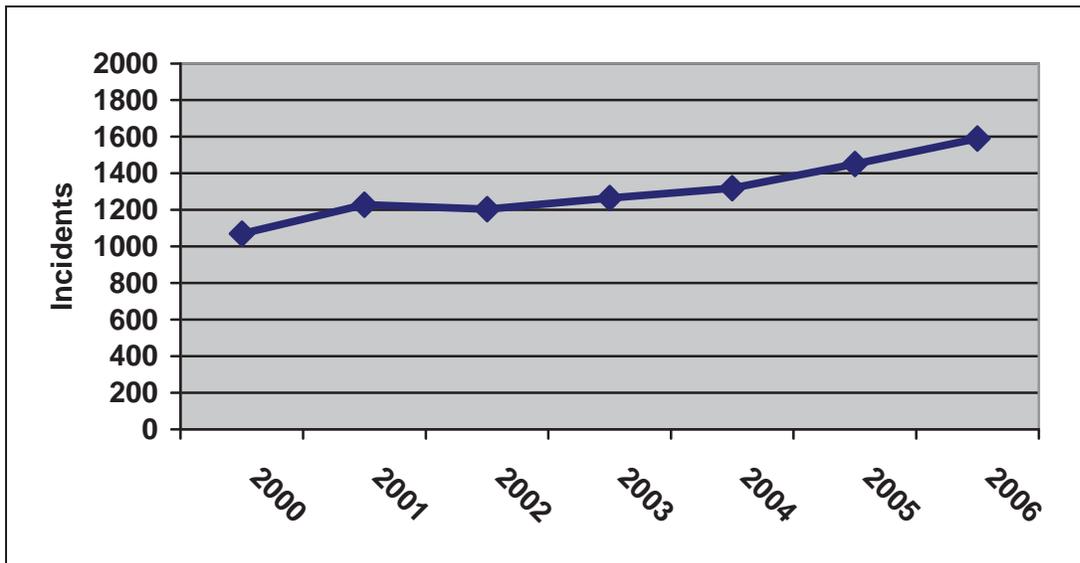
⁸ Includes drugs, domestic abuse, disturbance, alcohol, embezzlement, fraud, forgery, sex offense, vandalism, destruction of property, warrant arrest, trespassing,

hazardous materials incidents including the recent issues of terrorism, smoke/odor investigations, fire and carbon monoxide alarms, confined space rescue, and high-angle rope rescues. In addition to emergency services the department provides ongoing public safety services including fire-safety inspection and prevention programs for homes, businesses, and in the schools; child safety-seat inspections; juvenile fire-setters intervention, CPR courses, and annual testing of over 800 fire hydrants (City of Rock Springs 2007d).

The RSFD has a site for a fourth fire station on the west side of the city, where much new development is occurring. The department has funds to build the station but not to equip and operate it. Costs to replace and equip a pumper truck average about \$270,000; replacing and equipping a ladder truck costs about \$400,000. The expected frontline life of each truck in Rock Springs is 15 years with another five to ten years as a backup/reserve (Sarff 2007). Despite higher salaries in the natural gas industry, the RSFD has been able to retain staff, losing only one firefighter in recent months. The wage differential does become evident in recruiting. The department recently conducted an entry-level examination and only had 23 applicants in contrast to the 40 to 60 applicants during previous tests.

As shown in Figure 32, annual incidents (calls for service) increased by 49 percent between 2000 and 2006. In recent times, the department is receiving more calls for medical service from people who may have other, less-intensive options, because they are new to the community and unfamiliar with those options.

Figure 32. Rock Springs Fire Department annual incidents: 2000–2006



Sources: RSFD: Year 2000 Fire Report; End of Year 2006 Report.

6.7 CITY OF GREEN RIVER

The City of Green River is located about 50 miles west from the project area’s western border of the project area. Although few natural gas service companies are located in Green River, the City is experiencing some growth and housing demand from the natural gas-related development in Sweetwater County.

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Green River had a 2006 population of 11,933 (WEAD 2007). Green River's population has been relatively stable at between 11,000 and 12,000 since 2000, with net growth of slightly over one percent since 2000. The Sweetwater Economic Development Authority estimates that Green River's December 2006 population was 12,882, based on residential electric power accounts and statewide household multipliers (SWEDA 2007).

Green River is currently limited on its ability to expand its boundaries to accommodate growth. The City is somewhat constrained by topography and land ownership, although housing demand has resulted in a number of subdivision proposals on land adjacent to the city and the city is in negotiations to acquire some BLM land west of the current city limits (Hoffman 2007). Several of the proposed subdivisions in the southern part of the city would require annexation and extension of water and wastewater services and development of new streets.

6.7.1 Green River Water System

Green River obtains treated water from the Green River/Rock Springs/Sweetwater County Joint Powers Water Board treatment plant, located in Green River. The City operates its own water-distribution and storage system. Green River has three water-storage tanks and three water pumps to move the water to areas of higher elevation within the City. The City is conducting a water-system study and has identified a need for more water-storage capacity, particularly in the southern part of the City, where water storage is already at capacity and where new development is proposed. It is anticipated that \$14 million in improvements to the system will be required, which is foreseen as being accomplished in three phases, subject to the availability of funding (Nelson 2007).

6.7.2 Green River Wastewater System

The Green River wastewater treatment plant has 1.5 MGD treatment capacity and is currently treating about 1.0 MGD. However, the City is conducting a wastewater master-plan study, which has already identified a number of problem areas in the wastewater collection system that will need to be addressed to accommodate new growth and more effectively move wastewater to the treatment plant (Nelson 2007).

6.7.3 Green River Solid Waste Disposal

Green River operates a landfill that has about 20 years of remaining life at current fill rates. The City is working on a 20-acre expansion that would increase the landfill life to about 50 years. Green River is also part of the Wyoming Integrated Solid Waste Management process, which is likely to result in consolidation of landfills in the area (Nelson 2007).

6.7.4 Green River Police Department

The Green River Police Department (GRPD) includes six divisions: patrol, investigations, communications, nuisance control, animal control, and records. As of September 2007, GRPD had 30 sworn officers and about 45 support personnel (Steffen 2007).

The Green River Police Department Dispatch Center answers calls for service for the Green River Police Department, Castle Rock Ambulance Service, and Green River Fire Department. The dispatch center is staffed by four full-time and four part-time Communication Officers (City of Green River 2007). Detainees are transported to the Sweetwater County Jail in Rock Springs.

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Six to eight months of police academy and on-the-job training and an investment of \$50,000 are typically required before a new recruit is fully qualified for patrol duty. In recent years the GRPD has seen the pool of qualified police officer applicants shrink substantially. The lack of affordable housing in the community complicates recruiting (Steffen 2007).

The GRPD has experienced an increase in certain crimes including DUI, drugs, larcenies, gas and bill skips and bad checks in recent years, which the department attributes to the general growth and activity associated with natural gas development.

6.7.5 Green River Fire Department

The Green River Fire Department (GRFD) provides fire suppression and emergency response service to an area bounded by the Utah border on the south, I-80 milepost 57 and the Uinta and Lincoln County borders on the west, the Lincoln and Sublette County borders on the north, and I-80 milepost 96 on the east. The GRFD responds to more than 330 calls per year, provides fire protection to the Jamestown Fire District and has a mutual aid agreement with Sweetwater County to assist with fire suppression in the western half of Sweetwater County (City of Green River 2007). GRFD staff and volunteers respond to all vehicle accidents with the Castle Rock Ambulance Service, and in turn, the ambulance service responds to all fire calls with the fire department.

The department operates two fire stations: Station #1 is located at City Hall and Station #2 is located south of the Green River at the corner of Shoshone and Hitching Post. It is important to maintain equipment and volunteers on both sides of the river in case access across the bridges was blocked. The department is typically staffed by 34 to 36 volunteers, two full-time personnel, a part-time administrative assistant and a part-time maintenance person. GRFD currently has four pumpers, one reserve pumper, one “parade truck” that is an antique 1946 American LaFrance Fire Engine, one 55-foot ladder truck, one quick-attack truck, one HAZMAT response trailer and three SUVs, which are used by the Fire Chief, Assistant Chief, and other personnel. As of September 2007, the department was awaiting delivery of a new ladder truck to replace the existing one.

If substantial growth continues to occur on the south side of town and the town boundary is extended beyond several miles, a new fire station might be required in that area to maintain response times and the town’s ISO insurance rating (Kennedy 2007).

6.8 WAMSUTTER

The Town of Wamsutter is located near the center of the project area. According to the Wyoming Economic Analysis Division, Wamsutter had a 2006 population of 267 (WEAD 2007). In contrast, SWEDA estimates that the 2006 population was 650, based on the number of residential electric hook-ups in the town and the surrounding unincorporated area. Additionally there were between 80 and 90 workers staying at the ESS Wamsutter Base Camp just north of Wamsutter in June of 2007 (Rensburg 2007). Other estimates have placed Wamsutter’s population as high as 1,000 (BP 2006, Carnes 2007). Wamsutter is designing its utility systems to accommodate an anticipated 2011 population of 2,500.

The Town of Wamsutter has five full-time and nine part-time employees and is in the process of recruiting a full-time public works director. Recently a Community Development Specialist began work in Wamsutter, the result of a collaborative partnership of the University of Wyoming Cooperative Extension Service, Sweetwater County, Anadarko Petroleum Company, BP America, Devon Energy Corp, Hyland Enterprises and Love’s Travel Shop. The Community Development Specialist is charged w/ assisting the Mayor and Town Council on development projects.

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Wamsutter has several residential subdivision projects in process and developers have announced plans for two new motels (see Section 1.5 [Housing]). A number of capital facilities have recently been constructed and others are in process. These projects have been funded from a variety of sources including proceeds from Sweetwater County's capital facilities sales tax. In addition, Wamsutter recently completed a new children's day-care facility funded by a \$360,000 grant from BP America and a \$160,000 grant from the Wyoming Community Development Block Grant Program.

6.8.1 Wamsutter Water System

During summer 2007, Wamsutter was nearing completion of three improvements to the Town's water system; a 400,000-gallon water-storage tank north of town (funded in part by \$1,213,000 from capital facilities sales tax revenues), construction of a water main connecting the industrial park to the Town's water system (funded by \$954,716 from the capital facilities sales tax), and installation of water meters (funded by a \$538,000 loan from the Wyoming State Revolving Loan Fund). A new well intended to be the town's main water source was scheduled to be on line in November of 2007 and the Town bid a water treatment project in August of 2007. The Town's water system improvements are designed to accommodate a target population of 2,500 (Colsen 2007). In December of 2007 the Wyoming Water Development Commission approved \$22,000 to study the siting of a new water source for the town. A bill before the 2008 session of the Wyoming Legislature includes \$800,000 in funding for drilling a new well.

6.8.2 Wamsutter Wastewater System

Wamsutter is completing construction of a wastewater collection main to connect the industrial park and other system improvements to the wastewater system. The Town is also conducting a capacity analysis of its wastewater lagoon system to determine short- and long-term needs. The analysis was funded by a \$16,500 grant from BP America. As with the water system, the objective is to develop a wastewater system to accommodate a population of 2,500. Currently the system serves about 850 people.

6.8.3 Wamsutter Streets

Wamsutter is embarking on a program to pave a number of the streets in the town, funded by a \$2,189,317 grant from the Wyoming State Land and Investment Board and a matching \$2,189,317 grant from BP America.

