BASIN DESCRIPTION

General

The Henrys Fork basin is located in the northeast corner of Idaho. The basin includes the major portions of the counties of Fremont, Madison and Teton with their county seats of St. Anthony, Rexburg and Driggs. The main river systems are the Henrys Fork which originates in small streams which empty into Henrys Lake (the main stem of the Henrys Fork is usually described as originating at Big Springs), Falls River which originates in the southwest corner of Yellowstone National Park and the Teton River which partially originates on the west edge of Grand Teton National Park.

The major part of the upper Henrys Fork basin consists of a high mountain plateau with lodgepole pine and large open meadows. The upper portion of the Teton River basin largely consists of a wide high-mountain valley. The middle portion of the Henrys Fork basin consists largely of undulating plateau lands. The lower basin consists of the relatively flat upper end of the Snake River Plain.

The Henrys Fork of the Snake River drains 1,750,000 acres. From Henrys Lake, set in a pocket of the continental divide at 6,500 feet, the stream drains to the south-southwest and flows for 117 miles before entering the Snake River. Basin elevations vary from about 4,800 feet in the southern part of the Snake River to over 10,000 feet at the mountain peaks to the north.

The basin has one of Idaho's colder climates. Freeze-free periods at the Ashton and Island Park climatological stations are 90 and 45 days. Annual precipitation, much of which falls as snow, averages 16.9 and 28.9 inches at Ashton and Island Park Dam. Annual precipitation varies from 10 inches in the lowlands to 60 inches in the mountains.

The upper Henrys Fork basin is at the eastern end of the Snake River Plain, a downwarped feature arcing across southern Idaho into Wyoming. As the plain was downwarped, volcanism and sedimentation filled it with basalt, rhyolites, and sedimentary deposits. A large shield volcano formed in the south-central part of the Henrys Fork basin and later collapsed to form the Island Park caldera, an elliptical bowl approximately 18 by 23 miles. Basalt flows later impinged on the caldera's rim from the south while rhyolitic flows reached the rim from the Yellowstone plateau and filled the bowl along with other sediment. The upland agricultural soils are almost all silt loams derived from wind-blown sediment. Valley soils are generally alluvial in origin.

Land use is timber production and grazing in the uplands with both irrigated and dryland farming in the lower plains. In 1975 forested land comprised 9 percent of the basin area, rangeland 26 percent, irrigated cropland 15 percent, dryland agriculture 13 percent and other uses 7 percent. Irrigated cropland in the Henrys Fork basin amounts to about 321,000 acres planted primarily to grain, potatoes and hay. The bulk of the irrigated lands lie on both sides of the lower Henrys Fork and lower Teton River between the Snake River and Ashton. Land use is shown on Figure 3.

The basin is sparsely populated with a total of 38,000. The principal cities of Rexburg, St. Anthony, Ashton, Driggs and Sugar City had 1990 populations of 13,000 in Rexburg and 8,000 in the remaining towns. Urbanization onto agricultural lands is not considered a problem in the basin. Summer tourist influxes are heavy and contribute substantially to sewage loading of surface streams. Land ownership is shown below in Table 1 and delineated on Figure 4.

Table 1. Land Ownership

Ownership	Acres	% Basin
Private	763,485	46%
Forest Service	643,259	39%
BLM	120,311	7%
National Park Service	36,722	2%
State	86,620	5%
Water	18,738	1%

Henrys Lake is a very shallow natural lake which has been raised by the construction of a low dam at the outlet allowing approximately 12 feet of water storage capacity. With the high elevation, Henrys Lake is a relatively cold lake. Ice cover persists from mid-November to late April in most years. Some stagnation occurs beneath the ice, but dissolved oxygen usually does not fall below 3 to 4 mg/l. Thermal stratification is slight since the shallow lake undergoes nearly continuous mixing throughout the summer. Organic loading and algae production are high, so even with no thermal stratification, oxygen depletion will occur in deeper waters (14-20 feet) during the warm summer-fall period. Algal blooms in Henrys Lake are very heavy. The colonial blue-green algae, *Gleotrichia* and *Aphanizomenon*, bloom every year through the summer. Near-surface concentrations of algae masses are swept downstream into the Henrys Fork River, thereby carrying high oxygen demand into that stream and significantly reducing its transparency above Island Park Reservoir.

Island Park Reservoir is also shallow, less than 50 feet in most places, and similar to Henrys Lake in mixing characteristics. Dissolved oxygen and temperature profiles show little stratification, indicating well mixed waters. Island Park Reservoir has a number of significant impacts on the Henrys Fork River. One study showed that median August temperature increased 7°F over the inflow (from 59° to 66°F); median August dissolved oxygen declined from over 9 to 7.5 mg/l; BOD doubled with passage through the reservoir (from algal production in the pool); August total phosphorus increased from 0.02 to 0.05 mg/l; Kjeldahl nitrogen increased from 0.23 to 0.37 mg/l; and ammonia increased from 0.01 to 0.08 mg/l.

