
TECHNICAL MEMORANDUM

**SUBJECT: Task 4. Basin Water Demand Projections
Memo 1: Historic and Current Economic and Demographic
Conditions**

PREPARED BY: BBC Research & Consulting
Edward Harvey and Marc Carey

DATE: October 11, 2002

Introduction:

This memorandum provides the starting point for development of Snake/Salt River Basin (Basin) water demand projections by describing:

- An overview of current economic and demographic conditions in the Basin;
- Historical changes and trends in Basin economic and demographic measures; and
- A more detailed evaluation of current and historic conditions in the Basin's most important sectors from an economic and/or water use standpoint.

Information summarized in the memorandum was gathered from publicly available secondary sources and from personal and telephone interviews conducted by BBC Research & Consulting (BBC) from April through July 2002. References are listed at the end of this memorandum. Subsequent memoranda related to water demand forecasting describe the three alternative planning scenarios and the overall economic and demographic projections for the Basin in year 2032 (Memo 2), and the water demand projections for year 2032 (Memo 3).

Demographic Overview

At present, nearly 26,000 people reside in just over 10,000 households within the Wyoming portions of the Snake and Salt River Basins. Roughly 44 percent of the population of the Basin lives within the boundaries of the City of Jackson or the Towns of Afton, Alpine and Thayne, the four principal population centers within the Basin. These municipalities also account for 45 percent of Basin households.

The City of Jackson comprises 52 percent of the total population and 34 percent of the total households within Teton County, while the three towns in northern Lincoln County constitute 39 percent of the total population and 30 percent of total households in Lincoln County. The remainder of the basin's population lives within unincorporated areas of Lincoln, Sublette and Teton counties. A breakdown of the current population of the Basin is provided in Exhibit 1.

Population and household estimates for Basin towns were developed for the year 2000 by the Wyoming Department of Administration and Information, Division of Economic Analysis. Population and household estimates in unincorporated portions of the Basin were estimated using Census 2000 totals for Census Designated Places and other Census Tracts within the Basin.

Exhibit 1. Estimated 2000 Population, Households and Related Political Jurisdictions in the Basin

Location	Lincoln/Sublette		Teton		Total	
	Population	Household	Population	Household	Population	Households
Snake/Salt River Basin						
Jackson	0	0	8,647	3,631	8,647	3,631
Afton	1,818	651	0	0	1,818	651
Alpine	550	217	0	0	550	217
Thayne	341	118	0	0	341	118
Municipal Subtotal	2,709	986	8,647	3,631	11,356	4,617
Unincorporated Areas	6,623	2,308	7,970	3,356	14,593	5,664
Basin Total	9,332	3,294	16,617	6,987	25,949	10,281

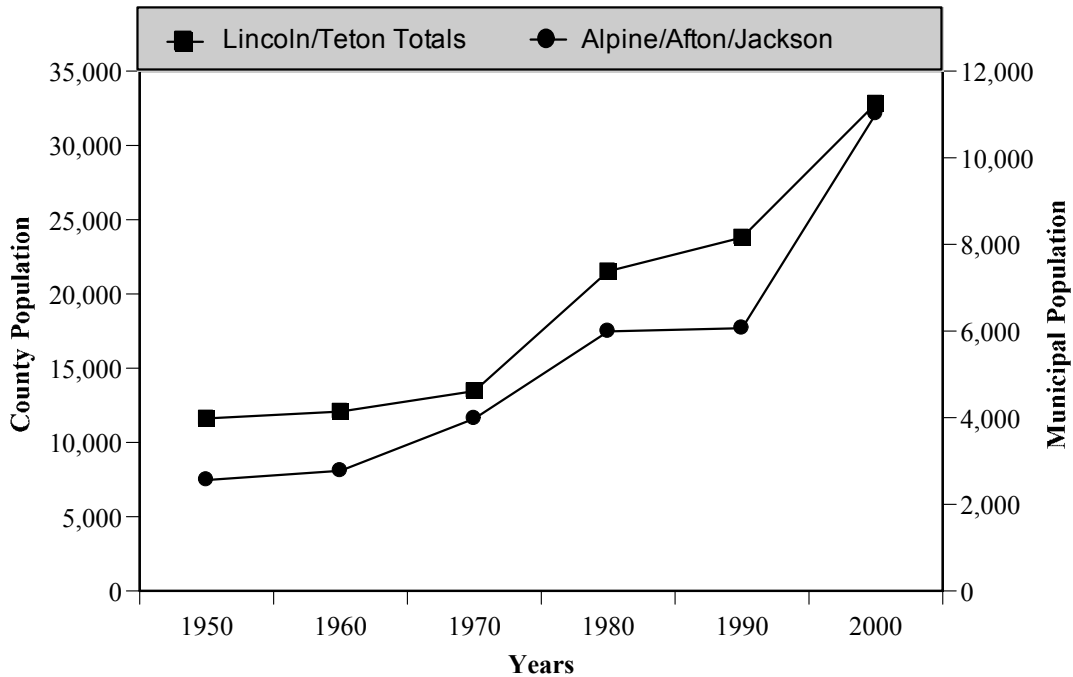
Source: Wyoming Department of Administration and Information, Division of Economic Analysis. Profile of General Housing Characteristics by County and Place, 2000. Census Tracts from 2000 Census of Population and Housing, Census 2000, Bureau of the Census.

Historic Population Growth

Changes in census tract definitions from decade to decade and the imprecise relationship of census-defined geography to the watershed make it difficult, if not impossible, to precisely quantify historic population totals for the unincorporated portions of the Basin. However, population changes in the four principal communities that comprise a good portion of the Basin’s population can be readily tracked over time from the decennial censuses.