6.8.4 Wamsutter Law Enforcement

Law-enforcement services in Wamsutter are provided by a combination of municipal, county, and state law-enforcement agencies. The Town has a police Chief who enforces municipal ordinances, although town officials have had difficulty keeping the position filled. A Sweetwater County Deputy Sheriff is located in Wamsutter as are three Wyoming Highway Patrol (WHP) officers. There are no detention facilities in the town; detainees must be transported to the Sweetwater County Jail in Rock Springs (Carnes 2007).

Because of the housing shortage in Wamsutter, law enforcement agencies have been required to provide housing for their officers. BP America donated \$46,000 to provide modular housing for the Wamsutter police officer. Sweetwater County developed housing for its deputy and the Wyoming Department of Transportation developed five housing units for the WHP officers and other WYDOT employees.

6.8.5 Wamsutter Emergency Response

Wamsutter has volunteer fire and ambulance services providing emergency response services to the town and the surrounding area including natural gas fields. During the summer of 2007, the Wamsutter Volunteer Fire Department had 14 volunteers, two fire trucks, one water tender, and a wildland fire attack truck. The Volunteer Ambulance Service had 16 volunteer EMTs and two ambulances and responds to about 150 calls per year, most of which are related to traffic accidents on I-80.

6.8.6 Sweetwater County Solid Waste District #2

Sweetwater County Solid Waste District #2 serves eastern Sweetwater County from the eastern border of the County to Point of Rocks, including the towns of Bairoil and Wamsutter. District #2's landfill fill rates have more than doubled over the past two years and the district's landfill, located just south of Wamsutter, is within several months of its maximum capacity. Consequently, the district is no longer accepting waste from natural gas rigs and construction crews. District #2 has made application to the BLM and the Wyoming DEQ for another trench, which would extend the landfill's life for an additional year. The district has also applied for permits to develop a new landfill adjacent to the existing landfill on the remaining 20 acres of the district's 40-acre site, but those applications have not yet been approved (Rigano 2008).

7. LOCAL GOVERNMENT FISCAL CONDITIONS

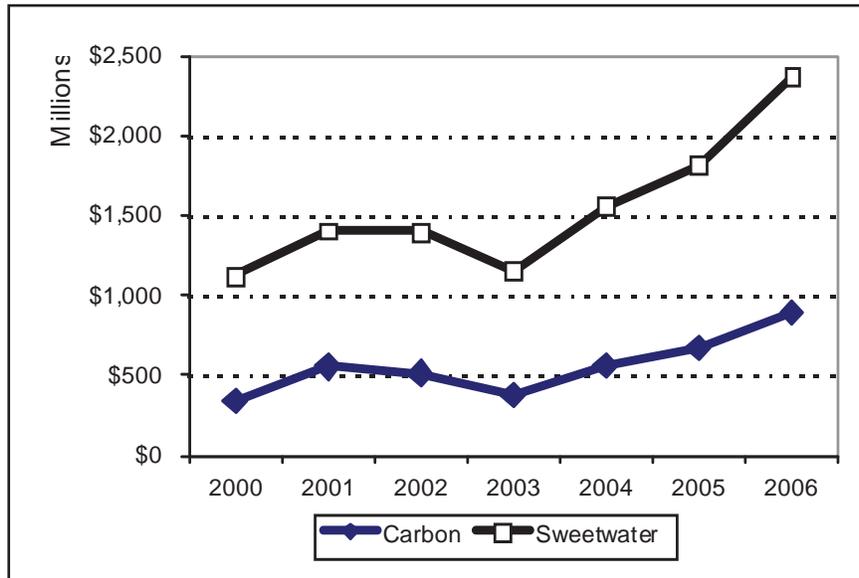
Natural gas development in the project area affects a range of local state and federal government revenues and expenditures. Affected revenues include ad valorem property tax revenues of Carbon and Sweetwater Counties, Carbon County School District #1, Sweetwater County SD #1 and certain special districts, sales and use tax revenues of the State of Wyoming, the two counties, and their municipalities; state severance taxes; and federal mineral royalties. The two counties and the affected school districts, special districts, and municipalities also see increases in expenditures to serve development and associated population growth. This section describes existing fiscal conditions and trends in the local government jurisdictions that are likely to be affected by the proposed CD-C project.

7.1 COUNTY FISCAL CONDITIONS AND TRENDS

7.1.1 Property Taxes

Property taxes make up a significant share of the revenue base of Carbon and Sweetwater Counties. In Wyoming, the assessed valuation of real and personal property, utilities, and mineral production is the basis for local property taxes. In 2006, the total assessed value in Sweetwater County approached \$2.4 billion, more than double the \$1.1 billion recorded in fiscal year 2000 (see Figure 33). Assessed valuation also climbed dramatically in Carbon County, from \$337 million in fiscal year 2000 to nearly \$900 million in 2006, including a jump of more than \$200 million from 2005 to 2006.

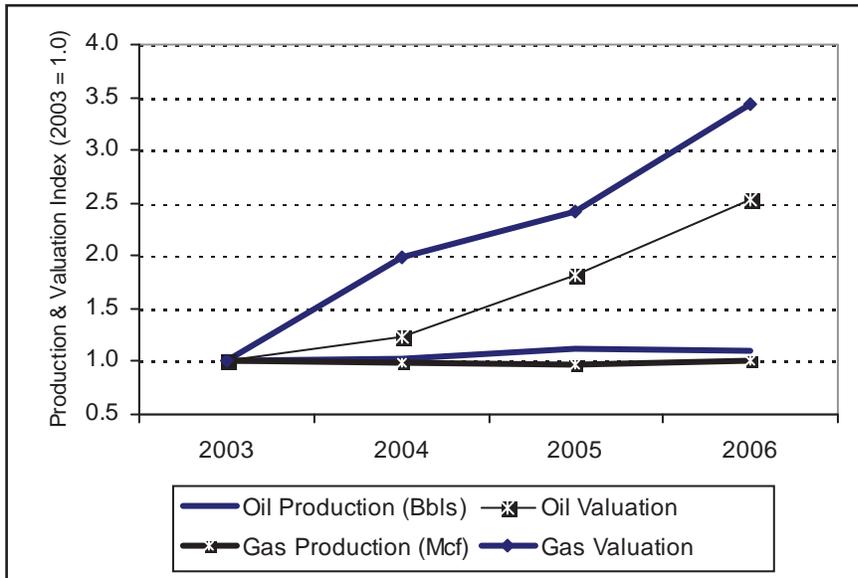
Figure 33. Total assessed value, Carbon and Sweetwater Counties, 2000–2006



Source: Wyoming Department of Revenue, 2003–2006.

In both counties the valuation on oil and gas have been the most rapidly growing components of the total assessed value, more than quadrupling between 2000 and 2006 in Carbon County and tripling in Sweetwater County. However, this has been due more to rising oil and gas prices than increased production (see Figure 34). From 2003 through 2006, oil production in the two counties combined increased by 11 percent while the value increased by over 150 percent. In the case of gas, production was virtually flat over the period while valuation went up nearly 250 percent.

Figure 34. Changes in oil and gas production and valuation in the two-county study area, 2003–2006



Source: Wyoming Department of Revenue, 2003–2006.

Due to the recent growth in mineral production and prices, the assessed value of minerals has increased from 64.5 percent to 81.3 percent of the tax base in Carbon County over the past six years and from 63.6 percent to 77.3 percent in Sweetwater County. Tables 24 and 25 show recent trends in the assessed value of the two counties, by type of property.

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Table 24. Assessed value by class, Carbon County, fiscal years 2000–2006

	For Taxes in the Following Fiscal Year							Change 2000-06
	2000	2001	2002	2003	2004	2005	2006	
Real Property								
<i>Agriculture</i>	\$ 6,269,760	\$ 6,262,236	\$ 6,299,420	\$ 7,174,946	\$ 8,568,490	\$ 8,574,397	\$ 8,893,032	41.8%
<i>Commercial</i>	\$ 9,995,472	\$ 10,394,770	\$ 10,680,346	\$ 10,747,714	\$ 10,890,764	\$ 11,810,099	\$ 12,610,642	26.2%
<i>Residential</i>	\$ 34,336,241	\$ 36,333,808	\$ 38,381,705	\$ 40,068,475	\$ 41,591,055	\$ 45,856,394	\$ 49,399,893	43.9%
Subtotal	\$ 50,601,473	\$ 52,990,814	\$ 55,361,471	\$ 57,991,135	\$ 61,050,309	\$ 66,240,890	\$ 70,903,567	40.1%
Minerals								
<i>Coal</i>	\$ 40,784,620	\$ 32,323,991	\$ 10,276,614	\$ 9,052,231	\$ 7,142,514	\$ 3,051,584	\$ -	-100.0%
<i>Gas</i>	\$159,074,447	\$362,561,806	\$338,472,292	\$198,973,451	\$366,142,219	\$447,125,250	\$657,795,481	313.5%
<i>Oil</i>	\$ 16,939,926	\$ 31,122,431	\$ 26,301,185	\$ 30,522,140	\$ 35,740,481	\$ 61,475,195	\$ 71,674,063	323.1%
<i>Other</i>	\$ 366,717	\$ 281,010	\$ 505,496	\$ 213,404	\$ 307,513	\$ 486,072	\$ 988,489	169.6%
Subtotal	\$217,165,710	\$426,289,238	\$375,555,587	\$238,761,226	\$409,332,727	\$512,138,101	\$730,458,033	236.4%
Utilities	\$ 37,017,889	\$ 41,628,203	\$ 47,940,041	\$ 48,898,806	\$ 51,471,733	\$ 46,903,049	\$ 46,271,365	25.0%
Personal property	\$ 31,988,670	\$ 33,155,186	\$ 36,401,714	\$ 36,618,561	\$ 38,027,279	\$ 42,672,517	\$ 51,050,463	59.6%
Total	\$336,773,742	\$554,063,441	\$515,258,813	\$382,269,728	559,882,048	\$667,954,557	\$898,683,428	166.9%
Percent minerals	64.5%	76.9%	72.9%	62.5%	73.1%	76.7%	81.3%	

Source: Wyoming Department of Revenue, 2000–2006 Annual Reports.

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Table 25. Assessed value by class, Sweetwater County, fiscal years 2000–2006

	For Taxes in the Following Fiscal Year							Change2000-06
	2000	2001	2002	2003	2004	2005	2006	
Real Property								
<i>Agriculture</i>	\$ 2,867,814	\$ 3,105,344	\$ 3,128,330	\$ 3,384,670	\$ 3,890,765	\$ 4,618,583	\$ 4,363,106	52.1%
<i>Commercial</i>	\$ 24,056,134	\$ 26,491,000	\$ 27,568,963	\$ 28,700,836	\$ 30,847,778	\$ 33,212,392	\$ 35,042,960	45.7%
<i>Residential</i>	\$ 87,250,899	\$ 105,471,049	\$ 91,025,122	\$ 94,588,804	\$ 100,685,339	\$ 112,085,265	\$ 131,216,090	50.4%
Subtotal	\$ 114,174,847	\$ 135,067,393	\$ 121,722,415	\$ 126,674,310	\$ 135,423,882	\$ 149,916,240	\$ 170,622,156	49.4%
Minerals								
<i>Coal</i>	\$ 95,628,328	\$ 103,145,569	\$ 110,451,688	\$ 92,540,468	\$ 95,173,328	\$ 116,658,528	\$ 116,363,044	21.7%
<i>Gas</i>	\$ 337,011,539	\$ 560,198,184	\$ 577,598,770	\$ 350,084,737	\$ 722,708,526	\$ 879,077,282	\$1,232,340,154	265.7%
<i>Oil</i>	\$ 72,419,110	\$ 110,173,591	\$ 89,538,393	\$ 90,593,819	\$ 112,742,873	\$ 159,200,662	\$ 235,689,352	225.5%
<i>Trona & other</i>	\$ 211,715,084	\$ 206,667,852	\$ 210,063,508	\$ 204,190,935	\$ 196,195,261	\$ 200,138,099	\$ 257,001,327	21.4%
Subtotal	\$ 716,774,061	\$ 980,185,196	\$ 987,652,359	\$ 737,409,959	\$1,126,819,988	\$1,355,074,571	\$1,841,393,877	156.9%
Utilities	\$ 125,018,923	\$ 122,849,306	\$ 122,375,973	\$ 128,135,325	\$ 131,508,087	\$ 127,339,747	\$ 149,150,470	19.3%
Personal property	\$ 170,326,979	\$ 168,874,394	\$ 172,520,674	\$ 168,522,398	\$ 169,602,385	\$ 189,548,139	\$ 219,474,392	28.9%
Total	\$1,126,294,810	\$1,406,976,289	\$1,404,271,421	\$1,160,741,992	\$1,563,354,342	\$1,821,878,697	\$2,380,640,895	111.4%
Percent minerals	63.6%	69.7%	70.3%	63.5%	72.1%	74.4%	77.3%	

Source: Wyoming Department of Revenue, 2000–2006 Annual Reports.

