



THE STATE OF WYOMING

Water Development Office

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TECHNICAL MEMORANDUM

TO: Water Development Commission **DATE:** November 20, 2012
FROM: Philip R. Ogle **REFERENCE:** Snake/Salt River Basin Plan Update, 2012
SUBJECT: Population Projections and Economic Conditions – *Tab XVII (2012)*

Contents

1.0 Introduction.....	1
2.0 Population	1
3.0 Economics	6
References	7

1.0 Introduction

This memorandum discusses the historic, current and projected population and economic trends within the Snake/Salt River Basin. Data and discussions from the 2003 Plan (Sunrise Engineering, Inc. 2003) and the associated technical memoranda Historic and Current Economic and Demographic Conditions (BBC Consulting & Research, Inc. 2002(a)) and Future Economic and Demographic Scenarios (BBC Consulting & Research, Inc. 2002(b)) provided the data and information for the historic discussion. Current conditions were developed from data and information obtained from the State of Wyoming, Department of Administration and Information, Economic Analysis Division (DAIEAD) and interviews with knowledgeable individuals working and living within the basin. The discussion is divided into two sections: population and economics.

The approach used to project future population and economic trends for this memorandum differs from the approach taken by BBC Consulting & Research (2002(b)). They used an economic based approach to project economic and population growth. They looked at potential economic growth and projected population growth from the proposed economic drivers. An inverse and simpler approach was used in this evaluation. Population estimates were used as the driver and economic growth projections were developed from these data and basin specific economic information. This method works well for the Snake/Salt River Basin because of the three main economic sectors, agriculture, industry and tourism, only tourism seems to be expanding. Tourism and associated recreational activities do not directly consume water except through use by people and by facilities such as golf courses and ski areas. Therefore, growth in tourism can be reflected in population growth and recreational water use.

2.0 Population

Population of the three counties that make up a majority of the Snake/Salt River Basin, Lincoln, Sublette and Teton, remained constant during the 1950s and 1960s; grew rapidly in the 1970s;

showed slow but steady growth during the 1980s; and grew rapidly again in the 1990s (Sunrise Engineering, Inc. 2003 and BBC Consulting & Research, Inc. 2002(a)). Historically, population changes in Teton and Lincoln Counties have been driven by immigration to meet increasing job opportunities.

The 2002 basin population was estimated to be 26,370 in the 2003 Plan, and the DAIEAD estimated the population to be 34,473 in 2012. This shows a moderate growth rate of about three percent annually over approximately ten years. Table 1 and Figure 1 show population estimates provided by DAIEAD for the portions of the three counties within the Snake/Salt River Basin and the basin total. Area of the counties within the basin varies; all of Teton County is within the basin. Twenty-eight percent of Lincoln County is in the Snake/Salt Basin, and the portion of Sublette County within the basin is small (8%) and has little impact on the total population of the basin. Teton County showed the greatest population growth over the period from 2003 to 2012 and has the highest projected growth to 2030. Sublette County occupies only a small area within the Snake/Salt River Basin and showed limited growth from 2003 to 2012; and this low growth trend is projected to continue to 2030. It should be noted that the DAIEAD projections were only made to 2030 and were extended linearly to 2032 for this analysis.

Figure 2 presents the Low, Mid and High population growth scenarios from the 2003 Plan. The High-growth scenario shows rapid growth in the basin of approximately 6.2 percent annually with a projected population of 75,070 in 2032. The Mid-growth scenario shows an estimated basin population of 46,680 in 2032, while the Low-growth scenario estimates the 2032 basin population to be 29,290. When comparing growth projections from the 2003 Plan to projections made by DAIEAD, the Mid-growth projection is fairly close for the period 2012 to 2030 and extended to 2032. The 2003 Plan Mid-growth projection estimated a basin population of 46,680 in 2032 and the extended DAIEAD estimate is 42,033. The DAIEAD estimate represents the Mid-growth projection for this evaluation.

High, Mid and Low-growth projections for this evaluation are shown in Figure 3 and presented in Table 2. The High-growth scenario assumes the 3.1 percent growth rate seen between 2002 and 2012 continues, resulting in a basin population of 50,679 in 2032. This is equivalent to a 2.35 percent growth rate over the 20-year projection. The Mid-growth scenario, which was developed from the DAIEAD population projection for the year 2030, shows a growth rate of 1.1 percent over the 20-year period and results in a population of 42,033 in 2032. The Low-growth scenario is taken from the Low-growth projection in the 2003 Plan and assumes a growth rate of 0.3 percent per year over the 20-year period from 2012 to 2032 equaling a population of 36,413.