Since 1950, the combined population of Alpine, Afton and Jackson has increased at an average annual rate of about 3 percent. This long-term average, however, masks considerable fluctuation during this 50-year period. As shown in Exhibit 2, the population of the three communities remained almost constant during the 1950’s and 1960’s before growing rapidly in the 1970’s. While the 1980’s were characterized by slow but steady growth, population during the 1990’s increased dramatically, with the combined population of Alpine, Afton and Jackson increasing at an average annual rate of 6 percent over the past ten years. In general, the rates of population growth in these communities closely correspond to the rates of population growth for Lincoln and Teton Counties as a whole over the past five decades.

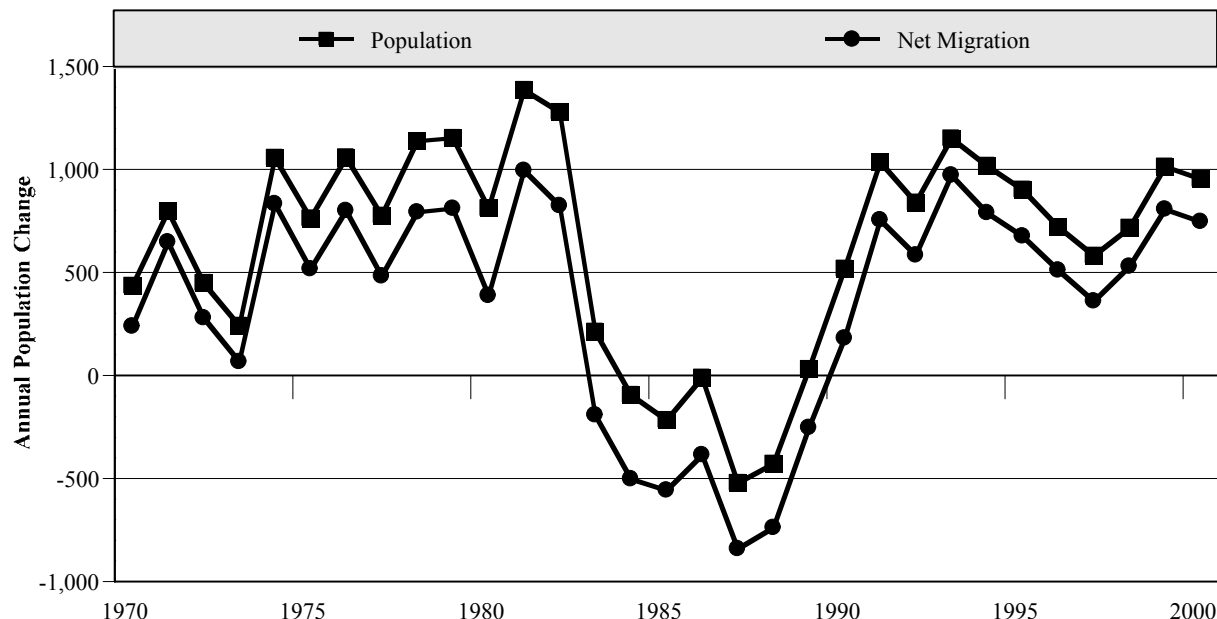
Exhibit 2. Population of Lincoln and Teton Counties and the Towns of Alpine, Afton and Jackson, 1950 to 2000



Source: Wyoming Department of Administration and Information, Economic Analysis Division.

From resident births exceeding resident deaths, termed “net natural population increase,” the combined population of Lincoln and Teton Counties has generally increased by between 150 and 450 residents per year since 1970 according to data from the Wyoming Department of Health. However, population changes in these counties have historically been driven primarily by migration to or from the area, presumably in response to changing economic opportunities. Exhibit 3 portrays total annual changes in population and annual net migration for the two-county area from 1970 through 2000. Total annual population changes for each county were calculated from annual population estimates reported in the U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System (BEA-REIS). With the exception of the five-year period in the late 1980’s, the Lincoln-Teton county region has maintained relatively steady levels of growth, driven largely by in-migration to the region.

Exhibit 3. Components of Population Change, 1970 to 2000, Lincoln and Teton Counties



Note: Area between lines represents “net natural population increase,” or the annual difference between birth total and death total for Lincoln and Teton Counties.

Sources: Department of Commerce, Bureau of Economic Analysis, Regional Economic Information Systems, 2000. Wyoming Department of Health.

Labor Force Participation and Unemployment

A high proportion of Basin residents between the ages of 18 and 65 are currently active in the labor force. County level figures based on labor force estimates published by the Wyoming Department of Employment and estimates of population between the ages of 18 and 65 from Census 2000 indicate that about 92 percent of Teton County residents are either employed or actively seeking work, compared to the state average labor force participation rate of about 87 percent. The participation rate in Lincoln County is lower than the state average, at 79 percent.

The most recent average annual unemployment rates published by the Wyoming Department of Employment, for 2001, were 5.4 percent for Lincoln County, 2.2 percent for Teton County and 3.9 percent for the state of Wyoming as a whole. All totals represent relative low points, as the average annual unemployment rates during the 1990’s were 6.8 percent for Lincoln County, 2.3 percent for Teton County and 5.0 percent for the State of Wyoming.