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7.1.2 Sales and Use Tax Conditions and Trends

Rivaling property taxes in importance to county governments is the sales and use taxes imposed by the state and, when approved by the local electorate, the counties themselves. The state sales and use tax of 4.0 percent is collected based on the point of sale, but the share returned to counties and incorporated municipalities (a statutorily established amount, currently 31 percent of the statewide total receipts) is on a population-based formula, irrespective of where the sales were generated. Counties can elect to impose a 1.0 percent optional general purpose local tax and a 1.0 percent specific-purpose tax for capital improvements. Carbon and Sweetwater Counties currently each impose both of these optional 1.0 percent levies. The state collects these taxes and distributes the local share based on the above-referenced formula.

Tables 26 and 27 summarize the amount of sales, use, and lodging taxes distributed to the two counties by the state in recent years. The distributions include both the full distribution of local-option taxes and the respective county’s proportional share of the state taxes. The tables also show the total amount of sales and use tax receipts collected from each of the counties for activities occurring within their respective boundaries, which is a more comprehensive measure of the growth in sales activity over the period.

As shown in Table 26, total sales and use tax revenues nearly tripled in Carbon County over the past five years, to nearly \$6.6 million in fiscal year 2006. The significance of the local-option taxes is readily apparent, accounting for 84 percent of the total sales and use tax revenues in fiscal year 2006.

Table 26. Annual Sales and Use Tax distributions and generation, Carbon County

	Fiscal Year					Change 2002-06
	2002	2003	2004	2005	2006	
Distributed to County						
General-purpose sales	\$ 427,105	\$ 369,167	\$ 433,378	\$ 478,201	\$ 628,572	47.2%
General-purpose use	\$ 114,616	\$ 35,762	\$ 35,628	\$ 96,259	\$ 57,427	-49.9%
Specific-purpose sales	\$ 979,656	\$ 37,892	\$ 1,783,584	\$ 3,351,825	\$ 4,405,351	349.7%
Specific-purpose use	\$ 200,331	\$ 2,788	\$ 139,346	\$ 678,904	\$ 403,730	101.5%
State sales	\$ 478,114	\$ 493,413	\$ 573,328	\$ 726,241	\$ 940,643	96.7%
State use	\$ 127,931	\$ 49,009	\$ 49,221	\$ 135,109	\$ 90,935	-28.9%
Lodging	\$ 52,573	\$ 49,928	\$ 50,128	\$ 38,171	\$ 42,468	-19.2%
Total distributed	\$ 2,380,326	\$ 1,037,959	\$ 3,064,613	\$ 5,504,710	\$ 6,569,126	176.0%
Generated within County						
Total generated	\$18,713,400	\$14,730,375	\$18,884,535	\$24,828,589	\$29,618,540	58.3%
Sales tax by mining	\$ 1,646,931	\$ 1,782,235	\$ 3,517,260	\$ 4,244,804	\$ 7,010,635	325.7%
Use tax by mining	\$ 606,395	\$ 278,240	\$ 187,499	\$ 606,653	\$ 485,559	-19.9%
Percent mining	12.0%	14.0%	19.6%	19.5%	25.3%	

Source: Wyoming Department of Revenue, Annual Reports, and Wyoming Department of Administration and Information, Wyoming Sales, Use, and Lodging Tax Report, Annual Series 2002–2006.

The resurgence of natural gas development activity and pipeline construction is evident in the sharp increase in the total sales and use taxes generated on sales in the county and the receipts from the local specific-purpose sales tax. Again, note the high share of the sales and use tax directly attributable to the

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mining sector, which includes oil and gas and currently accounts for about a quarter of the taxes in both counties. There is an indication that Carbon County sales and use tax distributions may be somewhat lower in 2008 as major pipeline construction and refinery expansion projects are completed.

Sweetwater County sales and use tax distributions increased by 62 percent between 2003 and 2004 and remained at levels between \$8.6 and \$10.8 million through 2006. The substantially higher level of sales and use tax attributable to the mining sector in Sweetwater County reflects the trona and coal-mining base within the county as well as oil and gas development (Table 27).

Table 27. Annual sales and use tax distributions and generation, Sweetwater County

	Fiscal Year					Chg,
	2002	2003	2004	2005	2006	2002-06
Distributed to County						
General purpose sales	\$ 1,655,068	\$ 1,582,303	\$ 1,794,481	\$ 2,104,913	\$ 2,593,614	56.7%
General purpose use	\$ 291,965	\$ 255,847	\$ 280,275	\$ 355,893	\$ 470,224	61.1%
Specific-purpose sales	\$ 1,510,547	\$ 4,687,757	\$ 5,288,061	\$ 2,364,513	\$ 1,772,060	17.3%
Specific-purpose use	\$ 252,028	\$ 758,564	\$ 825,754	\$ 416,353	\$ 307,448	22.0%
State sales	\$ 1,856,665	\$ 1,974,901	\$ 2,239,607	\$ 2,882,540	\$ 3,547,002	91.0%
State use	\$ 308,016	\$ 311,899	\$ 341,614	\$ 466,283	\$ 617,328	100.4%
Lodging	\$ 44,229	\$ 42,437	\$ 45,979	\$ 39,133	\$ 43,588	-1.4%
Total distributed	\$ 5,918,518	\$ 9,613,708	\$10,815,771	\$ 8,629,628	\$ 9,351,264	58.0%
Generated within County						
Total generated	\$59,888,050	\$60,888,594	\$68,680,972	\$76,915,422	\$94,363,848	57.6%
Sales tax by mining	\$ 7,845,170	\$ 6,992,707	\$ 9,377,712	\$ 11,876,151	\$19,024,059	142.5%
Use tax by mining	\$ 4,263,404	\$ 3,455,090	\$ 3,863,375	\$ 4,661,831	\$ 6,058,178	42.1%
Percent mining	20.2%	17.2%	19.3%	21.5%	26.6%	

Source: Wyoming Department of Revenue, Annual Reports, and Department of Administration and Information, Wyoming Sales, Use, and Lodging Tax Report, Annual Series, Annual Series 2002–2006.

The information in Tables 26 and 27 also provides some insights as to how the oil and gas development in these two counties yield fiscal benefits to the entire state through the various redistribution formulas. A total of \$32.6 million in sales and use taxes attributable to the mining sector were generated within the two counties. Of that total, \$15.8 million (48.6 percent) remained local, while \$16.8 million flowed to the state or was distributed to other communities.

7.1.3 County Revenue and Expenditures

Property, sales, and use taxes account for a major share of county revenues. However, counties have many other revenue sources, ranging from fees for services to federal payment-in-lieu-of-taxes, severance tax and mineral royalties distributions and grants. In the case of Carbon County (Table 28) there was a one-time grant of over \$12 million from the State Land Investment Board (SLIB).

Table 28 shows total fund revenues and expenditures in several broad categories for Carbon County’s general fund over the past few years. Total revenue increased from \$14.1 million in fiscal year 2004 (FY2004) to \$36.5 million budgeted for FY2007. Even without the SLIB grant, total revenue increased by 70 percent, compared to the national Consumer Price Index of 10.4 percent. All categories of

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expenditures increased at a rate greater than the CPI, with the greatest increases in the Road and Bridge category (a 180 percent increase over three years) and operating costs for the jail (up 130 percent). Increases in the road and bridge budget are in large part attributable to construction and maintenance of roads that provide access to areas of natural gas development.

Table 28. Annual General Fund revenues and expenditures, Carbon County

	FY2004 Actual	FY2005 Actual	FY2006 Actual	FY2007 Budget	Pct. of Total FY2007	2004-07 Change
General Fund Revenue						
Property tax revenue	\$ 4,063,910	\$ 6,234,276	\$ 7,156,399	\$ 9,590,750	26.2%	136.0%
Other revenue	\$10,081,080	\$ 6,857,222	\$ 9,129,752	\$26,946,187	73.8%	167.3%
Total revenue	\$14,144,990	\$13,091,498	\$16,286,151	36,536,937	100.0%	158.3%
General Fund expenditures						
Select departments						
Criminal justice						
Attorney	\$ 368,572	\$ 377,625	\$ 404,795	\$ 444,156	1.1%	20.5%
District Court	\$ 203,501	\$ 214,572	\$ 240,661	\$ 272,750	0.7%	34.0%
Attorney	\$ 368,572	\$ 377,625	404,795	\$ 444,156	1.1%	20.5%
District Court	\$ 203,501	\$ 214,572	\$ 240,661	\$ 272,750	0.7%	34.0%
Courthouse	\$ 181,031	\$ 171,534	\$ 210,053	\$ 203,875	0.5%	12.6%
Criminal justice subtotal	\$ 753,104	\$ 763,731	\$ 855,509	\$ 920,781	2.3%	22.3%
Sheriff	\$ 1,119,471	\$ 1,170,063	\$ 1,249,957	\$ 1,483,118	3.7%	32.5%
Jail	\$ 786,914	\$ 1,072,473	\$ 1,398,848	\$ 1,806,320	4.5%	129.5%
Road and bridge	\$ 1,844,725	\$ 1,410,805	\$ 2,293,834	\$ 5,150,763	12.9%	179.2%
Social services	\$ -	\$ 136,600	\$ 33,718	\$ 455,246	1.1%	
Select departments subtotal	\$ 4,504,214	\$ 4,553,672	\$ 5,831,866	\$ 9,816,228	24.7%	117.9%
All other departments	\$10,315,212	\$ 8,613,211	\$ 9,156,484	\$17,485,524	44.0%	69.5%
Impact fund	\$ -	\$ -	\$ -	\$12,472,950	31.4%	
Total expenditures	\$14,819,426	\$13,166,883	\$14,988,350	\$39,774,702	100.0%	168.4%

Source: Carbon County, County Budget, FY 2006-07.

Table 29 shows comparable general fund budget data for Sweetwater County. There too, all categories increased much more rapidly than the rate of inflation, although in most cases not as much as in Carbon County. The highest departmental growth was the Courthouse, up 110 percent over three years. However, the aggregate budgeted expenditures of the other departments not specified in the table were up 164 percent. The rapid rise in assessed value and corresponding increases in property taxes, coupled with increases in other revenues, allowed the county to budget a \$13 million increase in reserves for 2007.