Percentage of the basin population from each of the three counties remains the same as the population grows. Lincoln County makes up 36.9 percent of the basin population; Teton County equals 62.4 percent; and Sublette County equals 0.7 percent. In the 2032 Mid-growth scenario, Lincoln County's basin population is estimated to be 15,510, Teton County's population is estimated to be 26,229, and Sublette County's basin population is estimated to be 294. County population estimates for the three growth scenarios are shown in Table 3.

Table 1: Population Estimates for the Counties Making Up the Snake/Salt River Basin from 2003 to 2030

County/Basin	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2030
Lincoln	10,903	11,172	11,339	11,625	11,957	12,315	12,536	12,574	12,645	12,730	15,243
Teton	18,417	18,870	19,154	19,636	20,196	20,802	21,174	21,239	21,360	21,503	25,747
Sublette	206	211	214	219	225	232	236	237	238	240	287
Total Snake/Salt Basin	29,526	30,252	30,707	31,480	32,378	33,350	33,946	34,050	34,244	34,473	41,277

Note: Estimates presented in this table were prepared by DAIEAD

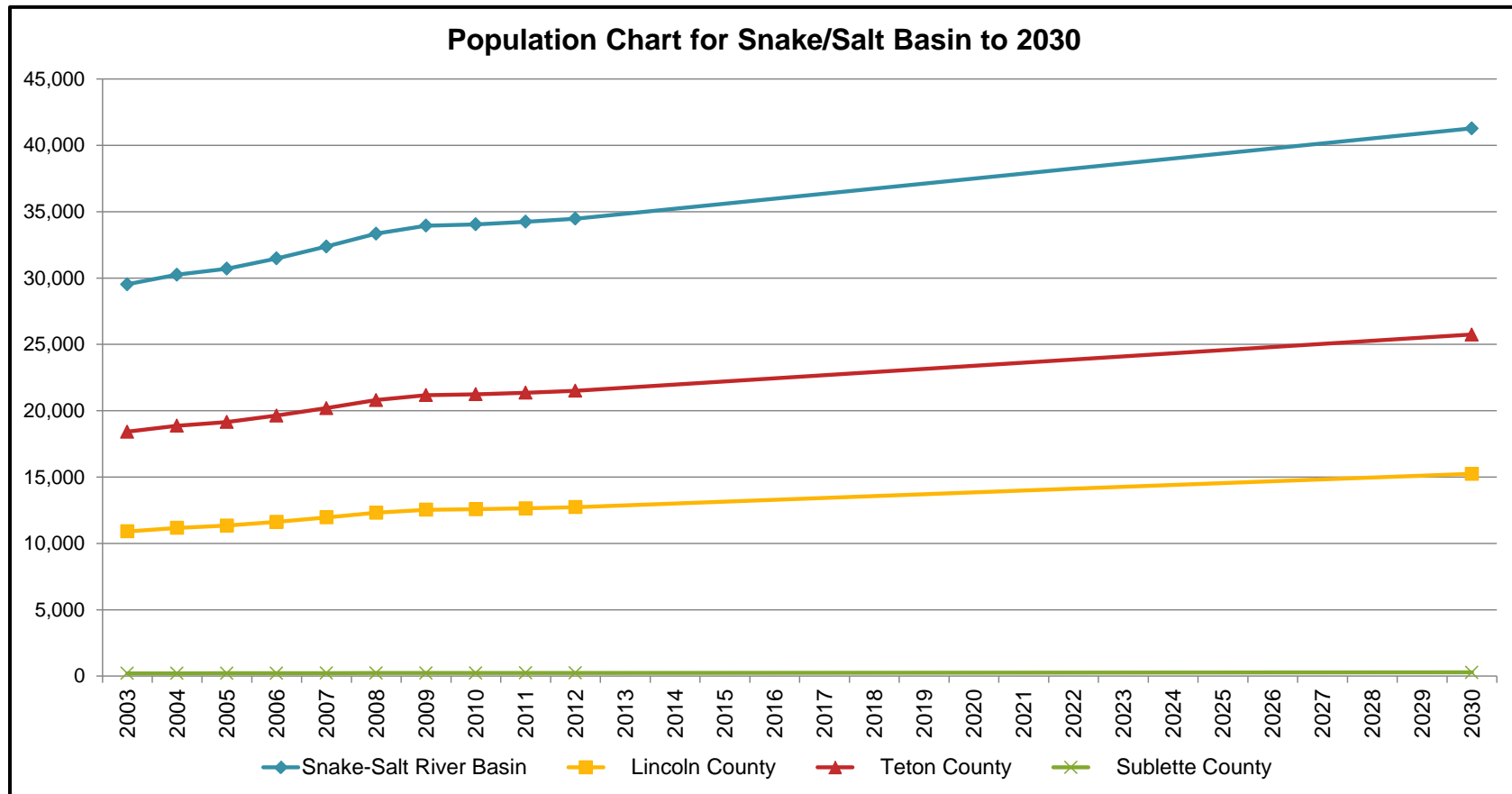


Figure 1: Population Estimates for the Counties Making Up the Snake/Salt River Basin (from DAIEAD)