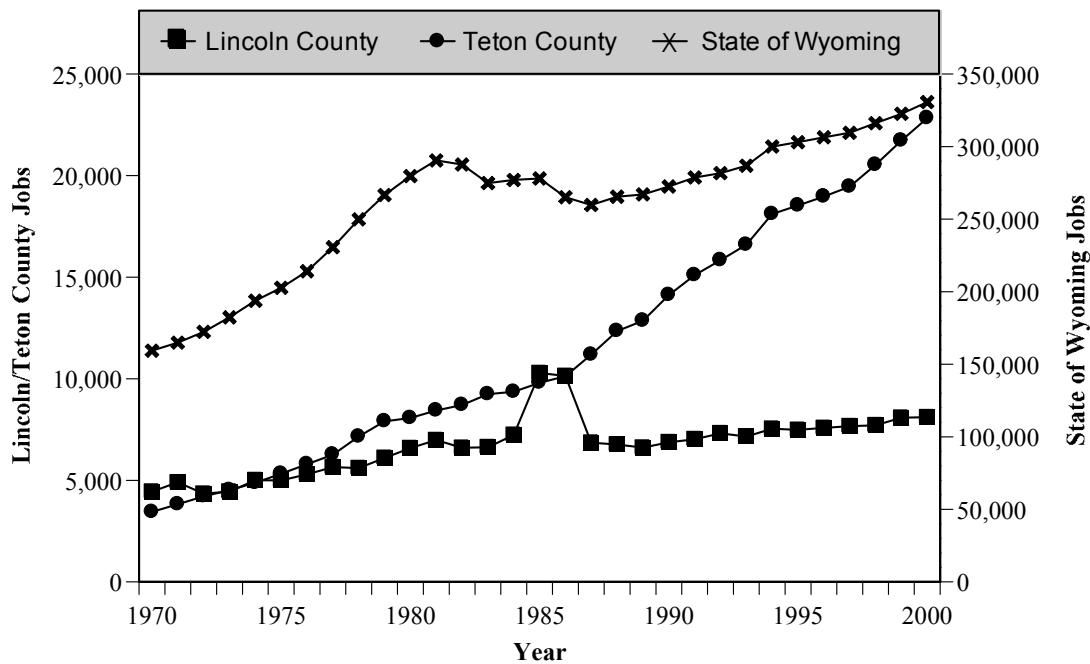
Economic Overview

Based upon the extrapolation of 2000 data from BEA-REIS to the year 2002, the study team estimates that there are currently over 28,200 full and part-time jobs located in Lincoln and Teton Counties. The study team estimates that approximately 4,200 of these jobs are located within the Basin portion of Lincoln County and about 24,000 jobs are located in Teton County.

Historic Employment Growth

Exhibit 4 depicts historical employment growth for Lincoln and Teton counties (graphed against the left axis) and the State of Wyoming (graphed against the right axis) from 1970 through 2000. Over the past three decades, Teton County employment has grown at a rapid and increasing rate. Especially during the decade of the 1990's, employment growth has outpaced the rate of growth for the State of Wyoming as a whole. This rapid growth reflects the continued development of the tourism industry in Teton County. In general, Lincoln County employment growth during the past three decades has been much slower than either Teton County or the State of Wyoming as a whole. An exception was the brief period of power plant construction during the mid-1980's; growth in county employment fell back shortly thereafter to rates comparable to the pre-construction period.

Exhibit 4. Total Employment Growth: Lincoln and Teton Counties and the State of Wyoming, 1970-2000

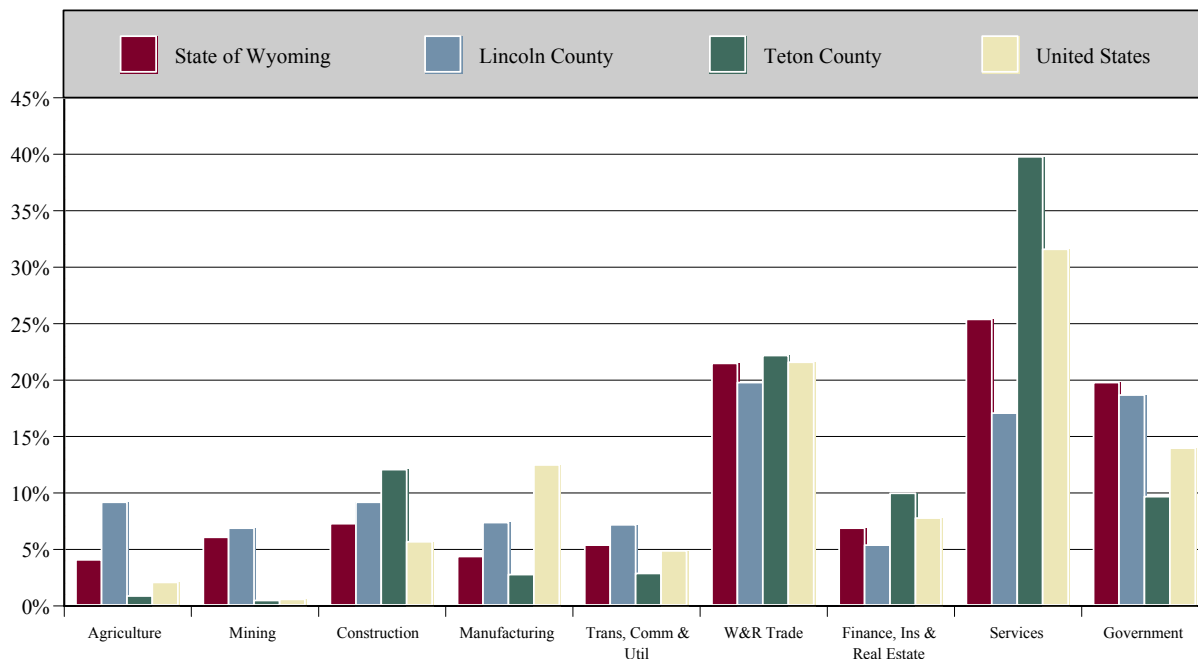


Source: Department of Commerce, Bureau of Economic Analysis, Regional Economic Information Systems, 2000.