Major tributaries in this reach, Buffalo River and Warm River, obtain most of their flow from groups of springs either at their heads or along their channels. These springs occur along the base of the steep-fronted bluffs of Yellowstone plateau rhyolite. The combined flow of these springs is about 600 cubic feet per second (cfs), or about 42 percent of the average discharge of the Henrys Fork near Ashton. These springs are large, two of them discharging more than 200 cfs.

After leaving Island Park Reservoir, the Henrys Fork cuts across the Island Park caldera before dropping off the plateau at Mesa Falls then flows to the south toward Ashton. Average stream gradient in this reach is a precipitous 26 feet per mile. Below Ashton the river levels out as it flows across the agricultural regions at an average gradient of 8 feet per mile.

The mean annual flow of the Henrys fork near the mouth is 1,407,000 acre-feet or 2,100 cfs with approximately one-third of that contributed by the Falls River and one-third by the Teton River. The flow range is extreme between wet and dry years; it varies from 600,000 acre-feet to 3,000,000 acre-feet. An additional estimated 1,000,000 acre-feet is recharged into the Snake Plain Aquifer and flows to the west.

Figure 3:
Land Use in the Henrys Fork Basin

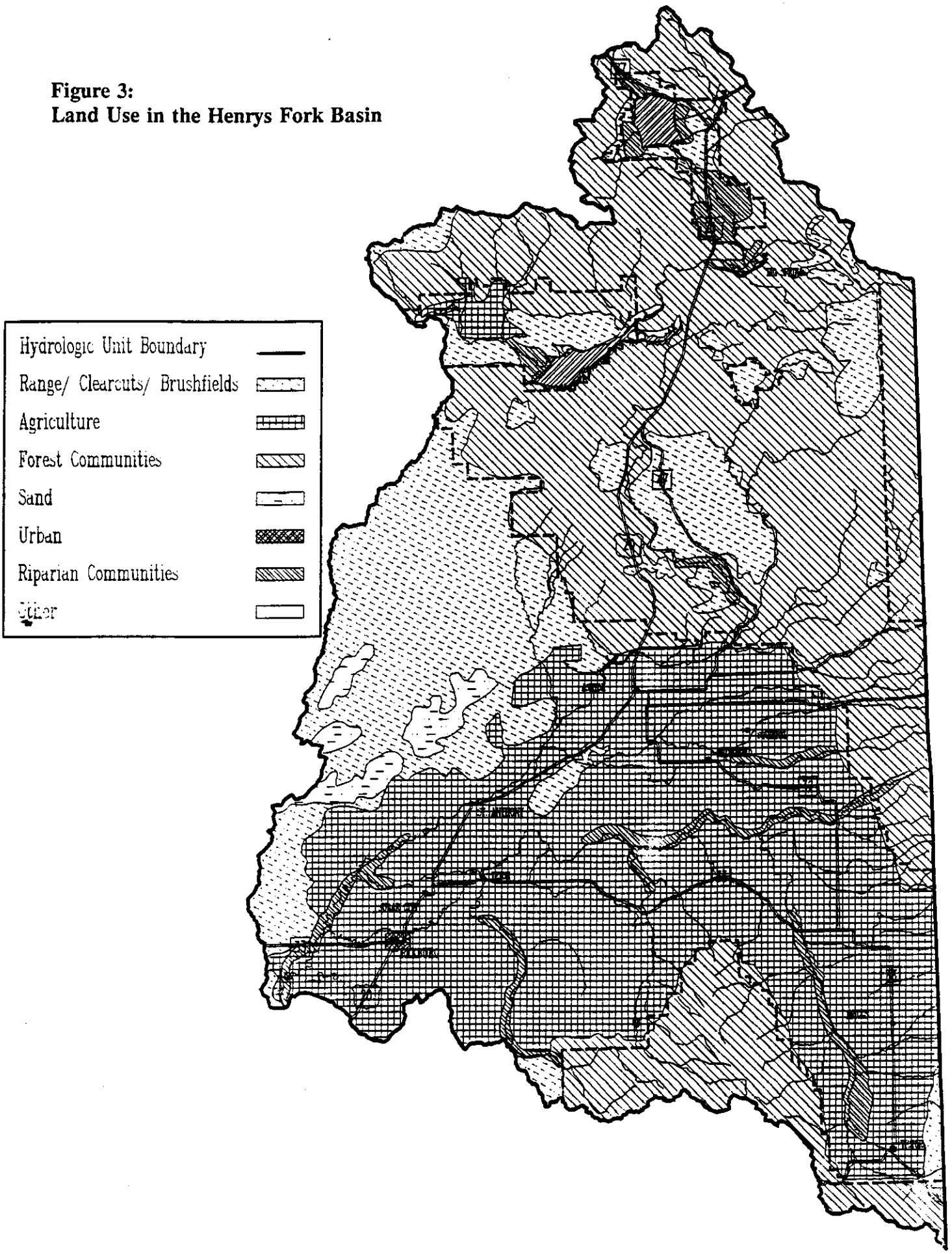
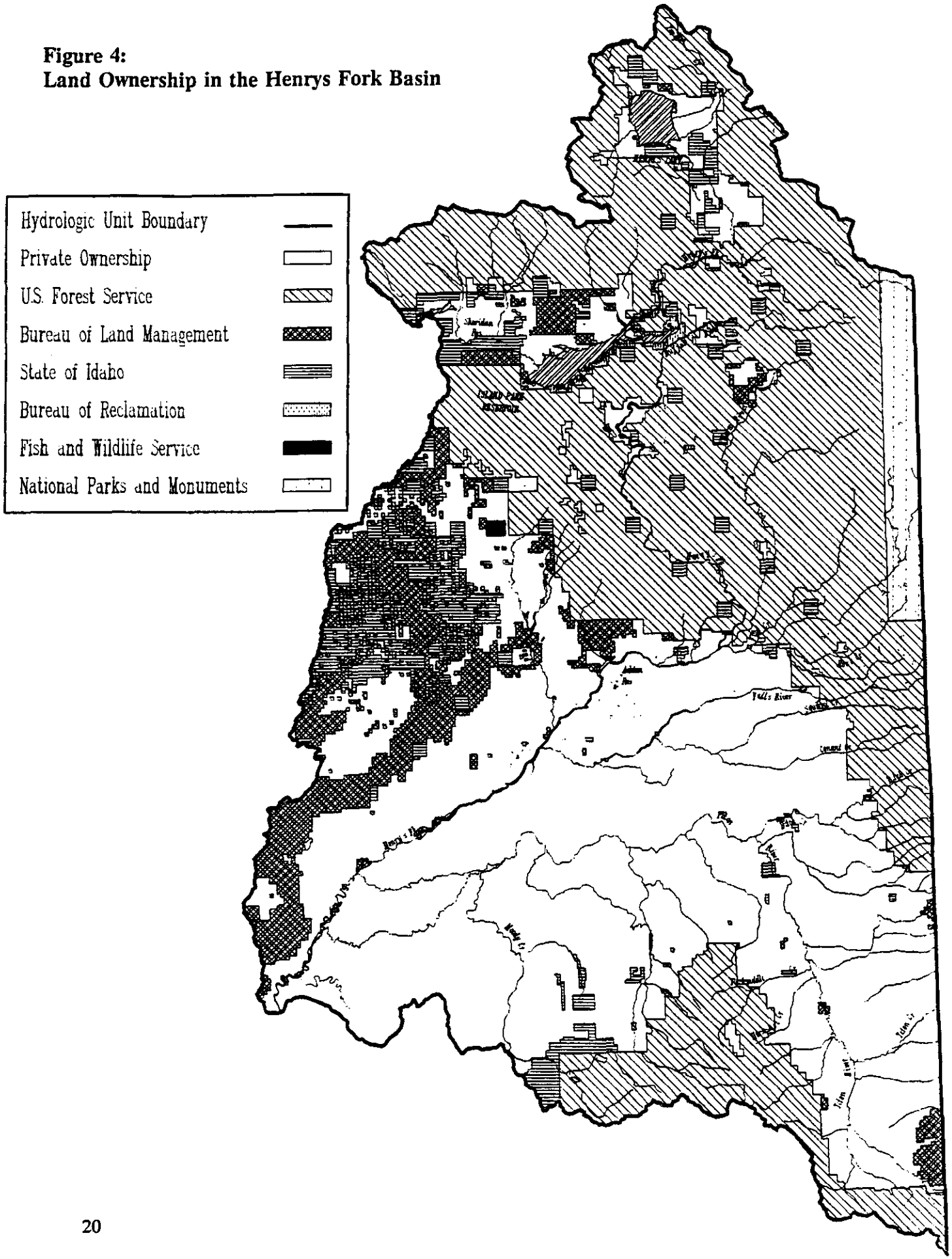


Figure 4:
Land Ownership in the Henrys Fork Basin



Source

Bennett, David, H., C. Michael Falter and Robert G. White. *Columbia Basin Water Withdrawal Environmental Review, Appendix D Fish Part II Snake River,* U.S. Army Corps of Engineers, Portland, District. 1980.