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Table 29. General Fund revenues and expenditures, Sweetwater County

	FY2004 Actual	FY2005 Actual	FY2006 Actual	FY2007 Budget	Pct. of Total FY2007	2004-07 Change
General fund revenue						
Property tax revenue	\$ 8,486,801	\$ 9,184,814	\$10,338,850	\$20,349,575	48.3%	139.8%
Other revenue	\$12,590,369	\$14,672,526	\$17,733,239	\$21,816,215	51.7%	73.3%
Total revenue	\$21,077,170	\$23,857,340	\$28,072,089	\$42,165,790	100.0%	100.1%
General Fund expenditures						
Select departments						
Criminal justice						
Attorney	\$ 1,344,130	\$ 1,346,201	\$ 1,500,827	\$ 2,023,460	3.5%	50.5%
District court	\$ 515,169	\$ 519,550	\$ 523,946	\$ 624,973	1.1%	21.3%
Juvenile probation	\$ 226,625	\$ 335,422	\$ 295,715	\$ 387,552	0.7%	71.0%
Courthouse	\$ 657,784	\$ 838,266	\$ 858,216	\$ 1,383,613	2.4%	110.3%
Criminal justice subtotal	\$ 2,743,708	\$ 3,039,439	\$ 3,178,704	\$ 4,419,598	7.6%	61.1%
Sheriff	\$ 2,585,112	\$ 2,600,817	\$ 3,081,742	\$ 3,449,141	5.9%	33.4%
Jail	\$ 2,354,398	\$ 3,273,342	\$ 4,106,742	\$ 4,488,764	7.7%	90.7%
Road and bridge	\$ 3,359,921	\$ 3,678,219	\$ 4,158,613	\$ 4,704,584	8.1%	40.0%
Social services	\$ 1,006,372	\$ 1,113,235	\$ 1,196,039	\$ 1,470,456	2.5%	46.1%
Select departments subtotal	\$12,049,511	\$13,705,052	\$15,721,840	\$18,532,543	31.7%	53.8%
All other departments	\$ 9,027,659	\$10,152,288	\$12,350,258	\$26,560,442	45.5%	194.2%
Reserves	\$ -	\$ -	\$ -	\$13,311,884	22.8%	
Total expenditures	\$21,077,170	\$23,857,340	\$28,072,098	\$58,404,869	100.0%	177.1%

Source: Sweetwater County Budget, FY 2006-07.

7.2 MUNICIPAL FISCAL CONDITIONS AND TRENDS

7.2.1 Property Taxes

Property taxes are not as substantial a revenue source for municipalities as for counties. However, trends in assessed value are important indicators of local economic growth. As shown in Table 30, Green River, Rawlins, and Rock Springs have relatively large ad valorem tax bases, while the three smaller communities have more modest property tax bases. The most significant change disclosed by these data is that Wamsutter's tax base nearly quadrupled over the past three years, primarily due to development related to nearby natural gas activity. Rock Springs saw a 47.5 percent increase in assessed value between 2003 and 2006 due to its emergence as a regional service center for natural gas development, resulting in an assessed value nearly four times that of Rawlins and twice that of Green River.

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Table 30. Total assessed value, affected cities and towns

City/Town	Fiscal Year				Growth 2003-06
	2003	2004	2005	2006	
Green River	\$41,771,148	\$44,198,421	\$47,907,399	\$55,080,205	31.9%
Rawlins	\$26,838,230	\$27,166,416	\$29,419,466	\$ 31,466,624	17.2%
Rock Springs	\$81,327,114	\$87,291,947	\$97,943,498	\$119,965,719	47.5%
Baggs	\$ 939,579	\$ 1,064,436	\$ 1,184,220	\$ 1,253,046	33.4%
Dixon	\$ 186,556	\$ 203,548	\$ 215,900	\$ 224,686	20.4%
Wamsutter	\$ 1,510,119	\$ 1,977,938	\$ 1,475,796	\$ 5,438,372	260.1%

Source: Wyoming Taxpayers Association, Annual Reports.

7.2.2 Sales and Use Tax Distributions

Sales and use taxes are typically the single largest sources of general fund revenue for municipalities. That pattern applies to the affected municipalities in the project area. Table 31 shows the annual sales and use tax distributions reported by the state for the past five years to each of the six potentially affected communities. The comparative distributions among the communities generally reflect their relative sizes, but also differences in the level of economic activity and growth associated with natural gas industry.

Table 31. Total sales and use tax distributions, cities and towns

City/Town	Fiscal Year					Change 2002-06
	2002	2003	2004	2005	2006	
Green River	\$7,615,546	\$7,405,529	\$8,397,258	\$10,177,818	\$12,668,279	66.3%
Rawlins	\$4,182,683	\$3,665,228	\$4,235,744	\$5,252,016	\$6,336,901	51.5%
Rock Springs	\$12,319,620	\$11,986,332	\$13,559,427	\$16,429,886	\$20,471,622	66.2%
Baggs	\$ 168,602	\$ 144,331	\$ 166,218	\$ 205,710	\$ 245,475	45.6%
Dixon	\$ 36,748	\$ 31,131	\$ 36,043	\$ 110,613	\$ 53,712	46.2%
Wamsutter	\$ 139,769	\$ 166,023	\$ 188,374	\$ 228,118	\$ 282,659	102.2%

Source: Wyoming Department of Revenue, Annual Reports.

7.2.3 Municipal Revenue and Expenditures

Summaries of municipal general fund revenues and expenditures were developed from the budget documents of each potentially affected city and town. These summary budgets are presented in Tables 32 through 35 below. Although the organization of funds and level of detail provided in the municipal budgets varies among the communities, the summary budgets attempt to present comparable information for each municipality by assigning all revenues and expenditures to one of a broadly defined set of categories. Two conventions should be noted. First, the income category of “taxes” includes sales and use taxes returned to the municipalities by the state. Several of the source-document budgets listed such payments as “intergovernmental revenue.” Conversely, some “taxes” such as severance tax and mineral royalties are included in the summaries as “intergovernmental” even though some local budgets classified them under the “tax” heading. Second, in preparing the expenditure summaries, multiple departments are grouped into six categories with descriptive titles that do not necessarily mean only the department with a

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similar name. For example “public works” in the table could include the Public Works department, but also Streets, Engineering, Shops, Building Maintenance, and other physical facility and plant construction and maintenance activities.

7.2.3.1 City of Rawlins

Table 32 summarizes general fund budget data (most recent actual plus two years of budgets) for the City of Rawlins. General Fund revenues and expenses will effectively equalize over the long term, but there may be variances in any one year due to inter-fund transfers, contributions to or from reserves, and varying year-end cash balances. In Rawlins, budgeted revenue is anticipated to increase modestly over the three-year period, with over two-thirds of the total from taxes. On the expenditure side, the largest single category – both in terms of absolute size and rate of increase over the three-year period – is public safety.

Table 32. Annual General Fund revenue and expenditures, City of Rawlins

	FY2006 Actual	FY2007 Budget	FY2008 Budget	Growth 2006-08
General Fund Revenue				
Taxes	\$ 6,253,396	\$ 7,495,241	\$ 8,294,450	32.6%
Franchises	\$ 364,850	\$ 347,000	\$ 369,000	1.1%
Intergovernmental	\$ 1,559,350	\$ 1,424,541	\$ 1,677,873	7.6%
Charges for Services	\$ 1,355,798	\$ 969,900	\$ 1,053,513	-22.3%
Police and Court	\$ 310,953	\$ 272,500	\$ 354,700	14.1%
Other Revenue	\$ 364,256	\$ 915,000	\$ 119,500	-67.2%
Transfers In	<u>\$ 439,394</u>	<u>\$ 439,394</u>	<u>\$ 425,850</u>	-3.1%
Total Revenue	\$10,647,997	\$11,863,576	\$12,294,886	15.5%
General Fund Expenditures				
Administration	\$ 1,620,711	\$ 1,978,844	\$ 2,095,460	29.3%
Courts	\$ 250,359	\$ 328,730	\$ 287,597	14.9%
Public Safety	\$ 2,542,486	\$ 3,311,433	\$ 4,185,164	64.6%
Public Works	\$ 2,833,988	\$ 3,881,532	\$ 3,297,710	16.4%
Parks & Recreation	\$ 1,667,997	\$ 1,976,484	\$ 2,304,915	38.2%
Miscellaneous	<u>\$ 209,085</u>	<u>\$ 2,354,321</u>	<u>\$ 2,452,809</u>	1073.1%
Total Expenditures	\$ 9,124,626	\$13,831,344	\$14,623,655	60.3%

Note: Taxes include State-rebated sales and use tax.

Source: City of Rawlins, Budget Worksheet, FY2007-08.

7.2.3.2 City of Rock Springs

The City of Rock Springs has an annual general fund budget more than twice the size of Rawlins, with taxes again the largest single contributor to revenue (see Table 33). The city’s anticipated general revenues exhibit substantial year-to-year revenue due to transfers and unexpected increases due to changes in local economic activity.

The city’s total budgeted general fund expenditures are anticipated to increase by half over the three-year period. In part the increase is being funded by the increased distributions of sales and use tax revenues, with reserves being used to fund the remainder. As with Rawlins, public safety is the largest category of budgeted expenditures for the City of Rock Springs, but its growth is more constrained. The largest year-

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to-year increase in expenditures was in parks and recreation, due primarily to a \$2.0 million budget item to add nine holes to the municipal golf course. Annual expenditures for public works have also expanded sharply, from \$4.8 million in FY2005 to \$9.1 million budgeted for FY2007.

Table 33. Annual General Fund revenue and expenditures, City of Rock Springs

	FY2005 Actual	FY2006 Actual	FY2007 Budget	Growth 2005-07
General Fund Revenue				
Taxes	\$19,334,370	\$23,197,558	\$20,260,517	4.8%
Intergovernmental	\$ 2,556,728	\$ 4,270,720	\$ 2,849,333	11.4%
Charges for services	\$ 1,013,139	\$ 1,098,985	\$ 1,015,100	0.2%
Fines and forfeitures	\$ 370,556	\$ 442,006	\$ 410,500	10.8%
Miscellaneous	\$ 1,286,589	\$ 1,479,508	\$ 762,200	-40.8%
Transfers in	\$ 114,556	\$ 1,493,031	\$ 110,500	-3.5%
Total revenue	\$24,675,938	\$31,981,808	\$25,408,150	3.0%
General Fund Expenditures				
Administration	\$ 3,078,668	\$ 3,149,734	\$ 4,262,253	38.4%
Courts	\$ 249,024	\$ 199,198	\$ 293,451	17.8%
Public safety	\$ 9,675,357	\$ 9,555,465	\$10,893,736	12.6%
Public works	\$ 4,861,925	\$ 8,445,884	\$ 9,147,411	88.1%
Parks & recreation	\$ 5,499,407	\$ 6,930,504	\$10,642,972	93.5%
Total expenditures	\$23,364,381	\$28,280,785	\$35,239,823	50.8%

Note: Taxes include State-rebated sales and use tax.

Source: City of Rock Springs, Final Budget 2006–2007.

7.2.3.3 City of Green River

As indicated in Table 34, Green River’s General Fund revenues have grown by about 18 percent over the last three years, with taxes comprising the largest and fastest-growing component. Total fund expenditures have increased nearly 50 percent. This is possible because the fund had built up in a balanced way over the years, and over \$12 million is budgeted to be transferred to the Capital Projects fund in FY2008. Regarding day-to-day activities, the parks and recreation category showed the greatest growth among the selected categories.