Employment and Earnings by Sector

Exhibit 5, based upon BEA-REIS data for 2000, depicts the share of total employment in Lincoln County, Teton County and the State of Wyoming for each major industry division. County data were utilized to present this distribution since Basin specific totals were not available. As indicated in the exhibit, the three largest employment sectors in both Lincoln and Teton counties (as well as in the State of Wyoming) are services, retail trade and government.

Exhibit 5. Composition of 2000 Employment by Sector for Lincoln and Teton Counties, Wyoming, and the United States



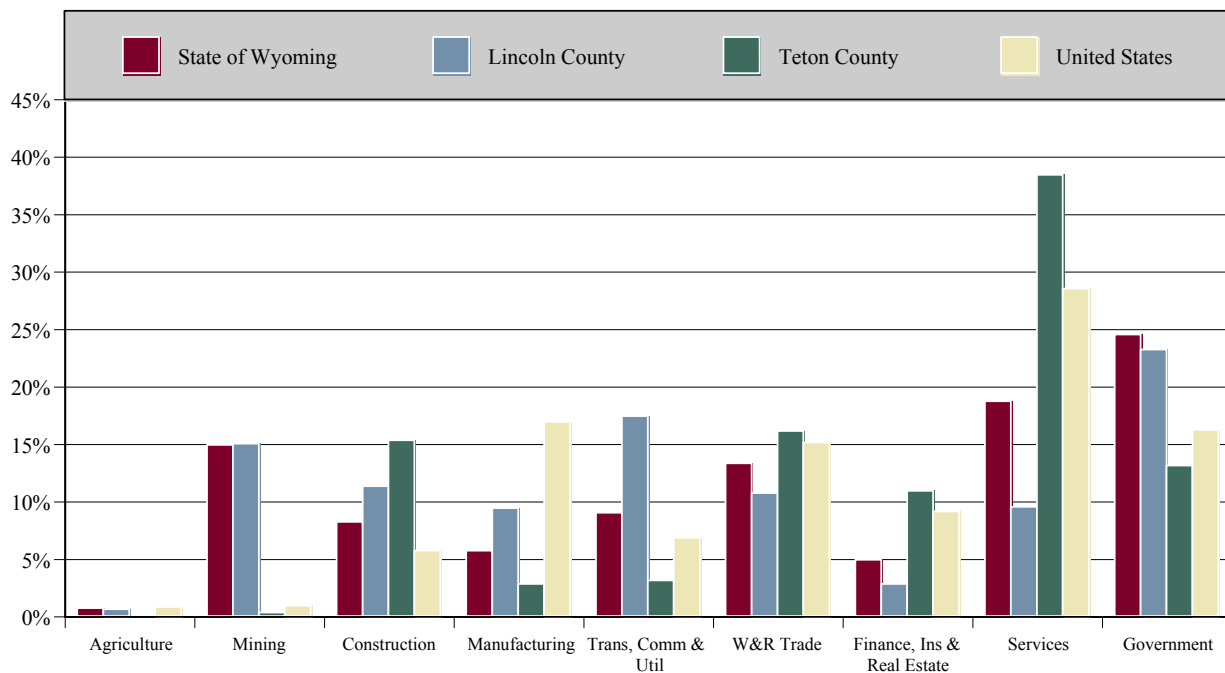
Source: Department of Commerce, Bureau of Economic Analysis, Regional Economic Information Systems, 2000.

Comparing shares of county employment and employee earnings to state averages can be useful in indicating the categories of economic activity that bring money into the local economy. Such categories comprise the economic base of the local economy. Since only the northern part of Lincoln County lies within the Snake/Salt River Basin, however, the sectoral distribution presented in Exhibit 5 above does not precisely reflect the Basin’s employment distribution. For example, almost all employment in the Mining and TCU sectors occurs in the southern half of Lincoln County, which is outside the Basin’s boundaries.

As shown in Exhibit 5, agricultural employment in Lincoln County is relatively large compared to both the State of Wyoming and to the national average. In contrast, agricultural employment in Teton County is much smaller than both these benchmarks. Both Lincoln and Teton Counties have relatively large construction sectors — likely related to the 1990’s housing boom — especially in Teton County. Further evidence of this is the relatively large share of jobs in the finance, insurance and real estate sector within Teton County, somewhat remarkable for a small county predominantly rural in nature and far from any major metropolitan areas. The service sector in Teton County is particularly dominant, reflecting the dominance of the tourism industry in the county. Roughly 40 percent of the jobs in Teton County are within the service sector, much higher than either the State of Wyoming or the national average. There are also a relatively large number of government sector jobs in Lincoln County and the State as a whole, reflecting in part, the large amount of federal lands that are administered in each area. Even though over 90 percent of Teton County is public land, the share of government sector jobs in Teton County is smaller, reflecting the more diverse nature of the County’s economy.

Exhibit 6, also based on BEA-REIS data for 2000, depicts the relative proportion that each major industry division contributes to total earnings in Lincoln County, Teton County, and the State of Wyoming. While the graphic does highlight distinct differences in the economies of Lincoln and Teton Counties, it is important to remember that county boundaries and Basin boundaries are not identical. Important sectors in Teton County include the Construction and Trade and Services sectors - each important components of a thriving tourist-based economy. In contrast, significant sectors for Lincoln County include the Mining sector and Government sector, more typical of a western rural county with a large share of federal lands. For purposes of characterizing the economy of the Snake/Salt River Basin, however, this is somewhat deceptive since almost all of the mining activity occurs in the portion of Lincoln County. Transportation and public utilities also accounts for a comparatively large share of Lincoln County earnings due to operations of the power plant near Kemmerer — which is also outside the Basin.