Early History

Evidence of early human presence in the lower Henrys Fork Valley coincides with findings in other parts of southern Idaho. Radiocarbon dating of artifacts from the Wilson Butte Cave in the Shoshone-Dietrich area shows the earliest known activity to be 14,500 before present (B.P. = 1950). The Jaguar Cave in the Blue Dome area of Birch Creek had artifacts dating back to 11,600 B.P.

After the introduction of the horse (about the year 1700), Shoshone and Bannock Indians traveled through the Henrys Fork area on elk hunts into Yellowstone Park via Targhee Pass. They established camps in the basin in the Island Park area and in the Teton Valley. Other tribes visited the area. The Blackfeet of Montana sent raiding parties into the area. The Crow, Flathead, and Nez Perce made summer visits to the area using Targhee, Reas, and Raynold Passes.

In 1808, John Colter, after leaving the 1805-06 Lewis and Clark expedition, was the first white to enter the region. His entrance was via the Teton Basin later referred to as Pierre's Hole. (Pierre Tevanitagon, an Iroquois Indian who traveled through the area about 1819, was an employee of Donald McKenzie of the British North West Company headquartered near present day Lewiston, Idaho.) John Colter was employed by Manual Liza, founder of the Missouri Fur Company, a rival of the British Hudson Bay Company and the North West Company.

In 1810, Andrew Henry, also of the Missouri Fur Company, built Fort Henry (a cabin about 10 x 10 feet) near St. Anthony. The company established the rendezvous system (1825-1840) which gave the Americans advantages over the British, although the British were active in southeast Idaho under Peter Skene Ogden and Donald McKenzie. An area-wide rendezvous site, used both in 1829 and in 1832, was Pierre's Hole or the Upper Teton Valley. Fort Henry was abandoned in 1856 because of Indian hostilities, largely from the Crow of Montana. A notable trapper, Richard "Beaver Dick" Leigh and Jenny, his Shoshone wife, settled and trapped in the area starting in the 1840's until 1876 when Jenny and all their children died of smallpox.

In 1868, Gilman Sawtell set up base near Sawtell Peak. A few other individuals subsequently settled in the area. The Bannock Chief, Targhee, whose name is used throughout the area, was killed by the Crow in the winter of 1871-1872 after signing the Fort Bridger Treaty of 1868. In 1877, the upper Henrys Fork was crossed by Chief Joseph and the Nez Perce as they were eluding the troops of General Howard.

Although Brigham Young visited the valley in 1852 following the 1847 westward migration, the possibilities of early frost delayed Latter-Day Saints (LDS) settlement until 1879. LDS settlers in the lower Teton River area near Rexburg built a diversion for the McCormick-Rowe Canal from the South Branch of the Teton River and another for the Teton Island Feeder Canal from the North Branch of the Teton River. In the upper Snake River area, two irrigation diversions predate these canals. The first was in 1874 from Willow Creek, above Ririe Reservoir but below Tex Creek, and a second diversion in 1876 from lower Willow Creek, south of the settlement of Ririe. In the Teton Valley the first permanent settlement is reported to have been in 1882 by non-LDS. In the Falls River vicinity, the LDS settled at Chester in 1885.

Yellowstone Park was created in 1872, predating the adjacent agricultural settlements. The Targhee National Forest was created in 1903 out of portions of the Forest Reserves set aside in 1891. Grand Teton National Park was created in 1929.

Demographics

A general decrease in rural population, prevalent across the United States since the turn of the century, is reflected in population figures for the three Henrys Fork Basin counties between 1920 and 1960. Beginning in the 1960s, but specifically through the 1970s, the U.S. observed an increase in rural population (Table 2 and 3). The shift is attributed to a strong agricultural economy, industrial development in rural areas, and a desire for rural settings and small towns. Population increase in the three basin counties since 1970 reflects this change and general growth in the western U.S., particularly the Pacific and Mountain states. In the 1980s population growth focused again on urban areas, but rural "amenity rich" counties, defined as providing recreation opportunity, scenic beauty, services, and/or cultural amenities, continued to experience growth.

Most of the population growth in the basin has been in Rexburg and may be associated with growth at Ricks College. Likewise, the secondary home market and the tourism sector in upper Fremont and Teton counties has supported the growth of Rexburg as a trade center. Recent growth in Teton County is primarily from retirees who are moving permanently into their "recreation" homesites. In Teton County most of the new residents are from out-of-state. In Fremont County, where growth slowed significantly in the 1980s, retirees from Eastern Idaho, primarily Idaho Falls and Pocatello, are the predominant newcomers. The INEL workforce is also moving into the basin (Hefferon, 1991; see also Table 4 for town population figures).