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Table 34. Revenue and expenditures, City of Green River

	FY2006 Actual	FY2007 Budget	FY2008 Budget	Growth 2006-08
General Fund Revenue				
Taxes	\$13,627,304	\$13,447,894	\$16,674,049	22.4%
Intergovernmental	\$ 2,463,647	2,441,950	\$ 2,889,987	17.3%
Charges for services	\$ 403,962	\$ 413,400	\$ 435,400	7.8%
Fines and forfeitures	\$ 128,495	\$ 89,300	\$ 130,200	1.3%
Miscellaneous	\$ 1,222,460	715,769	\$ 909,783	-25.6%
Total revenue	\$17,845,868	\$17,108,313	\$21,039,419	17.9%
General Fund Expenditures				
Administration	\$ 2,758,120	\$ 3,017,938	\$ 3,715,140	34.7%
Courts	\$ 226,029	\$ 259,311	\$ 265,632	17.5%
Public safety	\$ 4,451,629	\$ 4,891,163	\$ 5,205,388	16.9%
Public works	\$ 1,995,492	\$ 2,441,584	\$ 2,651,771	32.9%
Parks & recreation	\$ 3,345,409	\$ 3,807,538	\$ 4,724,824	41.2%
Transfers out	\$ 6,976,533	\$ 9,614,768	12,822,362	83.8%
Total expenditures	\$19,753,212	\$24,032,302	\$29,385,117	48.8%

Notes: Taxes include State rebated sales and use tax.

Source: City of Green River, Annual Budget Fiscal Year 2008.

7.2.3.4 Baggs, Dixon and Wamsutter

Table 35 shows budget data for Fiscal Year 2007 for the three smaller communities. Information for only a single budget year is shown as consistent year-to-year information was not readily available. Again, the categories shown are an attempt to provide data on as comparable a basis as possible. Even so, the Dixon budget data includes the utilities, which are reported separately as enterprise funds in the other communities. Compared to the counties and cities, these communities receive smaller portions of their revenues from taxes and devote a higher share of the expenditures to administration. In part, the latter also reflects the more narrow range of services provided by these small municipalities.

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Table 35. Revenue and expenditures, affected towns

	Fiscal Year 2007 Budget		
	Baggs	Dixon	Wamsutter
General Fund Revenue			
Taxes	\$ 222,971	\$ 124,934	\$ 472,000
Licenses & permits	\$ 11,000	\$ 1,202	\$ 33,150
Intergovernmental	\$ 67,244	\$ 79,853	\$ 94,000
Charges for services	\$ 16,810	\$ 26,707	\$ -
Miscellaneous	\$ 150,713	\$ 12,026	\$ 354,200
Total revenue	\$ 468,738	\$ 244,722	\$ 953,350
General Fund Expenditures			
Administration	\$ 121,582	\$ 68,855	\$ 518,205
Courts	\$ 5,400	\$ 1,840	\$ 6,500
Public safety	\$ 106,391	\$ 11,297	\$ 185,000
Public works	\$ 72,704	\$ 4,543	\$ 184,495
Parks & recreation	\$ -	\$ -	\$ 59,150
Utilities	\$ -	\$ 105,285	\$ -
Miscellaneous	\$ 162,661	\$ 12,665	\$ -
Total expenditures	\$ 468,738	\$ 204,485	\$ 953,350

Source: Various Town documents.

Note: Taxes include state distributed sales and use tax. Dixon budget includes all funds.

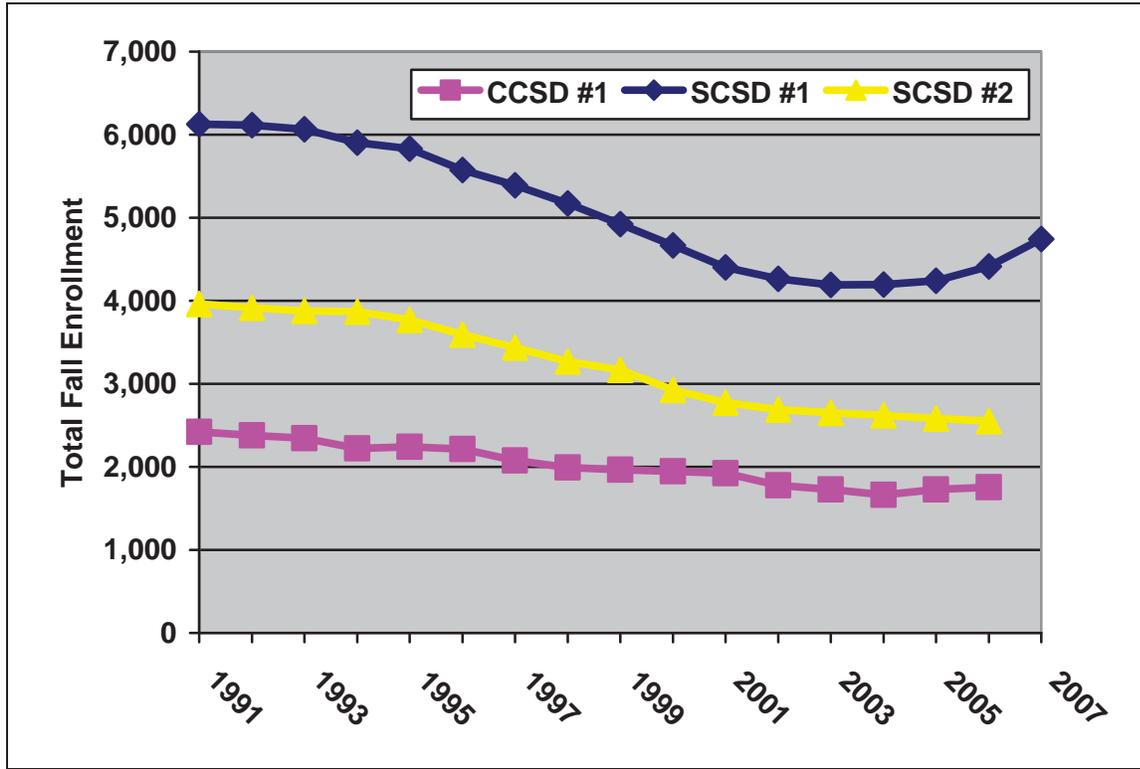
8. PUBLIC EDUCATION

Three school districts could be affected by the Continental Divide–Creston Project:

- Carbon County School District #1 (CCSD #1)
- Sweetwater County School District #1 (SCSD #1)
- Sweetwater County School District #2 (SCSD #2)

Figure 35 displays 1991–2006 fall enrollment statistics for the three affected school districts. All three districts had substantial enrollment declines through the 1990s and the first five years of the current decade. SCSD #1 began to gain enrollment in 2005, as did CCSD #1. SCSD #2 continued to lose enrollment through 2006.

Figure 35. 1991–2006 Fall Enrollment in Carbon County School District #1 and Sweetwater County School Districts #1 and #2



Sources:

1. Historical Enrollment by Grade by District Totals for Years 1991 through 2000, from 2000 Wyoming Education Statistics, Series Number 2, downloaded April 11, 2007 from www.k12.wy.us/statistics/stat_series.aspx.
2. Historical Enrollment by Grade by District Totals for Years 1996 through 2005, from 2005 Wyoming Education Statistics, Series Number 2, downloaded April 11, 2007 from www.k12.wy.us/statistics/stat_series.aspx.
3. 2006 Fall Enrollment counts provided by special request from the Wyoming Department of Education, from Shannon Cranmore, the Data Analyst/EDEN Coordinator on April 12, 2007.

Financing for school operations and maintenance is governed by the provisions of the Wyoming School Foundation Program and the Wyoming School Facilities Commission. The provisions of these two statutes are described under the School District Fiscal Conditions section.

8.1 CARBON COUNTY SCHOOL DISTRICT #1

CCSD #1 serves Rawlins, Sinclair, and the Little Snake River Valley, including the communities of Baggs and Dixon. Additionally, the district serves students in the Sweetwater County community of Bairoil.

8.1.1 Facilities

Currently CCSD #1 operates three elementary schools, a middle school, a high school and a cooperative high school in Rawlins. Additionally the district operates a fine-arts center, a swimming pool and a sports

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complex. It also operates elementary schools in Sinclair and Bairoil and a K–12 comprehensive school in Baggs that serves the entire Little Snake River Valley.

The three elementary schools in Rawlins are at capacity and the district is currently using three modular classroom buildings to accommodate elementary students. The district plans to consolidate the elementary schools in Rawlins; current plans are to build collocated K–2nd and 3rd–5th grade schools. The district will need additional modular classrooms to accommodate all elementary students until the new schools are constructed.

The Rawlins middle school can accommodate an additional 75 to 100 students over 2006–2007 school-year levels. The Rawlins High School was designed to accommodate 1,100 to 1,200 students and fall enrollment was 438 students. The under-utilized high school facility results in high maintenance and utility costs and safety issues for the district. The auditorium and swimming pool associated with the high school are considered valuable assets for the district and the community, and the district intends to keep these assets, however the high school is ultimately configured (Sanders 2007).

8.1.2 Enrollment

Until recently, Carbon County School District #1 has had substantial reductions in enrollment, losing 756 students between fall 1991 and fall 2004, a 31 percent reduction in total enrollment. Fall enrollment has been increasing over the past two years; the district gained 63 students in the fall of 2005 and 26 students in 2006, for a total five percent increase over the two-year period (Figure 35). There have been substantial increases in kindergarten and first grades in recent years, which is more of a demographic phenomenon than a result of migration. The district typically loses students from fall enrollment through the end of the year.

8.1.3 Other Issues

CCSD #1 has difficulty finding affordable housing for teachers. The district has purchased modular housing in Baggs to address this problem in the Little Snake River Valley. The district also has difficulty in recruiting and retaining maintenance and custodial staff given the labor shortage in the area and the higher wages paid in the energy industry.

8.2 SWEETWATER COUNTY SCHOOL DISTRICT #1

SCSD #1 serves eastern and central Sweetwater County and the communities of Rock Springs, Farson, Eden, Superior, and Wamsutter.

8.2.1 Facilities

SCSD #1 has six elementary schools (five K–4th grade buildings and one 5th–6th grade building); one junior high and two senior high schools (one traditional and one alternative) in Rock Springs; a combined elementary, middle, and high school in Farson; and a combined elementary and middle school in Wamsutter (SCSD #1 2007). The district closed eight schools between 1991 and 2003 due to declining enrollments.

Currently there are no empty classrooms in the Rock Springs K–4th grade buildings or in the 5th–6th grade building. SCSD #1 reopened a previously closed school to accommodate recent increased enrollments in the elementary grades. The Wyoming School Facilities Commission (WSFC) has approved construction

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of a new 450-student capacity K–4 building in Rock Springs and the district has applied to the BLM for land in the western part of town for this facility. The district has a proposal in to the WSFC to build two 5th–6th grade buildings and an addition to the junior high school. One of the new 5th–6th grade schools would also be located on the property that the district hopes to acquire from the BLM.

In Wamsutter, the 1st and 2nd grades, 3rd and 4th grades and 5th and 6th grades are combined, each two-grade class in one classroom.

8.2.2 Enrollment

SCSD#1 lost 1,934 students between the fall of 1991 and the fall of 2003, or 32 percent of total enrollment. Between the fall of 2003 and fall 2006, the district added 220 students, an increase of about 5 percent over 2003 total fall enrollment (see Figure 35). School enrollment during the 2006–2007 school year was about 4,400 students. October 2007 total enrollment for SCSD #1 was 4,742.