Exhibit 6. Composition of 2000 Earnings by Sector for Lincoln and Teton Counties, Wyoming, and the United States



Source: Department of Commerce, Bureau of Economic Analysis, Regional Economic Information Systems, 2000.

Key Economic and Water Use Sectors

The remainder of this memorandum describes current conditions in two key sectors in the Basin. Agriculture, while no longer one of the largest sources of employment or income in the Basin, still accounts for the largest amount of water use. Tourism and visitor related activities are a large and increasingly important component of the local economic base.

Prospects for these sectors, and specific scenarios incorporating varying assumptions about each sector, provide the cornerstone to the economic, demographic and water demand projections for the Basin. These elements are discussed in the two subsequent technical memoranda for the Basin water demand projections.

Agriculture

In order to understand current agricultural activity in the Basin and the factors affecting local agriculture in the future, BBC interviewed relevant personnel from a variety of federal and state land management and agricultural agencies. BBC also interviewed representatives of several livestock operations currently operating within the Basin. BBC also gathered and analyzed current and historic livestock and hay production data for the Basin counties published by Wyoming Agricultural Statistics Service. In addition, BBC obtained information on current and historic stocking levels for livestock grazing allotments within the Basin from the United States Forest Service (USFS), the Bureau of Land Management (BLM) and the National Park Service (NPS). The following is an abbreviated summary of current agricultural conditions in the Basin.

- *Livestock.* Livestock production (cattle and sheep) is the primary money-making, agricultural enterprise in the Basin. Ranchers typically have permits tied to their operation that allow them to graze their livestock on a particular allotment of public (primarily Forest Service) land throughout the Basin during the summer months. Cattle are grazed on public lands from roughly early June to mid October, while sheep are grazed from early July through mid September. The largest share of these allotments are Forest Service lands, divided between the Bridger-Teton National Forest (BTNF) and the Caribou Targhee National Forest (CTNF). BLM allotments are relatively small, and occur almost exclusively in the Salt River portion of the Basin. In Teton County there are several large ranches where cattle are grazed exclusively on private lands (Resor, Rosenbaum).

In addition, horses used for pleasure riding on either small private ranchettes or in commercial riding operations are becoming more abundant in Teton County. Although it is difficult to estimate exact numbers, a conservative estimate of 1,000 such horses in Teton County is reasonable. According to the local brand inspector, there are at least 10-12 operations in Teton County with over 100 head, and roughly 1,000 Teton County horses have received lifetime brand inspections (Maher).

The horse population within the Basin is highly seasonal. During the summer months, two large horse operations (one in northern Lincoln County) lease roughly 1,400 horses to Teton County dude ranches and outfitters. During the rest of the year, these horses return to their home pastures, and may be leased to hunters during the fall hunting season (Madson).

Exhibit 7 presents estimates of existing stocking levels on public and private lands within the Basin. The majority of cattle (76 percent) and sheep (97 percent) are grazed on land that is administered by the USFS. While the USFS authorizes a much larger number of sheep than cattle (all in Lincoln County), BLM and NPS allotments are exclusively devoted to cattle. Note that the cattle and sheep totals on private land in Teton County are estimated using anecdotal evidence from interviews, calibrated to Wyoming Agricultural Statistical Service (WASS) totals. Estimating similar totals for Lincoln County was problematic since only the

northern portion of the county lies within the Basin. Local agricultural officials, however, confirmed that county public land authorizations provided reasonable livestock estimates (Brown, Kennington). Horse totals on private lands in both Lincoln and Teton Counties represent year round averages based on estimated seasonal totals. No corresponding information was available for Sublette County portions of the Basin.

Exhibit 7. Current Estimated Livestock Levels within the Snake/Salt River Basin

	Animal Head		
	Cattle	Sheep	Horses
Teton County			
BTNF	3,273	0	194
CTNF	1,038	0	0
GTNP	1,102	0	0
Private	<u>2,500</u>	<u>1,000</u>	<u>1,600</u>
Teton Subtotal	7,913	1,000	1,794
Lincoln County			
BTNF	2,165	29,643	109
CTNF	0	9,115	0
BLM - Pinedale	135	0	0
BLM - Kemmerer	101	0	0
Private	<u>0</u>	<u>0</u>	<u>850</u>
Lincoln Subtotal	2,401	38,758	959
Sublette County			
BTNF	<u>5,796</u>	<u>1,000</u>	<u>122</u>
Sublette Subtotal	<u>5,796</u>	<u>1,000</u>	<u>122</u>
Basin Total	16,110	40,758	2,875

Sources: Kemmerer and Pinedale Offices, Bureau of Land Management, 2001 livestock data; Bridger-Teton and Caribou Targhee Forests, United States Forest Service, 2001 livestock data; and Park Service Grazing Use Report and personal interviews.

- Sheep inventory in the State of Wyoming declined dramatically since the end of World War II, although the rate of decline slowed during the 1990's (National Agricultural Statistics Service). The decline is largely due to the poor wool market and the comparatively sparse demand for lamb relative to other types of meat (Kennington). In contrast, Wyoming cattle inventories have generally increased since the 1940s, with the 1990s exhibiting a sharp increase (National Agricultural Statistics Service). With the exception of a short period in the mid 1990s, cattle prices have been high since the mid 1980s and are projected to remain strong for the next decade (USDA Livestock Baseline projections). Within Lincoln and Teton counties, while annual inventories have fluctuated significantly, a trend analysis shows that since 1975, the sheep inventory in Lincoln and Teton counties has declined annually by roughly 2 percent, while cattle numbers have decreased annually by about 1 percent during the same period (National Agricultural Statistics Service). Within the Basin itself, while the decline for sheep is about the same, the decline in cattle numbers is sharper. Cattle numbers

are decreasing in contrast to increasing state numbers mostly because of rising land values. Over the past decade, authorized grazing for sheep and cattle on BTNF lands has declined, on an annual basis, by 2 percent and 3 percent respectively (Broyles).