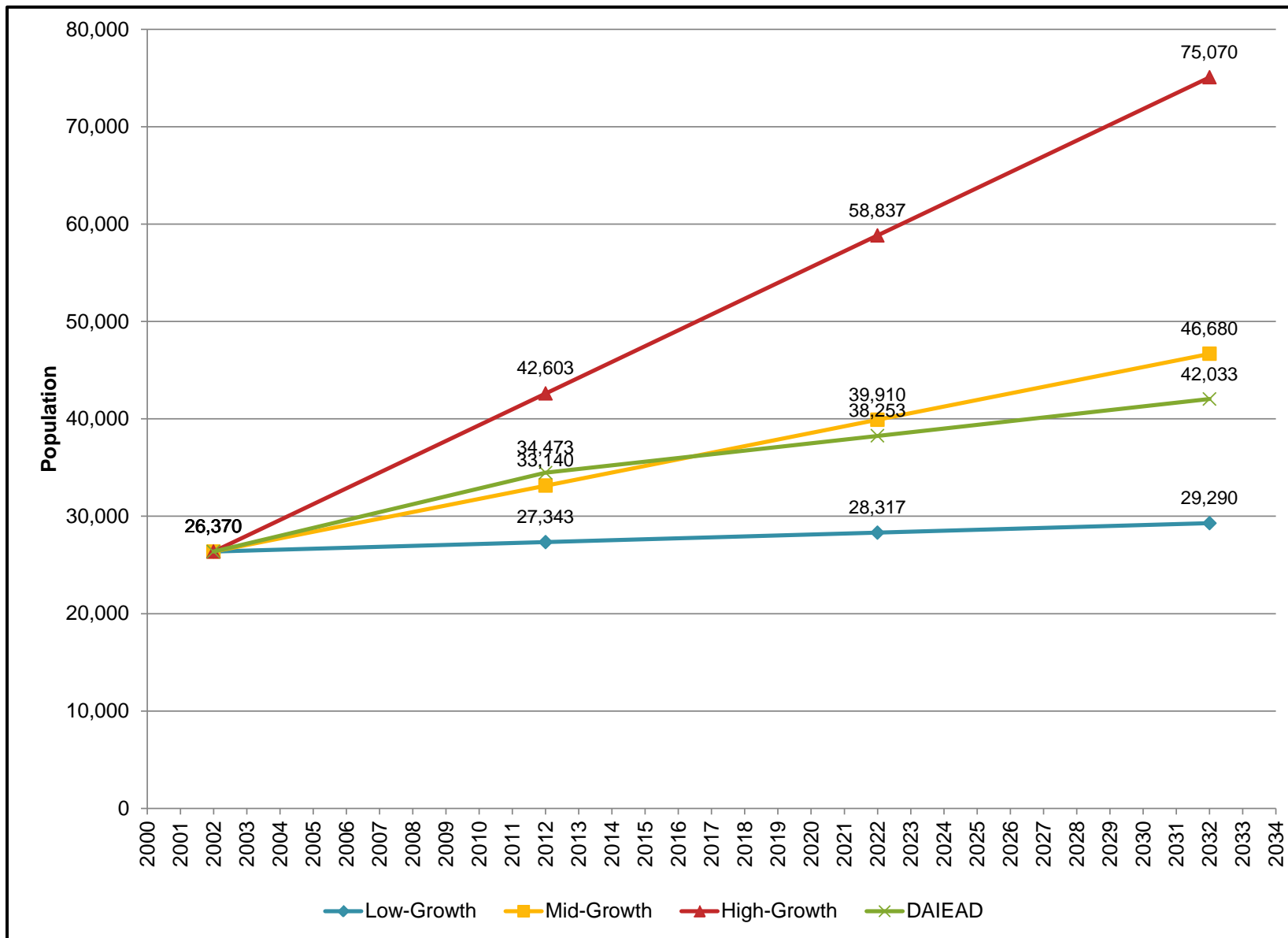


Figure 2. 2003 Plan Low, Mid and High-Growth Scenarios and the DAIEAD 2030 Population Estimate Extended to 2032