Although enrollment is increasing, student turnover is high. The district is seeing an increase in students who enroll for a matter of weeks or even months and then leave the district as their parents are relocated. In one recent semester, the district enrolled 875 new students but lost 800 students before the semester's end (Grube 2007).

The average classroom size in SCSD #1 is increasing. District standards allow for a maximum of 23 students in K–3rd grade classes and 27 students in 4th–12th grade classes, although the Wyoming Department of Education recommends 16 to 18 students in kindergarten classes. In September of 2007, there were 792 new students. About 400 of the new students were enrolled in kindergarten and 392 were enrolled in other grades. In kindergarten and some of the lower grades, the district has a number of classrooms that are within two or three students of capacity for that classroom. The district was required to open up three new kindergarten classes at the beginning of the 2007–2008 school year.

8.2.3 Other Issues

Salary levels for teachers in Wyoming are comparatively high, which attracts interest from teachers in other states and those just entering the profession. However, housing cost and availability is a disincentive for teachers in the Rock Springs area. SCSD #1 provides teacher housing (teacherages) in Wamsutter; however, the state does not reimburse districts for the costs of teacher housing.

Serving English language learners (ELL) has become a major effort in SCSD #1. During the 2003–2004 school year, the district provided ELL classes to 26 students. During the 2007 school year the district will provide ELL services to about 400 students. The State reimburses districts for one ELL teacher for every 100 students. SCSD #1 has an ELL Coordinator, eight full-time ELL teachers and five to six paraprofessional ELL aides; the district is not reimbursed for a number of these employees.

SCSD #1 must also compete with the higher-paying gas industry and other industries for certain types of employees. The district has been short 11 custodians for the last two years and has been required to use mechanics and other administrative and maintenance staff to drive school buses. Principals in outlying schools must have a commercial driver's license as a condition of employment. During the 2006–2007 school year, the Principal in Farson drove a bus. The district has also had problems recruiting and retaining food serve staff and special education aides. Some special-aid students require a 1:1 ratio of aides to students (Grube 2007).

8.3 SWEETWATER COUNTY SCHOOL DISTRICT #2

SCSD #2 serves the western half of Sweetwater County including the communities of Green River, Granger, and McKinnon.

8.3.1 Facilities

SCSD #2 operates Green River High School (grades 9–12), Expedition Academy Alternative High School (grades 10–12), Lincoln Middle School (grades 7–8), and Monroe Intermediate School (grades 5–6). The District also maintains three elementary schools within the city limits and three rural elementary schools (SCSD #2 2007). The district has closed two elementary schools since 1990 due to declining enrollment.

It is estimated that the three Green River elementary schools could accommodate a combined total of an additional 40 to 50 students, as these schools approach their optimum capacity. These schools have classroom sizes of 19 to 20 students and are running short of classrooms. Reopening a previously closed elementary school that was mothballed might be possible if elementary enrollments continue to increase.

There is some capacity for growth in both the 5th–6th grade intermediate school and the 7th–8th grade middle school. The high school has a design capacity of 1,200 to 1,500 students and currently serves about 780 students (Sorensen 2007).

8.3.2 Enrollment

Between fall of 1991 and fall of 2006, SCSD# 2 lost 1,412 students or 36 percent of total 1991 fall enrollment (see Figure 35). Total enrollment at the end of the 2006–2007 school year was about 2,600 students.

8.3.5 Other Issues

Similar to the other two affected school districts, SCSD #2 has had difficulty recruiting teachers because of the cost and availability of housing. Recruiting ELL and special-education teachers and aides has also been a problem (Sorensen 2007).

8.4 SCHOOL DISTRICT FISCAL CONDITIONS

A statewide school finance system, the Wyoming School Foundation Program (WSFP) [Title 21, Chapter 13, of Wyoming Statutes], regulates operating revenues and expenditures for public education services delivered at the local level. The WSFP provides a guaranteed level of funding to every school district in the state, with funding based on numbers of students, classrooms, and other factors such as adjustments for small schools, transportation, special programs, and the cost of living. The system is structured to achieve equalization in educational opportunities across the state, irrespective of differences in the local revenue-generating capacities of individual districts. Carbon, Sweetwater, and other mineral-rich counties play an important role in funding the school finance system because of their combined energy and minerals-related tax base. Revenues for school funding come from taxes on minerals production, real estate and taxable personal property, and various other local, state, and federal program funds and grants.

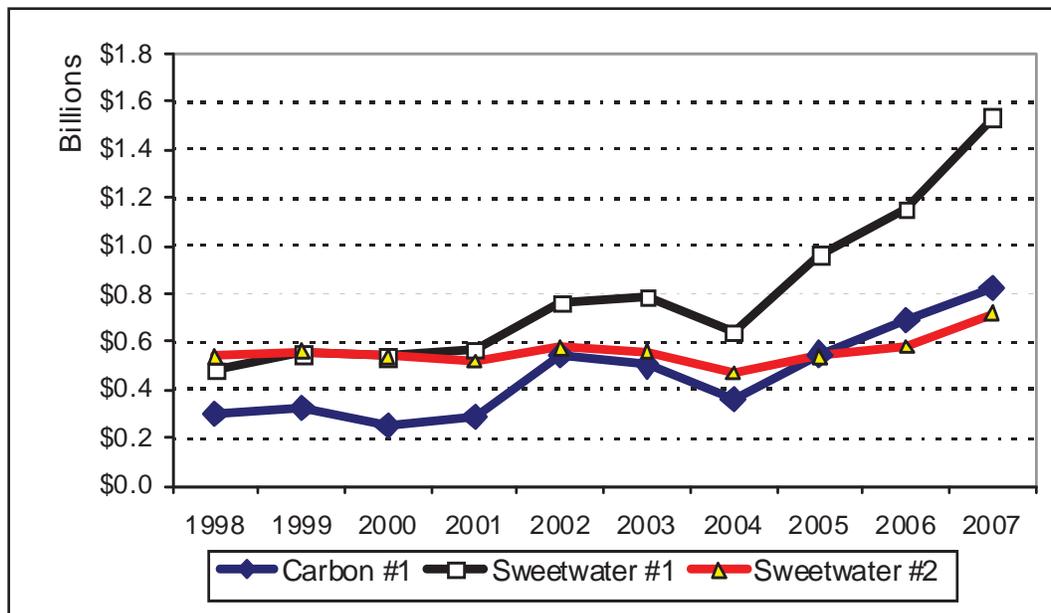
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The WSFP funding formula uses either a three-year rolling average of enrollment or the previous year's enrollment if it is the highest of the three years to compute the following year's allowable district operating budget. If a district has a substantial increase in enrollment in any year over the previous year or the three-year rolling average, the WSFP does not fully fund the additional students during the first year. There is an exception allowing for supplemental funding if enrollment increases 10 percent or more over the previous year. For growth of less than 10 percent, the district may need to hire new teachers and fund higher operating expenditures without a comparable increase in revenue, even if the district's tax base also increases.

To fund public education, all districts are statutorily required to levy an ad valorem property tax of 43 mills, 31 mills of which are deemed local resources. The remaining 12 mills represent a statewide levy used to fund the guaranteed revenue for districts with fewer local resources. If local property tax revenues fail to meet a district's guaranteed funding level, the WSFP makes up the difference. If the district's revenues exceed the guaranteed level, the excess is transferred to the state to aid in the funding of other districts under "recapture" provisions of the WSFP.

Like the counties of which they are a part, CCSD #1 and SCSD #1 and #2 have experienced substantial increases in assessed value in recent years. As illustrated in Figure 36, CCSD #1 had a 175 percent increase in assessed value over the past decade, topping \$800 million for FY2007, while SCSD #1 increased its assessed value by more than 220 percent, exceeding \$1.5 billion in FY2007. Increases in CCSD #2 assessed valuation were more modest, growing by 33 percent over the decade. As described above, the districts do not experience a corresponding increase in operating revenues associated with the increase in assessed valuation due to the provisions of the WSFP.

Figure 36. Total assessed valuation, affected school districts: 1998–2007



Source: Wyoming Department of Education, Statistical Report Series.

Table 36 through Table 38 show the income derived by the three districts in several separate funds. As noted most of the revenue comes from local property taxes, but the Special Revenue Fund consists primarily of state and federal grants. As described above, locally derived property tax revenues in excess of certain limits are remitted to the WSFP for redistribution to other districts. CCSD #1 made such

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payments, known as “recapture,” in 2002, 2003, 2005, and 2006. SCSD #1 had excess revenue only in 2006, and SCSD #2 had no excess revenue during the 2000–2006 period.

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Table 36. Carbon County School District #1, revenue, staffing and enrollment trends

	Fiscal Year						
	2000	2001	2002	2003	2004	2005	2006
Revenue by Fund							
General	\$14,339,730	\$13,854,442	\$17,562,122	\$15,152,949	\$15,641,629	\$16,390,727	\$17,517,449
Special	\$ 862,501	\$ 1,655,510	\$ 1,596,121	\$ 1,101,727	\$ 2,207,322	\$ 3,540,401	\$ 1,599,625
Capital	\$ 1,812,560	\$ -	\$ 933,621	\$ 1,138,200	\$ 16,094	\$ -	\$ -
Enterprise	\$ 425,461	\$ 397,930	\$ 415,240	\$ 372,488	\$ 353,410	\$ 426,616	\$ 500,695
Total	\$17,440,252	\$15,907,882	\$20,507,104	\$17,765,364	\$18,218,455	\$20,357,744	\$19,717,769
Staff (FTE)							
Teachers	142.2	142.9	139.3	125.4	135.5	134.9	137.9
Others	129.7	122.0	127.7	113.2	124.9	131.5	139.6
Total	271.9	264.9	267.0	238.6	260.4	266.4	277.5
Enrollment	1,965	1,946	1,923	1,778	1,728	1,664	1,727
Student/Teacher Ratio	13.8	13.6	13.8	14.2	12.8	12.3	12.5

Source: Wyoming Department of Education, Statistical Report Series No. 3.

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Table 37. Sweetwater County School District #1, revenue, staffing, and enrollment trends

	Fiscal Year						
	2000	2001	2002	2003	2004	2005	2006
Revenue by Fund							
General	\$34,752,833	\$35,907,387	\$37,946,368	\$40,168,129	\$38,106,459	\$39,208,910	\$ 39,951,705
Special	\$ 4,406,353	\$ 4,271,874	\$ 5,738,870	\$ 6,604,231	\$ 6,201,358	\$ 8,165,728	\$ 4,860,421
Capital	\$ 332,580	\$ 7,852	\$ 359,768	\$ 37,718	\$ 401,410	\$ 6,610	\$ 333,614
Enterprise	\$ 1,158,313	\$ 1,151,862	\$ 1,086,817	\$ 1,087,672	\$ 1,164,918	\$ 1,302,832	\$ 1,326,119
Total	\$40,650,079	\$41,338,975	\$45,131,823	\$47,897,750	\$46,874,146	\$48,684,080	\$ 46,471,859
Staff (FTE)							
Teachers	368.4	341.6	323.0	316.6	292.3	304.2	307.4
Others	193.6	393.3	378.5	418.2	375.0	337.9	390.5
Total	562.0	734.9	701.5	734.8	667.3	642.1	697.9
Enrollment	4,924	4,665	4,401	4,264	4,193	4,197	4,240
Student/Teacher Ratio	13.4	13.7	13.6	13.5	14.3	13.8	13.8

Source: Wyoming Department of Education, Statistical Report Series No.3.