- *Crops.* Crop production in the Basin consists mainly of hay (both irrigated meadow and alfalfa) used for supplemental livestock feed. The vast majority of hay grown within the Basin is consumed by Basin livestock (either own-farm or sold to neighbors) as supplemental feed during the winter months (Kennington). There is some alfalfa and grain grown along the Salt River, but especially in Teton County, the majority of hay acreage is irrigated meadow (Sunrise Engineering, 2002). Roughly 85 percent of hay fields in each county have been irrigated historically, with the percentage being a bit higher in Teton County (National Agricultural Statistics Service). Irrigated production in the Basin occurs along the Salt and Snake rivers, with significant supplemental acreage along the Hoback and Teton rivers in Teton County. Irrigated acreage levels have been stable through time, and sources have confirmed that almost all irrigable land in the Basin is in fact irrigated during years with normal precipitation levels (Kennington, Brown).

Exhibit 8 presents irrigated acreage estimates, by crop, for rivers within the Basin and demonstrates the significant difference in crop types between the Lincoln and Teton County portions of the Basin. The largest acreage along the Salt River in Lincoln County is planted to alfalfa and grains, with roughly 56 percent in alfalfa. In contrast, all the acreage along the Snake and Hoback rivers in Teton County is irrigated pasture. The land along the Teton River near Alta is somewhat of an exception, with roughly 40 percent of acreage planted to alfalfa and 30 percent apiece planted to irrigated pasture and small grains (Sunrise Engineering, 2002).

Exhibit 8. 2002 Estimates of Irrigated Acreage within the Snake/Salt River Basins

	Alfalfa	Pasture	Grain	Total
Lincoln County				
Upper Salt	15,643	10,283	5,849	31,774
Lower Salt	<u>19,779</u>	<u>5,472</u>	<u>8,559</u>	<u>33,810</u>
Lincoln County Subtotal	35,422	15,755	14,408	65,584
Teton County				
Upper Snake	0	6,813	0	6,813
Lower Snake	0	18,043	0	18,043
Hoback	0	3,984	0	3,984
Teton	1,859	1,394	1,394	4,647
Teton County Subtotal	<u>1,859</u>	<u>30,234</u>	<u>1,394</u>	<u>33,487</u>
Total	37,281	45,989	15,802	99,071

Source: Sunrise Engineering and Boyle Engineering, 2002.

- *Dairy.* A small but entrenched dairy industry exists in the Star Valley portion of Lincoln County near Afton. The industry consists of roughly three to five larger operations (150 head) and roughly thirty smaller operations (50 head). The majority of production from these operations supplies the Star Valley Cheese Company, although some is sold outside the Basin. Most operations grow their own hay for supplemental feed, and transport it directly to the confined dairy cows (Kennington). While production has remained relatively constant over the past thirty years, the number of operators has declined dramatically from roughly 300 in 1970 to current levels (Dana, Kennington).
- *Employment.* The number of ranches in the Basin counties, reflected by farm proprietor employment levels, has remained around 600 over the last 30 years. The total number of farm jobs in these counties, despite a short term increase during the early 1980's has gradually declined over this time period, from about 1,050 to its current level near 850, reflecting a slight increase in labor productivity, probably due to technological innovation (Bureau of Economic Analysis, Employment by Industry). Current agricultural related employment specifically within the Basin is estimated to be the sum of Teton county agricultural employment and one-half of Lincoln county agricultural employment, or roughly 400 farm proprietor jobs and 500 total farm jobs within the Basin.

Tourism and Visitor Related Activity

The tourist economy within the Basin is vibrant and growing, with over 2.5 million visitors per year (Collins). Peak tourist season is still the summer, but winter use is noticeably on the rise, and the shoulder seasons are getting shorter and shorter. In order to gain local insight into tourism and visitor related activity in the Basin, BBC interviewed representatives of the Teton County Planning Department, planners for Grand Teton National Park, Recreation Specialists for the Bridger-Teton National Forest, and a variety of recreation service providers in the area. BBC also collected extensive secondary data on recreational activities and associated visitor days from both the USFS and the NPS.

In addition, BBC developed estimates, by season of the current number of visitor nights in the area, average annual visitor expenditures and corresponding estimates of visitor related employment in the area. Secondary data sources, used in developing these estimates, included results from studies on the economic impact of the travel industry in Wyoming (Morey and Associates, 1999, 2000; Runyan and Associates, 2001), and an assessment of housing needs in Teton County (Prior and Associates, 2001).

The following is a brief summary of current tourism and visitor related activity in the Basin.

- *Visitor Types.* The Basin, and Teton County in particular, has historically served as a popular destination for tourists and outdoor recreation enthusiasts alike. The Basin includes Grand Teton National Park (GTNP) and serves as the primary access point for Yellowstone National Park (YNP), two of the most heavily visited Parks nationwide. Extensive recreation opportunities are available, not only within park boundaries, but also on the surrounding lands of BTNF and CTNF. In the winter, the area boasts of world-class alpine skiing opportunities at Jackson Hole, Grand Targhee and Snow King resorts as well as a host of other recreational

opportunities. The primary locale for visitor lodging and other services in the Basin is the City of Jackson. Jackson is the largest population center within the Basin, and lies directly on Highway 191 north, which many visitors take to get to the two national parks.