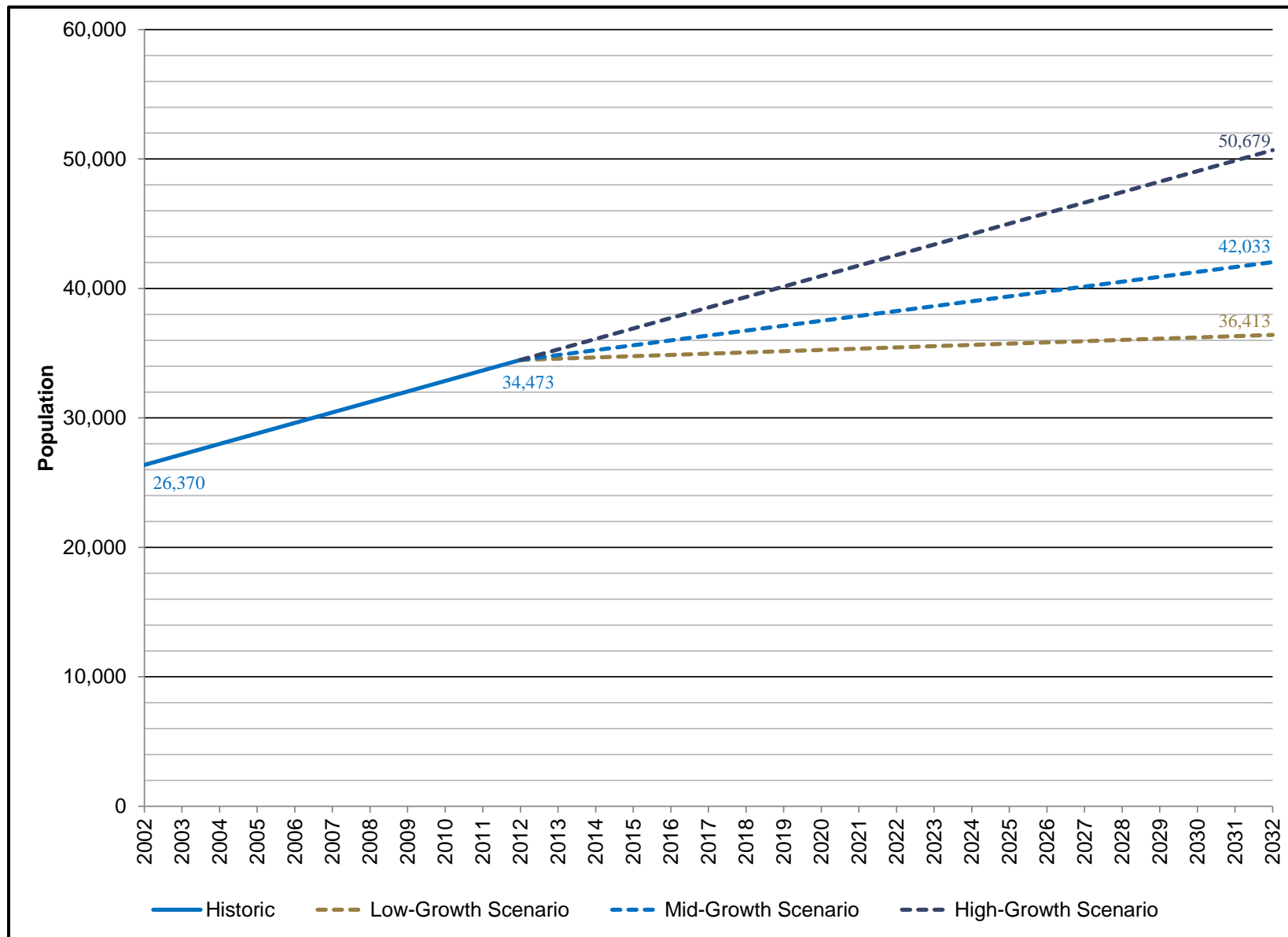


Figure 3. Historic Population Growth from 2002 to 2012 and Low, Mid and High-Growth Scenarios from 2012 to 2032

Table 2: Population Projections for the Low, Mid, and High-Growth Scenarios

Growth Scenario	2002	2012	2032
Low-Growth	26,370	34,473	36,413
Mid-Growth	26,370	34,473	42,033
High-Growth	26,370	34,473	50,679

Table 3: Estimated County Population for the Snake/Salt River Basin by Growth Scenario in 2032

County	Low-Growth	Mid-Growth	High-Growth
Lincoln	13,436	15,510	18,700
Teton	22,722	26,229	31,624
Sublette	255	294	355
<i>Basin Total</i>	<i>36,413</i>	<i>42,033</i>	<i>50,679</i>

3.0 Economics

Historically, agriculture and tourism have been the major economic sectors of the Snake/Salt River Basin. In the 2003 Plan, these were the two most important economic sectors considered. Industry was a minor economic sector with only three businesses included in this sector; Star Valley Cheese Corporation, Northern Foods and Water Star Bottling Company.

Although, agriculture was an important portion of the economy and the largest water use sector in the basin, tourism was the economic engine for the basin (Sunrise Engineering, Inc. 2003). Second home construction and development of subdivisions has been a portion of the economy in recent years, but it is difficult to determine the overall economic impact.

Currently, agriculture and tourism remain important economic sectors and agriculture is the largest water use sector. However, agriculture is decreasing in importance and tourism is becoming the main economic driver. Industry has been a minor part of the economy in the basin and has decreased with the closing of all three businesses mentioned above.