Table 2. Population Levels

	1920	1930	1940	1950	1960	1970	1980	1990	2000*	2010*
United States	106,000,000	123,000,000	132,000,000	151,000,000	179,000,000	203,000,000	227,000,000	248,000,000	268,000,000	282,000,000
Idaho	432,000	445,000	525,000	589,000	667,000	713,000	944,000	1,006,000	1,047,000	1,079,000
									*1,107,000	*1,198,000
Fremont	10,380	8,320	9,190	9,160	8,680	8,710	10,810	10,937	11,400	12,500
Madison	9,170	9,920	10,300	9,350	9,420	13,450	19,580	23,674	27,400	31,100
Teton	3,920	3,570	3,600	3,200	2,640	2,350	2,890	3,439	4,000	4,700
TOTAL BASIN	23,470	21,810	23,090	21,710	20,740	23,510	33,280	38,050	42,800	48,300

* Bonneville Power Administration county projections published in January, 1990.

* The number of second-home sites in Fremont County (1,500) with 2.75 people per house suggests an additional 4,000 summer residents plus another estimated 4,000 short-term visitors for a total summer increase of 8,000 people, mostly in the Island Park area. The total summer increase for Teton County is estimated to be nearly 1,000.

* Idaho projections by Northwest Power Planning Council in the 1989 Supplemental to 1986 Northwest Conservation and Electric Power Plan, Volume Two, medium-low scenario.

Sources: County figures are from the Idaho Almanac from Idaho Division of Tourism and Industrial Development, 1977, p. 315-316; United States and Idaho projections are from the U.S. Department of Commerce Bureau of Census, Current Population Reports, Population Estimates and Projections of the Population of the States by Age, Sex and Race 1988 to 2010, Table 5; county figures for 1990 are from preliminary 1990 census data; county projections use the 1980 to 1990 rate of change.

Table 3. Population Rate of Change in Percent

	1920-30	1930-40	1940-50	1950-60	1960-70	1970-80	1980-90	1990-2000	2000-2010
United States	16	7	14	19	13	12	9	8	5
Idaho	3	18	12	13	7	32	7	4	3
								10	8
Fremont	-4	4	-9	-7	0	24	1	5	10
Madison	-9	10	0	3	43	46	21	16	14
Teton	-9	1	-11	-18	-11	23	18	21	15
TOTAL BASIN	-7	6	-9	-4	18	36	14	13	13

Table 4. Growth of Henrys Fork Basin Towns

	1960	1970	1980	1990
Fremont	8,680	8,710	10,813	10,937
Ashton	1,242	1,187	1,219	1,114
Drummond	31	13	25	37
Island Park	53	136	154	159
Newdale	272	267	329	377
Parker	284	266	262	288
St. Anthony	2,700	2,877	3,212	3,010
Teton	399	390	559	570
Warm River	20	19	2	9
Madison	9,420	13,450	19,480	23,674
Rexburg	4,767	8,272	11,559	14,302
Sugar City	584	617	1,022	1,275
Teton	2,640	2,350	2,897	3,439
Driggs	824	727	727	846
Tetonia	194	176	191	132
Victor	240	241	323	292

Source: U.S. Department of Commerce, Bureau of Census.

Birth rates shown in Table 5 are one element in the population growth pattern. In-migration or out-migration as a result of economic conditions are the major influences affecting population. Birth rates in the basin have usually been higher than the average for the State of Idaho. Idaho birth rates have historically been higher than the average for the United States. While national birth rates have been constant, Idaho as well as basin birth rates have fallen considerably; so, at least Idaho birth rates now approximate national birth rates. The decline, however, has been slower in Madison County (see Table 5).

The 1988 death rates for the basin counties range from 3.8 to 7.5 per thousand or less than half of the birth rates. The difference between birth rates of 20 and death rates averaging 5 per thousand indicates a natural increase in population. The net increase of 15 per 1,000 per year gives a 10 year net increase of 16 percent. In the Henrys Fork basin the natural increase of 16 percent is more than the population growth of 14 percent, therefore, some out migration is occurring.

The educational level of basin residents generally is above the average in the United States and in Idaho (see Table 6).

Table 5. Birth Rates Per 1,000 Population and 1988 Death Rates Per 1,000 Population

	1983	1984	1985	1986	1987	1988	Deaths 1988
United States	15.5	15.7	15.7	15.5	15.7	15.9	8.8
Idaho	19.0	18.0	17.5	16.4	16.0	15.7	7.6
Fremont	21	22	19	18	15	17	7.5
Madison	25	22	23	22	19	22	3.8
Teton	24	19	24	22	19	15	6.9
Basin Average	24	22	22	21	18	20	5.1

Source: Idaho Department of Health and Welfare, Annual Summary of Vital Statistics.