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Table 38. Sweetwater School District #2, revenue, staffing and enrollment trends

	Fiscal Year						
	2000	2001	2002	2003	2004	2005	2006
Revenue by Fund							
General	\$23,196,455	\$22,731,393	\$23,094,624	\$25,461,141	\$23,270,301	\$24,114,085	\$25,387,335
Special	\$ 2,101,710	\$ 2,235,472	\$ 3,063,066	\$ 3,619,483	\$ 3,428,888	\$ 4,544,878	\$ 2,526,657
Capital	\$ 1,629	\$ 1,448	\$ -	\$ -	\$ 21,880	\$ 1,552,718	\$ 1,067,653
Debt Service	\$ 3,394,345	\$ 3,362,283	\$ 3,353,817	\$ 8,103,221	\$ 3,198,281	\$ 3,165,450	\$ 3,496,298
Enterprise	\$ 733,465	\$ 711,373	\$ 724,819	\$ 700,395	\$ 796,682	\$ 770,389	\$ 889,591
Total	\$29,427,604	\$29,041,969	\$30,236,326	\$37,884,240	\$30,716,032	\$34,147,520	\$33,367,534
Staff (FTE)							
Teachers	227.3	210.8	207.8	201.8	182.9	179.1	178.9
Others	219.7	211.8	227.7	231.3	232.7	238.4	239.4
Total	447.0	422.6	435.5	433.1	415.6	417.5	418.3
Enrollment	3,168	2,928	2,774	2,688	2,650	2,620	2,582
Student/Teacher Ratio	13.9	13.9	13.3	13.3	14.5	14.6	14.4

Source: Wyoming Department of Education, Statistical Report Series No.3.

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Funding for school facilities functions under the rules, policies, and procedures of the Wyoming School Facilities Commission (WSFC) [Title 21, Chapter 15, of Wyoming Statutes]. The WSFC was established during the 2002 Legislative session to oversee all aspects of construction and maintenance of school facilities and physical plant. Its mission is to provide adequate educational facilities for all children in Wyoming, mirroring the mission of the WSFP that focuses on operations. Districts are required to formulate five-year capital plans, which must then be approved by the WSFC. The WSFC is also responsible for funding the improvements using legislatively appropriated funds, most of which are derived from taxes imposed on energy and mineral resource production.

9. SOCIAL CONDITIONS AND TRENDS

This section describes relevant social conditions and trends within the CD-C study area. Specific social conditions associated with other users of the project area (grazing operators and recreationists) are also examined. Information for this section was obtained from interviews with community officials, local government staff, businesspersons, and ranchers; from review of scoping comments and newspaper articles; and from other secondary sources as cited.

9.1 COMMON SOCIAL ELEMENTS AND TRENDS

Over the past decade, the communities in the study area experienced an economic expansion fueled by energy development in the project area and elsewhere in the bi-county region and in much of southwest Wyoming. The recent expansion was the latest in a series of regional economic expansion and contraction cycles dating back to the construction of the transcontinental railroad but more recently associated with mineral and energy development. The larger communities in the study area have a somewhat economically diverse population resulting from the influences of the ranching, energy, mining, and transportation industries and federal and state government offices and facilities. Wamsutter, Baggs, and the other smaller communities are much less diverse economically. Wamsutter, although formerly a railroad and wool-shipping center, has recently become dependent on the energy industry and I-80 commerce. Of the communities in the study area, Baggs and the LSRV remain most closely tied to the ranching and outdoor recreation (principally hunting) industries, although a number of residents of Baggs and the LSRV are employed by or provide services to the energy industry and Devon Energy operates a field office in Baggs.

Communities in the study area are familiar with energy industries and with the relatively constant stream of newcomers to these communities. However, during the recent expansion, which began in 2002/2003 in Sweetwater County and 2004/2005 in Carbon County, economic and population growth occurred at levels not seen for more than two decades in these two counties. Local communities are in agreement that federal and state population statistics did not reflect the magnitude of growth and there were no reliable estimates of the number of energy workers who stayed in communities on a temporary basis.

As a result of the economic and population growth and the presence of relatively large numbers of temporary and transient, predominantly male workers in these communities, social conditions in affected communities were changing at a relatively rapid pace. Many of the “boom-town” phenomena (e.g. housing shortages and escalating housing costs, workforce shortages, elevated rates of certain types of crime) reported by researchers in the late 1970s and early 1980s once again emerged. Social settings within the study area such as stores, restaurants, bars, and post offices were increasingly crowded and from a local resident’s perspective, filled with strangers. Traffic on major streets and thoroughfares in

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Rock Springs and Rawlins was often congested (relative to past years), housing prices increased substantially, and local retail and service establishments had difficulty obtaining and keeping employees.

There are enthusiastic supporters of the boom and just-as-ardent detractors in all communities. But even some of the supporters lament the change in social conditions, e.g., “feeling the need to lock their houses and take the keys out of their cars, entering a supermarket or restaurant and not seeing a familiar face, having to wait for two stoplight cycles to cross an intersection.” For many, these inconveniences were offset by the robust economy and the increase in employment and shopping options. Others, including those who did not benefit from energy development and those on fixed incomes, were less likely to be enthusiastic about the boom.

Many residents of Carbon and Sweetwater counties value clean air and water, wildlife, wildlife habitat, and access to and the health of public lands (Blevins *et al.* 2004, Carbon County Board of Commissioners and Carbon County Planning Commission 1998, Markert 2008). A key concern for many residents is the effect of energy development on public lands, particularly lands with high resource values.

Two groups have been directly affected by natural-gas development within the project area: ranchers/grazing permittees and recreation users of the area.

9.2 RANCHERS/GRAZING PERMITTEES

Information for this section was obtained from individual and group interviews with grazing permittees, the Rawlins-based UW Cooperative Extension Area Educator for Range Management, and the RFO Range Resources Specialist assigned to the CD-C EIS. As discussed in Section 3.17 Rangeland Management of the EIS, 47 allotments are permitted for grazing within the project area. Many of these allotments extend beyond the boundaries of the project area. The active allotments are permitted for 191,700 animal unit months (AUMs) of grazing per year used mostly by cattle, although sheep are grazed on two allotments in the northwestern portion of the project area during winter months.

Many of the affected livestock operations in the project area are locally owned, multi-generational family ranches. A combination of long-term drought, high fuel and feed prices, unfavorable market conditions, and the high level of existing natural gas development within the allotments has resulted in challenging times for grazing permittees, causing some to substantially alter their methods of operation and even consider relinquishing their allotments.

In the most active natural gas fields within the project area, the predominant land use has changed from grazing/dispersed recreation to industrial. The project area contains roads with some of the highest traffic volumes in Carbon and Sweetwater counties, including high volumes of heavy-truck traffic. The high traffic volumes within the project area produce substantial amounts of dust on all but the major roads, which have been treated with magnesium chloride.

Natural gas development can affect grazing operations in several ways. Effects include livestock injury/mortality, reduced rates of weight gain in livestock, increased maintenance of range improvements, and required changes in livestock management practices.

Heavy traffic during drilling and field development often results in conflict with livestock operations. Vehicle/livestock collisions are not uncommon and, although some natural gas companies compensate permittees for livestock mortality, accidents are not reported in many cases. Responsibility is difficult to assign in areas used by multiple gas companies, and some service companies are less willing to compensate livestock owners. Companies are, in general, unwilling to compensate grazing permittees

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unless a driver accepts or is assigned responsibility for the accident. Gas-field traffic is of particular concern during lambing and calving periods, when animals sometimes use the roads to give birth and newborn animals are less able to move out of the way of oncoming traffic. In addition to animal losses from accidents, livestock lose weight if they are frequently startled by traffic. Some permittees have stopped trailing their herds along WY 789, the Wamsutter–Dad Road, and other major county and BLM roads within the project area because of the high volumes of industrial traffic, resulting in higher costs to move livestock by truck from pastures on one side of the road to the other.

High levels of gas-field traffic can increase damages to range improvements such as fences and cattle guards, resulting in scattering of livestock from pastures and introduction of other livestock and wild horses into pastures. During severe winters, when natural-gas company contractors clear snow for some distance on either side of road surfaces to remove heavy snow accumulations, damage to cattle guards and sections of fence often occurs. As a result, some permittees are unable to use some pastures in the spring, which has disrupted grazing patterns and resulted in unbudgeted costs to relocate livestock. Although in most cases gas companies compensate grazing permittees for repairing fences and cattle guards, there are sometimes disputes over the amount of compensation, the quality of the replacement fences and structures, and the timeliness of compensation. It is again difficult to assign responsibility for damage in areas where multiple gas and service companies are active; grazing permittees lose the use of the pastures while awaiting repairs, which at times requires an extended period to locate and schedule contractors.

Another concern for livestock grazing permittees is that some gas companies do not notify them in advance of starting new development within a federal grazing allotment. Consequently, affected grazing permittees do not have advance opportunity to relocate herds to avoid conflict with development. Although required by regulation, some drilling contractors do not adequately fence drilling facilities such as reserve pits, resulting in livestock injury or mortality.

New and improved roads are at times beneficial for grazing permittees in that they allow better access to pastures and livestock. But new and improved roads also facilitate higher travel speeds for gas-field traffic, increasing the risk of vehicle/livestock accidents. New and improved roads also allow more public access into grazing allotments, increasing the potential for vandalism and disruption of grazing in formerly remote areas. Some grazing permittees report reductions in vandalism in areas that are actively being developed, however, which they attribute to the greater human presence.

An oft-cited effect of high levels of natural-gas development is the reduction in forage associated with surface disturbance and infestation of noxious and invasive species when reclamation is delayed or unsuccessful. In areas where development is concentrated, reductions in forage can be substantial. Although a portion of disturbance for well pads, pipelines, roads, and other ancillary facilities is required to be reclaimed within a short period of time, a combination of the prolonged drought and ineffective reclamation methods has resulted in drill pads, pipeline and road corridors, lay-down areas, and pads for ancillary facilities remaining unreclaimed or in a weed-infested state for years. In addition to the direct reductions in forage associated with unreclaimed or weed-infested areas, a substantially larger area is often removed from productive use as a result of wind-blown dust from unreclaimed areas and roads which accumulates on plants, reducing palatability and accelerating wear on livestock teeth. The location of well pads, gathering lines, and roads may also alter surface-water flow patterns, resulting in erosion and loss of vegetative cover and forage.

The combination of high levels of gas development activity, reduced forage, and drought conditions requires substantially higher levels of livestock management for grazing permittees, as they are required to more frequently monitor livestock condition and movements, relocate livestock more frequently and round up livestock that have wandered from pastures when fences and cattle guards are down. Shepherders have been required to avoid grazing and trailing their flocks through certain areas and to

find new trails to avoid halogeton infestations, which can be toxic to sheep. Some grazing permittees who formerly wintered cattle on allotments within the project area have had to truck their herds to other areas or other states, in part because of periodic drought years but also in part to avoid natural-gas activity during winter months when herd management is more difficult.

Higher levels of livestock management result in higher fuel outlays and labor costs. Fuel costs for grazing permittees in the project area can be substantial given the distance to the allotments from communities and home ranches. Securing ranch hands in Carbon and Sweetwater counties during the boom years was complicated by the regional labor shortage and competition for workers. Some grazing permittees had difficulty competing for workers with the traditionally higher wages paid by the energy industry. More active management can also reduce livestock weight gain.