Besides destination tourists, a second important component of visitation to the area comes from seasonal residents with second homes in the Basin. The last decade saw an increase of roughly 3,200 housing units in Teton County, including nearly 700 new seasonal homes. This change represented an increase of 45 percent in both total and seasonal housing units within Teton County. As housing values in Teton County climb, northern Lincoln County is also seeing a marked increase in residential growth, especially for second homes. Over the past decade, roughly 550 new housing units, including 100 seasonal housing units, were developed in northern Lincoln County. These additional units represented an increase of 29 percent and 48 percent respectively over the existing housing base (Prior and Associates, 2001).

- *Recreation Activities.* In addition to park visitation in the summer and alpine skiing in the winter, the Basin offers extensive, year around recreational opportunities, both within the boundaries of GTNP and on the surrounding lands of BTNF and CTNF. Participation is obviously seasonal, and although the summer months still constitute the peak tourist season, participation in winter recreational activities such as snowmobiling and backcountry skiing continues to grow in BTNF (Marsh).

Exhibit 9 presents a monthly summary of recreational visitation days by activity, with private outfitters and concessionaires associated with GTNP. While these numbers likely represent only a small portion of recreational activity within the basin, they provide some insight into the relative popularity of activities and the distribution of participation over the summer months. The summer season extends from May through October, with the peak participation months being July and August. The most popular activities include rafting on the Snake River, ferry rides on Jackson Lake, and guided horseback rides through the surrounding countryside. Peak rafting season is in July and August, while peak fishing season occurs during August and September, when the river water clears and fish are more visible (Turner). From May through September, roughly 75 percent of the participation comes from water-based activities. In contrast, during October, nearly 90 percent of participation is in land-based activities.

Exhibit 9. Summer Recreational Visitor Days, by Activity, Private Outfitters and GTNP Concessionaires, 2001

Activity	May	June	July	August	September	October	Total
Backpacking	7	250	728	974	153	5	2,117
Boat Rental	334	4,792	7,081	4,733	531	0	17,471
Bus Tours	19	341	390	331	225	219	1,525
Camping	419	8,478	15,626	6,950	1,557	249	33,279
Ferry	0	19,724	27,328	17,454	6,020	0	70,526
Hiking	0	101	183	139	0	0	423
Horseback	196	7,542	13,333	11,162	4,267	278	36,778
Lake Fish	32	702	669	380	86	0	1,869
Lake Tour	31	4,129	5,247	140	0	0	9,547
River Fish	2	254	699	974	686	70	2,685
River Float	2,249	13,566	19,279	17,788	6,471	78	59,431
Total	3,289	59,879	90,563	61,025	19,996	899	235,651

Source: Grand Teton National Park, Concessionaire's Office, 2002.

Over the last decade, these activities have remained divided into three distinct participation levels. The annual number of ferry rides and river float trips has fluctuated between 70,000 and 90,000 visitor days, roughly the same level as the total for land based activities. Boat rentals and lake Tours comprise a second tier of recreation activity, with annual participation fluctuating around 20,000 visitor days over the past decade. Annual river fishing and lake fishing levels have remained roughly constant over the past decade, varying between 2,000 and 4,000 visitor days annually. Since 1998, there has been a noticeable drop (from 76 percent to 68 percent) in the share of participation in water-based activities, possibly due to lower water levels resulting from the drought that the Basin has experienced during this time period (Grand Teton National Park, Concessionaire's Office, 2002).

- *Expenditures and Employment.* BBC used information on daily tourist/visitor expenditure patterns (Morey and Associates/University of Wyoming, 1999, 2000) to estimate current spending levels in the Basin for both destination tourists and seasonal residents. Based on this information, BBC estimates a current annual total of \$507 million in destination tourist expenditures and \$234 million in expenditures by seasonal residents. Total expenditures in the tourist/visitor sector are estimated to support nearly 20,000 local jobs (See Exhibit 10 below). These include multiple jobs per individual and are by place of work, reflecting commuters from Lincoln County and Teton County, Idaho driving in the area.

Exhibit 10. Number of Visitor Days, Visitor Expenditures and Jobs Supported by Tourism Snake/Salt River Basins, 2000/2001

	Number of Visitor Days (Thousands)	Total Visitor Expenditures (Millions)	Total Supporting Jobs
Seasonal Residents	2,038	\$234	6,231
Summer	1,257	\$140	3,724
Winter	195	\$23	620
Other	585	\$71	1,887
Destination Tourist	5,137	\$507	13,473
Summer	3,169	\$290	7,706
Winter	493	\$53	1,407
Other	1,476	\$164	4,361
Grand Total Tourist	7,175	\$741	19,704
Summer	4,426	\$430	11,430
Winter	688	\$76	2,027
Other	2,061	\$235	6,248

Sources: Morey and Associates, 1999, 2000. Prior and Associates, 2001.

Summary

At present, there are approximately 26,000 residents living in the Wyoming portions of the Basin. The population of Basin counties grew rapidly during the 1970's, slowed considerably during the 1980s and has resumed comparatively rapid growth during the 1990s. About 28,000 jobs are located within the Basin, many of which are part-time. Employment is highly seasonal, especially in Teton County. Most jobs in the Basin are held by residents in the northern Lincoln and Teton Counties, although some jobs in the Basin are filled by residents of nearby Teton county Idaho. The most important sector of the Basin's economic base is tourism and visitor related activity. Agriculture is not as large a factor in the local economy as it was in the past and continues to steadily decline, but remains an important sector from the standpoint of Basin water use.

References

Interview with Bill Collins, Teton County Planning Director, October 2001.

Interview with Levi Broyles, Vegetation Management Program Facilitator, Bridger-Teton National Forest, June 2002.

Interview with Walt Grows, Rangeland Management Specialist, Caribou-Targhee National Forest, June 2002.