Table 6. Educational Attainment Residents 25 Years and Older

	Percent High School Graduates	Percent with Four Years or More of College
United States	66.5	16.2
Idaho	73.7	15.8
New Hampshire	72.3	18.2
Colorado (highest in nation)	78.6	23.0
Fremont	71.5	12.0
Madison	81.3	18.7
Teton	78.5	17.0
Ada	81.7	22.1

Sources: U.S. Department of Commerce, Bureau of Census, 1980 Census of Population, Volume 1, Characteristics of the Population, Chapter C, General Social and Economic Characteristics, Part 14, Idaho, tables 66 and 175; also Part 1, U.S. Summary, Table 102.

Employment and Income Trends

Average annual employment in the three basin counties shows an upward trend over the twenty year period 1970-1990. The increase in employment numbers is greatest in Madison County, followed by Fremont and Teton respectively. Despite the upward trend overall, Fremont County experienced a large drop in employment in 1978 and showed little growth in the 1980s. Madison County had a large drop in employment in 1980, but employment numbers grew again through the decade.

The 1990 average annual employment figure for Fremont County is an increase of 30 percent over 1970 (see Table 7). According to the Idaho Department of Employment, there were 3284 people employed in Fremont County in 1970 compared to 4284 in 1990. Farm employment fell 23 percent and non-farm employment grew by 34 percent. Total employment increased 71% in Madison County and 94% in Teton County between 1970 and 1990. In Madison County farm employment fell 31 percent and non-farm employment grew over 150 percent between 1970 and 1989. In Teton County farm employment remained relatively steady and non-farm employment increased 97 percent (Idaho Department of Employment, Labor Statistics, 1970-1990; Bureau of Economic Analysis, U.S. Department of Commerce).

The unemployment rate in Fremont County usually exceeds both the national and state average. Since 1984, the Teton County unemployment rate has often exceeded both the national and state average while the Madison County rate generally has been below the Idaho average rate (see Table 8). Since 1985, the reduction in the unemployment rate throughout Idaho and the nation has not, on average, taken place in Fremont County. An indicator of an economically depressed area is an unemployment rate of 1.5 times the national rate. During the 1980s Fremont County's unemployment rate has generally been 1.5 times the U.S. unemployment rate.

Table 7. Average Annual Employment

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Fremont	3284	3242	3545	3923	3925	4065	3748	3962	3171	4523	4561	4574	4418	4520	4533	4563	4389	4489	4419	4443	4284
Madison	4693	5529	5493	4729	6244	7080	7055	7788	8261	8331	6733	6648	6965	7199	7409	7383	7501	7596	7897	8171	8034
Teton	80	822	880	897	973	970	1059	1107	1166	1120	1220	1271	1501	1482	1454	1488	1532	1444	1474	1550	1542

Source: Idaho Department of Employment, The Labor Force in Idaho 1970-1990.

Table 8. Average Annual Unemployment - In Percent

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	March 1990
United States	7.0	7.5	9.5	9.5	7.4	7.1	6.9	6.1	5.5	5.3	5.2
Idaho	6.4	6.5	8.8	7.5	6.3	6.5	6.5	5.7	4.7	5.1	5.5
Fremont	7.8	6.5	9.1	10.6	9.0	9.7	10.4	9.3	7.3	7.6	9.3
Madison	5.4	4.5	4.8	5.6	4.6	5.6	6.0	5.0	5.0	4.3	4.9
Teton	6.2	5.1	6.5	7.7	6.9	7.2	7.3	7.7	6.2	5.2	5.6
Ada*	6.6	6.1	7.5	7.9	5.3	5.9	5.9	5.7	3.9	3.4	3.5

* for comparison

Sources: Idaho Department of Employment, *The Labor Force in Idaho*; U.S. data from U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, Table A-1.

Average annual unemployment and poverty rate levels are related. As shown in Table 9, the average basic poverty rate in Idaho in 1980 was only slightly greater than the average in the United States. The poverty rate in Fremont, Madison, and Teton counties was about twice the average State of Idaho rate. The high rate in these counties is close to the rate in Mississippi, the state with the highest poverty rate in the nation.