The economy and population grew steadily from 2002 to 2008 and slowed during the recession from 2008 to 2012. County and city planners within the basin indicate that the economy is beginning to pick-up again in 2012 (Daugherty 2012; Sinclair 2012; Woodward 2012).

Projections for growth in the individual water use sectors are presented in the associated sector Technical Memoranda. Water use sectors generally align with the economic sectors except for tourism. Growth or change in tourism, which is currently the largest economic sector in the Snake/Salt Basin, can only be translated to water use through population change (municipal and rural domestic water uses) and recreational and environmental water demands.

References

- BBC Research & Consulting, Inc. Edward Harvey and Marc Carey. 2002 (a). Snake/Salt River Basin Plan Technical Memorandum, Tab T. Memo 1: Historic and Current Economic and Demographic Conditions. Prepared for the Wyoming Water Development Commission, Cheyenne, Wyoming.
- BBC Research & Consulting, Inc. Edward Harvey and Marc Carey. 2002 (b). Snake/Salt River Basin Plan Technical Memorandum, Tab U. Memo 2: Future Economic and Demographic Scenarios. Prepared for the Wyoming Water Development Commission, Cheyenne, Wyoming.
- Daugherty, Jeff. Teton County. 2012. Telephone Interview.
- Sinclair, Tyler. Town of Jackson. 2012. Telephone Interview.
- Sunrise Engineering, Inc. 2003. Snake/Salt River Basin Plan Final Report. Prepared for the Wyoming Water Development Commission, Cheyenne, Wyoming in cooperation with BBC Research & Consulting, Inc.; Boyle Engineering, Inc.; Fassett Consulting; Hinckley Consulting; Nelson Engineering; and Rendezvous Engineering.
- Woodward, John. Lincoln County. 2012. Telephone Interview.
- Wyoming Department of Administration and Information, Economic Analysis Division. 2012. Population estimates for the Snake/Salt River Basin. Prepared Specifically for the Wyoming Water Development Office, Cheyenne, Wyoming.