Interview with Jody Kennington, Lincoln County Executive Director, Farm Service Agency, USDA, June 2002.

Interview with Doug Powell, Natural Resource Specialist, Pinedale Field Office, Bureau of Land Management, June 2002.

Interview with Michelle Easeley, Natural Resource Specialist, Kemmerer Field Office, Bureau of Land Management, June 2002.

Interview with Alan Gray, Forage Agronomist, Director of Powell Research and Extension Center, University of Wyoming, July 2002.

Interview with Gurn Brown, retired Agricultural Extension Specialist, Lincoln County, July 2002.

Interview with Bill Resor, Owner, Snake River Ranches, BAG Member, July 2002.

Interview with Jim Maher, Teton County Brand Inspector, July 2002.

Interview with Chad Madson, Owner, Yellowstone Horses, October 2002.

Interview with Alan Rosenbaum, Manager, Pinto Ranch, October 2002.

Interview with Jim Sullivan, General Manager, Snow King Ski Area, August 2002.

Interview with Larry Williamson, General Manager, Grand Targhee Ski Area, August 2002.

Interview with Jerry Blann, General Manager, Jackson Hole Mountain Resort, August 2002.

Interview with Bob O'Neil, Director of Guest Activities, Grand Teton Lodge Company, August 2002.

Interview with John King, General Manager, Signal Mountain Lodge, August 2002.

Interview with John Turner, Owner, Triangle X Ranch, August 2002.

Interview with Dick Barker, Owner, Barker Ewing Float Trips, August 2002.

Interview with Susan Marsh, Recreation Staff Officer, Bridger-Teton National Forest, August 2002.

Interview with Wendy Koelfgen, Clerk, Chief Rangers Office, GTNP, August 2002.

Interview with Kim McMahill, Concession's Specialist, Concessionaires Office, GTNP, August 2002.

Economic Research Service, United States Department of Agriculture Livestock Baseline Projections, February 2002. <http://www.ers.usda.gov/briefing/baseline/uslivestock.htm>.

Grand Teton National Park, Concessionaire's Office, unpublished data, 2002.

National Agricultural Statistics Service, Published Online Estimates Database,
[/www.nass.usda.gov:81/ipedb/](http://www.nass.usda.gov:81/ipedb/).

Sunrise Engineering, unpublished data, 2002.

U.S. Department of Agriculture, Census of Agriculture, 1997. <http://www.nass.usda.gov/census/>.

U.S. Department of Commerce, Bureau of Census, 2000 Census of Population and Housing.
<http://factfinder.census.gov/servlet/BasicFactsServlet>

U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System, 2001. <http://www.bea.doc.gov/bea/regional/reis/>

U.S. Department of Commerce, Bureau of Economic Analysis, Employment by Industry for Lincoln and Teton Counties, 2000. Published online at <http://eadiv.state.wy.us/i&e/i&e.htm>.

Wyoming Agricultural Statistics, 2001, Wyoming Agricultural Statistics Service. <http://www.nass.usda.gov/wy/>.

Wyoming Department of Administration and Information, Division of Economic Analysis, Profiles of General Housing Characteristics by County and Place,
http://eadiv.state.wy.us/housing/HU_2000.htm.

Wyoming Department of Health, Vital Statistics, various years.
http://wdhfs.state.wy.us/vital_records/99DATA/menu.pdf

Personal Interviews/Written Communications, Completed in Year 2002

Barker, Dick, Barker Ewing Float Trips, August 2002.

Blann, Jerry, Jackson Hole Mountain Resort.

Brown, Gurn, retired Agricultural Extension Specialist.

Broyles, Levi, Bridger-Teton National Forest.

Collins, Bill, Teton County Planning Department.

Dana, Frank, Starr Valley Cheese Factory.

Erickson, Ryan, Sunrise Engineering.

Gray, Alan, University of Wyoming.

Grows, Walt, Caribou Targhee National Forest.

Easeley, Michelle, Bureau of Land Management.

Kennington, Jody, Lincoln County Farm Service Agency.

King, John, Signal Mountain Lodge.

Koelfgen, Wendy, Grand Teton National Park.

Maher, Jim, Teton County.

Madson, Chad, Yellowstone Horses.

Marsh, Susan, Bridger-Teton National Forest.

McMahill, Kim, Grand Teton National Park.

Norton, Bob, Nelson Engineering.

O'Neil, Bob, Grand Teton Lodge Company.

Powell, Doug, Bureau of Land Management.

Resor, Bill, Snake River Ranches.

Rosenbaum, Alan, Pinto Ranch.

Sullivan, Jim, Snow King Ski Area.

Turner, John, Triangle X Ranch.

Williamson, Larry, Grand Targhee Ski Area.

Published Data Sources

Bureau of Economic Analysis, Full and Part-Time Employment by Industry, Lincoln and Teton Counties, Wyoming. www.bea.doc.gov/regional/reis/ca25/ca25_56041.htm.

Grazing Use and Open Space Study, Grand Teton National Park and Teton County, Wyoming, Report to Congress (Review Draft), National Park Service, United States Department of Interior, February 2001.

Housing Needs Assessment, Teton County Wyoming, prepared for the Teton County Housing Authority, Prior and Associates, August 2001.

Land and Resource Management Plan, Bridger-Teton National Forest United States Forest Service.

Lincoln and Teton County IMPLAN coefficients.

Report on the Economic Impact of the Travel Industry in Wyoming, 1999, 2000, Morey and Associates/ Department of Economics, University of Wyoming.

Revised Forest Plan, Targhee National Forest, Intermountain Region R-4, United States Forest Service, April 1997.

The Economic Impact of Travel on Wyoming, 1997-2001 State Estimates, Dean Runyan Associates, December 2001.