Although the actual poverty rate of 20 to 25 percent is important, many more people are affected when underemployment levels in these counties are considered. Table 9 shows that half of the people had incomes under 200 percent of the poverty rate. The number of underemployed in the Fremont, Madison and Teton counties area was twice the rate of urban areas such as Boise, Pocatello or Idaho Falls. The relatively rural state of New Hampshire had statewide rates equal to Idaho urban areas, thus, a rural character does not necessarily determine a condition of high poverty or underemployment. A major cause of high underemployment is the seasonal nature of two major industries, agriculture and tourism. There is a great need for companion employment in these industries during their nonpeak periods.

Table 9. Percent Below Poverty Levels - 1980

	Below Actual Rate	Below 150% of Poverty Level	Below 200% of Poverty Level
United States	12	22	32
Idaho	13	24	38
Connecticut (lowest state rate)	6	14	22
New Hampshire	9	17	28
Mississippi (highest state rate)	24	38	51
Fremont County*	17	33	50
Madison County*	28	45	60
Teton County	18	40	62
Ada County (at Boise-comparison)	9	17	27
Bannock County (at Pocatello)	9	18	29
Poverty Level Family Income with Four People	$12,800	$19,100	$25,500

* Persons in college dormitories or in institutions are not included in these calculations.

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population; Volume 1, Characteristics of the Population; Chapter C, General Social and Economic Characteristics; Part 1, United States Summary, Tables 108 and 245; and Part 14, Idaho, Table 181.

Related to underemployment is the distribution of the income within an area, that is, the income levels of the most affluent when compared to the poorest section of the population. The calculated equity ratio of the income levels in the Fremont-Madison-Teton county area appear to be similar to urban Idaho counties and to the United States equity ratio. The actual dollar amounts, however, are considerably lower in these counties for both the richest and the poorest fifth of the population than the levels in more urban areas within the state.

Related to income levels, the household assessed valuation gives an indication of the available assets in the county. The three counties of Fremont, Madison and Teton are compared in Table 10 to the Idaho average and to the high and low counties in the state. By using values per household instead of per capita, the influence of families with large numbers of children is somewhat negated. Statewide, two counties with a destination recreation economy (Blaine and Valley) rank near the top in valuation per household. Teton County, which has a spillover recreation economy from Jackson, Wyoming, also has a high valuation. The other two basin counties, Fremont and Madison, are near the state average in valuation per household. There are fairly good asset values per household in the basin counties, yet the income levels are low, causing higher than normal near poverty levels. Thus the assets in many cases are not income producing or are low income or wage producing assets.

Table 10. Household Valuation

Rank	County	Valuation in $1,000 - 1986	Households 1985	Valuation Per Household
1	Power	$ 544,000	2,300	$236,000
2	Valley	553,000	2,600	213,000
3	Blaine	1,165,000	5,500	212,000
9	Teton	144,000	1,000	144,000
15	Fremont	306,000	3,200	96,000
	Idaho-State	29,551,000	354,000	83,000
29	Madison	444,000	5,600	79,000
43	Bannock	1,470,000	24,300	61,000
44	Payette	350,000	5,800	60,000

Despite a decline in the number of people employed on farms, farm income continued to rise in all three counties between 1981 and 1989. Farm income is a significant percentage of all personal income in the basin. Retirement and Investment income is also significant and increasing in importance in the three basin counties (see Table 11; U.S. Department of Commerce, Bureau of Economic Analysis).

In Madison County the broad "Service" sector generates the greatest personal income. The service sector is here defined to include health, business, professional, customer services as well as finance, insurance, wholesale and retail trade. Rexburg is the trade center for the basin. Manufacturing has also grown considerably in Madison County. Some of this growth is in the potato processing industry. Total personal income in Madison County amounted to $231,449,000 in 1989, a 28 percent increase from 1981 (adjusted to 1989 dollars).

In Fremont County, the government sector is a primary income source due to federal land holdings. Total personal income in Fremont County amounted to over $130 million in 1989, a 9 percent increase from 1981 (adjusted to 1989 dollars). The bulk of that increase came from improved returns in farming and retirement income. Fremont County experienced a decline in service sector income and employment during the 1980s. This is counter to the national and regional trend and suggests an opportunity for improvement. Employment and income figures for the retail sector indicate that potential sales are not being realized.

Teton County has had growth in manufacturing, transportation, and the service sectors as well as in retirement and investment income. Total personal income in Teton County amounted to over $40 million dollars in 1989, a 23 percent increase over 1981 (adjusted to 1989 dollars). Income from

farming in Teton County increased by almost 40 percent over the past 20 years, from $7.6 million in 1969 to $12.5 million in 1989.