All of the above factors result in higher cost, lower production, and reduced profitability for grazing permittees. And, although their allotments are less productive because of activity, disturbance, weed infestations and drought, their allotment lease fees are not reduced. The reduced profitability is likely to change the nature of some CD-C ranching operations and may result in others leaving the ranching business. Grazing permittees interviewed for this assessment reported reductions in herd size, potential selling off of herds, and potential relinquishment of BLM leases.

The ranching economy in Carbon and Sweetwater counties is substantially smaller than the energy economy, but reductions in ranching operations would result in adverse changes in economic diversity in these two counties. Reductions in ranching operations would also have social and cultural implications for the study area. Ranching is an important element of the heritage and culture of Carbon and Sweetwater counties and the State of Wyoming as a whole.

9.3 RECREATION USERS OF THE AREA

Substantial changes in the recreation setting within the project area have already occurred. As noted elsewhere in this assessment, an average of about 239 wells/year were drilled within the project area during the 2000-2010 period and there were over 3,738 producing wells in the area at the end of 2010.

As discussed in Section 3.12 Recreation of the EIS, hunting—primarily by locals—is the dominant recreation use of lands within the project area. Some pleasure driving to view wild horses or the Red Desert landscape occurs near the specific resources and settings of interest. Recreation use in the project area is low overall and seasonal, with most occurring in the fall during the big game hunting seasons. The BLM generally considers the project area to be a recreation resource that attracts some non-residents who have special interests (e.g., wild horses, historic trails, and the Red Desert) but is visited mainly by Wyoming residents, especially those living nearby.

A mixture of local residents, other Wyoming residents, and non-locals has historically hunted within the project area, although as noted above, locals are the dominant users. Adverse effects of existing natural-gas development on hunting have resulted from development activity, traffic, and changes in wildlife distribution and abundance. Although the current presence of relatively widely spaced wells in some parts of the project area is not a deterrent for all hunters, safety issues associated with hunting around natural-gas facilities and the change in the recreational setting are believed to be deterrents for many non-local and out-of-state hunters for whom a natural setting is a part of the overall hunting experience.

Displacement of hunters from the project area results in increasing hunting pressure on other areas. There is increasing concern among hunting and wildlife advocacy groups that development in wide expanses of wildlife habitat and migration corridors will have an adverse effect on wildlife populations within the study area.

Some local and non-local groups and individuals value specific areas within and adjacent to the project area including a sage-grouse lek complex southeast of Creston, the Red Lakes Dunes Citizens' Proposed Wilderness and the Chain Lakes WHMA. At the time of this assessment, one well has been drilled in the Chain Lakes area and several wells have been drilled near the portion of the project area that contains the portion of the Red Lake Dunes Citizens' Proposed Wilderness and near the sage-grouse lek east of Creston.

A growing concern is the increasing amount of big-game poaching occurring in remote areas now accessible on roads improved for natural-gas development and an increasing amount of both personal and industrial litter along highways and county, BLM, and private roads. These effects represent a loss in environmental amenity values for local residents, recreational users, and non-users alike.

10. ENVIRONMENTAL JUSTICE

Executive Order (EO) 12898, "Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations" was published in the *Federal Register* (59 FR 7629) on February 11, 1994. EO 12898 requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations (defined as those living below the poverty level).

The assessment of potential environmental justice impacts is guided by the Council on Environmental Quality's *Environmental Justice Guidance under the National Environmental Policy Act* (CEQ 1997). Determination of Environmental Justice impacts requires three steps: (1) a description of the geographic distribution of low-income and minority populations in the affected area; (2) an assessment of whether the action under consideration would produce impacts that are high and adverse; and (3) if impacts are high and adverse, a determination as to whether these impacts would disproportionately affect minority and low-income populations. This section of the assessment describes the distribution of minority and low-income populations in areas likely to be affected by the CD-C project.

10.1 RACIAL AND ETHNIC MINORITY POPULATIONS

Table 39 presents the percentage of minority residents in the project area and surrounding areas at the time of the 2000 Census. Minorities were 11.0 percent of the population in the Environmental Justice analysis area that includes the project area, essentially the same as the statewide average of 11.1 percent. The Hispanic or Latino population is the largest minority group, locally as well as across the state.⁹ The analysis area does not exactly match the project area boundaries, but has similar demographic characteristics to the project area.

- The percentage of racial and ethnic minorities in the Rawlins area (about 25 miles from the eastern edge of the project area) was 25.2; this relatively high number is a result of persons incarcerated in the Wyoming State Penitentiary.

⁹ The analysis area is made of the census blocks surrounding and fully including the CD-C Project Area with adjustments for areas in the urban clusters in cities with populations over 5,000 (including the cities of Rawlins, Green River, and Rock Springs).

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- The percentage of racial and ethnic minorities in the Rock Springs area (over 40 miles away) was 13.5, and in Green River area (over 50 miles way) was 12.6, neither of which is meaningfully higher than the statewide average.
- The Town of Wamsutter, located within the project area, had a 2000 Census population of 261, 16.1 percent of whom were classified as racial or ethnic minorities. The Sweetwater County unincorporated community of Table Rock, located on the western edge of the project area, had a population of 82 with a 13.4 percent minority population. The percentages of racial and ethnic minorities in these communities are not meaningfully higher than the statewide average.
- The Town of Baggs (Carbon County) had a 2000 population of 348 with a 4.7 percent minority population. The Town of Dixon had a population 79 with a 5.1 percent minority population. The Town of Sinclair had a population 423 with a 5.4 percent minority population. All three minority populations within these communities are substantially lower than the statewide average.
- The percentages of minorities in Carbon County and Sweetwater County are higher, but not meaningfully so, than the statewide average. The higher percentages of minorities is due to the larger minority population in these counties' larger cities which are outside of, and distant from, the project area.

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Table 39. Percentage of minorities in the State of Wyoming, Carbon County, Sweetwater County, the CD-C project area, and selected communities

Geographic Area	Percentage of Total Population						
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
	White and not Hispanic or Latino	American Indian and Alaska Native and not Hispanic or Latino	Black or African American and not Hispanic or Latino	Other Races, Two or More Races, and not Hispanic or Latino	Hispanic or Latino Ethnicity	Total Racial and Ethnic Minorities (B) + (C) + (D) + (E)	Difference in Percent Minority Population Above/Below the State Average
United States	69.1%	0.7%	12.1%	5.5%	12.5%	30.9%	NA
Wyoming	88.9%	2.1%	0.7%	1.9%	6.4%	11.1%	NA
Carbon County	82.4%	1.1%	0.7%	1.9%	13.8%	17.6%	6.4%
Sweetwater County	86.9%	0.8%	0.7%	2.2%	9.4%	13.1%	2.0%
Places with Population Over 5,000 Near Project Area							
Rawlins Area. ^{Note 2}	74.8%	1.5%	1.0%	2.2%	20.5%	25.2%	14.1%
Rock Springs. ^{Note 3}	86.5%	0.6%	1.0%	2.7%	9.1%	13.5%	2.4%
Green River Area. ^{Note 4}	87.4%	1.1%	0.3%	1.2%	10.0%	12.6%	1.5%
Project Area Estimate	89.0%	1.0%	0.0%	2.4%	7.6%	11.0%	-0.1%
Census Tract 9676, Block Group 2, Carbon County without large places not in project area. ^{Note 5}	89.8%	1.3%	0.0%	1.6%	7.3%	10.2%	-0.9%
Census Tract 9716, Block Group 2, Sweetwater County without large places not in project area. ^{Note 6}	87.7%	0.5%	0.0%	3.7%	8.1%	12.3%	1.2%

Source: 2000 U.S. Census, U.S. Census Bureau, Summary File 1.

Note 1: Racial minorities include all persons identifying themselves in the census as a non-white race, including "Black or African American," "American Indian and Alaska Native," "Asian," "Native Hawaiian and Other Pacific Islander," "Some other race alone," and "Two or more races." Ethnic minorities include persons who identify themselves as Hispanic or Latino. Persons of Hispanic or Latino origin can identify themselves as part of any race (including white) and as persons of Hispanic or Latino origin are an ethnic minority, the racial group of White Alone does not include persons of Hispanic or Latino origin.

Note 2: Rawlins Area includes Rawlins and other areas in the Rawlins urban cluster (Block 4032 of Block Group 4 of Census Tract 9678, Block 2082 of Block Group 2 of Census Tract 9676, and Blocks 2005 and 2010 of Block Group 2 of Census Tract 9677). These other areas are considered to be areas that have urban settlement or development characteristics and not incorporated into any other place. Most of this area's population (468 persons out of 474 persons) live in Block 2082 and are incarcerated at the state penitentiary.

Note 3: Rock Springs Area includes Rock Springs, Reliance, North Rock Springs, Clear View Acres, Purple Sage, and other areas in the Rock Springs urban cluster (Blocks 3087, 3088 and 3089 of Block Group 3 of Census Tract 9708, and Blocks 2014 and 2015 of Block Group 2 of Census Tract 9709.03). These other areas in the urban cluster do not have any population.

Note 4: Green River Area includes Green River and James Town, and note that there are no other areas in this urban cluster.

Note 5: Places in Carbon County not in the project area, Census Tract 9676, Block Group 2 does not include those areas in the Rawlins (388 persons) and the Rawlins urban cluster (474 persons) described above, i.e., the Wyoming State Penitentiary and nearby areas around Rawlins and south of I-80.

Note 6: Places in Sweetwater County and not in the project area, Census Tract 9716, Block Group 2 includes 3 persons in the Rock Springs Area (living in Block 2355 of Block Group 2 of Census Tract 9716), as these persons are accounted for above.

10.2 PERSONS IN POVERTY

Table 40 presents the percentage of persons in poverty in the project area and surrounding areas. For the analysis of low-income population, the local area that includes the project area is slightly larger than that for the analysis of minority populations because the level of aggregation of income data available from the U.S. Census Bureau is larger than that for racial and ethnic characteristics. The key difference between these two areas of analysis is the population in the area surrounding the Wyoming State Penitentiary, which is now included in the analysis area. This change likely exaggerates the proportion of the population with poverty level incomes in the analysis area.

Persons with incomes below the poverty level represent 10.6 percent of the population in the analysis area that includes the project area. This is 1.8 percent lower than the 11.4 percent of the population with incomes below the poverty level for the State of Wyoming.

Table 40. Persons in poverty in the State of Wyoming, Carbon County, Sweetwater County, the CD-C project area, and selected communities

Geographic Area	Share of Population: Below Poverty Level	Share of Population: Below 150% of Poverty Level	Share of Population: Below 200% of Poverty Level	Percentage of Low Income (Below Poverty) Population Above/Below the State Average	Percentage of Low Income (Below 200% of Poverty) Population Above/Below the State Average
United States	12.4%	20.9%	29.6%	1.0%	-1.0%
Wyoming	11.4%	20.8%	30.7%	NA	NA
Carbon County	12.9%	23.6%	32.4%	1.5%	1.7%
Sweetwater County	7.8%	15.3%	22.3%	-3.7%	-8.4%
Project Area Estimate	10.6%	21.2%	27.6%	-0.8%	-3.1%
Census Tract 9676, Block Group 2	14.1%	29.6%	36.3%	2.7%	5.6%
Census Tract 9716, Block Group 2	4.9%	7.6%	13.6%	-6.5%	-17.1%

Source: 2000 U.S. Census, U.S. Census Bureau, Summary File 3.

Based on the foregoing, no environmental justice populations are present within the CD-C analysis area.

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