Table 11. Percentage of Total Personal Income by Source

	Fremont	Madison	Teton
Agriculture	19%	12%	31%
Manufacturing	6%	8%	<1%
Construction	2%	3%	4%
Services	17%	44%	15%
Government	13%	8%	10%
Retirement	12%	7%	11%
Investment	16%	15%	18%
Other Transfer Payments and Calculated Residence Adjustment	15%	3%	10%

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

The percentage of retail trade that is tourism related is estimated at 0.12, 20, and 23 percent respectively for Madison, Fremont, and Teton counties. The recreation economy in the basin appears, in many respects, to be an immature industry. There are many small operators attempting to provide services, but recreation needs are not being met, particularly for the large out-of-state market. As the basin's recreation industry grows, managers will develop new services, greater experience, and financing to capitalize on recreational opportunities in the basin.

Related to the poverty level and underemployment data is the median family income level. Table 12 shows that the median family income in the basin counties is considerably below the Idaho average median family income, and also is below the non-urban Idaho average. Similarly, the Idaho median family income is below the average United States median family income and more importantly, below the average United States non-metropolitan median family income. The Teton County average is actually below the lowest state in the nation, Mississippi, and is below the average non-metropolitan median family income for Mississippi. These figures are not per capita income so the affect of larger families is not reflected. See Table 12 for persons per household and per capita income.

There has been a noticeable drop in the median family income for the State of Idaho when compared to the nation over the last 20 years. The basin counties have followed the state trend of lagging behind the nation. A median family income of 59 to 71 percent of the national average seems low even when cost of living factors are considered.

Table 12. Median Family and Per Capita Income

	Family Income	Family Income Comments	Persons per Household - 1987	Per Capita Income - 1987
United States - 1990	$35,700		2.6	$15,500
- 1990 Metro	$38,200			
- 1990 Nonmetro	$28,000			
- 1969	$9,600			
Idaho - 1990	$27,200	44th State 76% of U.S.	2.7	$11,900
- 1990 Metro	$32,700			
- 1990 Nonmetro	$26,000			
- 1969	$8,400	37th State 88% of U.S.		
Mississippi - 1990	$24,600	50th State	2.8	
- 1990 Metro	$30,000			

- 1990 Nonmetro	$22,500			
- 1969	$6,100			
Alaska - 1990	$46,200	1st State	2.9	
- 1969	$12,400			
Fremont - 1990	$25,300	71% of U.S.	3.2	$11,000
- 1969	$7,800	81% of U.S.		
Madison - 1990	$26,000	73% of U.S.	3.8	$8,700
- 1969	$8,100	84% of U.S.		
Teton - 1990	$20,900	59% of U.S.	3.1	$11,000
- 1969	$5,900	61% of U.S.		
Bonneville - 1990	$33,900	1st Idaho County	2.9	$12,700
- 1969	$9,700			

Median Family Income - The amount which divides the distribution into two equal groups, one having incomes above the median and the other having incomes below the median. A family is limited by those related individuals who reside together.

Source: U.S. Department of Housing and Urban Development Office of Economic Affairs: Economic and Market Analysis Division: HUD Users office telephone 1-800-245-2691 for yearly data.
Metro = Metropolitan Statistical Areas (Ada County only in Idaho)

Amenities

The basin generally has a very good highway system including many paved arterial routes within the national forest. On the Upper Henrys Fork plateau during the winter, however, only U.S. 20, Idaho 87 past Henrys Lake, and a few short access roads are kept open. Railroad service is available up river to Ashton. Airstrips are available at Rexburg, St. Anthony, Driggs, and Henrys Lake.

Electric power is available to all the basin communities and to most of the isolated rural areas. High schools have been consolidated into the larger towns throughout the basin. Rexburg has a large well-established two-year college which provides associated cultural benefits.

Recommended Action

1. Encourage protection of paleontological sites, aboriginal village or camp sites, historic trails, early pioneer structures, fur-trade related sites, and Chief Joseph war related sites.
2. Encourage development of archeological and/or historical site interpretation facilities for public appreciation and education.
3. Encourage water resource-related economic development funding for private, city, county, state, and federal projects that strive for increased long-term, sustainable returns to the local economy.
4. Develop companion employment for non-peak periods in the agricultural and tourism industries.

Sources

Beal, Samuel M., *The Snake River Fork County*. (See Idaho State Library NW 9796)

Brooks, Charles E., *The Henrys Fork.* Nick Lyons Books, New York City. 1986.

Bradley, Iver E., *Utah Interindustry Study,* Table 5, Utah Economic and Business Research, University, of Utah, Vol. 27, No. 7, July-August 1967.

Driggs, B.W., *History of Teton Valley,* 1970 edition. (See Ricks College Library)

Hefferon, F., University of Idaho, Department of Public Affairs. Personal Communication, December 5, 1991.

McDonald, James D., *Cultural Forest Review Targhee National Forest,* St. Anthony, Idaho, 1983.