

**SOCIOECONOMIC PORTRAIT
CLARK FORK BASIN
STATE WATER PLAN**

POPULATION

Recent Estimates

Between the 2010 Census and July 1, 2013, the population of the Clark Fork Basin (including the Kootenai Basin) increased 1.6 percent to 363,796. During the same period Montana’s population increased 2.6 percent to 1,015,165.

Two-thirds of Clark Fork Basin residents live within areas considered to be “Metropolitan” or “Micropolitan” by the Executive Office of the President, Office of Management and Budget (OMB). According to OMB (Executive Office of the President 2013), a “Metropolitan Statistical Area” is considered to have “at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.” “Micropolitan Statistical Areas” are defined similarly with the exception that the area’s core consists of “at least one urban cluster” with a population between 10,000 and 50,000 (**Figure 1**).

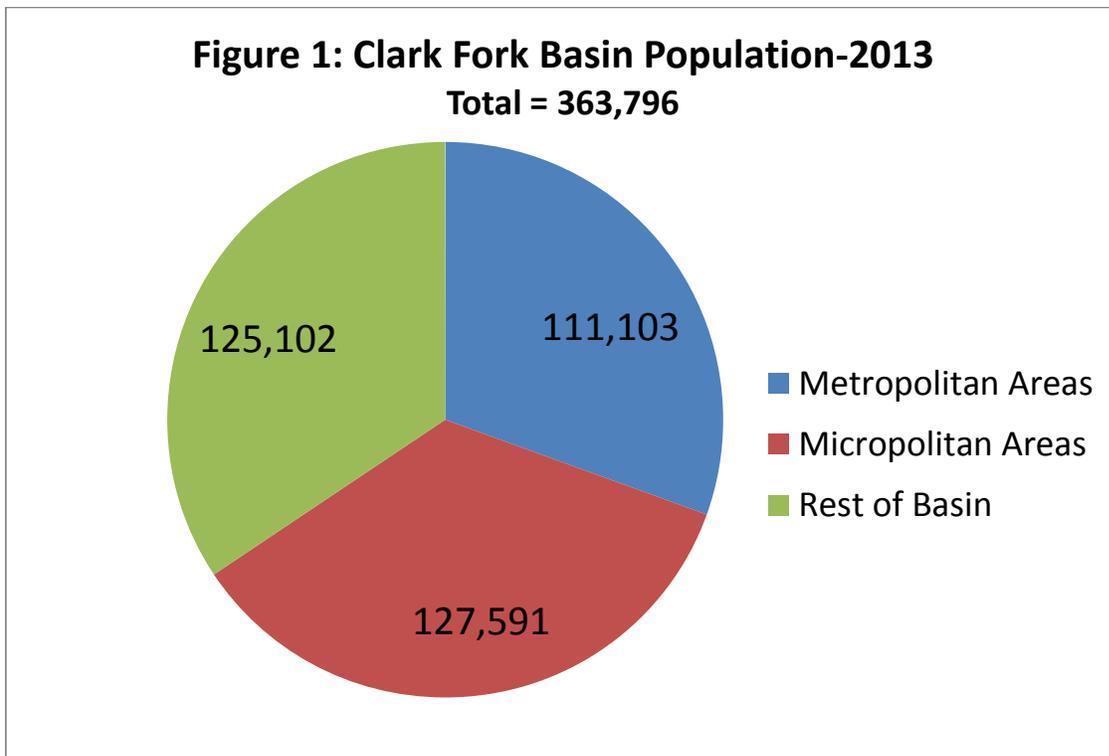


Figure 2 displays the Metropolitan Statistical Area and the Micropolitan Statistical Areas in the Clark Fork Basin. Missoula is the second largest of Montana’s three Metropolitan Areas. In 2013, one-third of the Basin’s residents lived in the Missoula area, the only Metropolitan

Figure 2: Metropolitan Statistical Areas, Micropolitan Statistical Areas Clark Fork Basin

	<u>2010</u>	<u>2013</u>	<u>% Change</u>
<u>Metropolitan Areas</u>			
Missoula	109,299	111,103	+1.7
<u>Micropolitan Areas</u>			
Butte	34,200	34,523	+0.9
Kalispell	<u>90,928</u>	<u>93,068</u>	<u>+2.4</u>
TOTAL	125,126	127,591	+2.0
Rest of Basin	123,685	125,102	+1.2
Montana	989,415	1,015,165	+2.6

Source: U.S. Census Bureau, Population Division

Area in the Basin. The Missoula Metropolitan Area grew 1.7 percent between 2010 and 2013, trailing the state’s rate of growth by nearly one percentage point. More than one-third of the Basin’s residents live in the Micropolitan Areas, Butte and Kalispell. Kalispell is the Basin’s largest Micropolitan Area and it continues to grow at a greater rate than the rest of the Basin, but more slowly than the entire state. One-third of the Basin’s population is found in “rural” areas outside of the areas characterized as Metropolitan or Micropolitan. Taken together, these areas grew at 1.2 percent between 2010 and 2013.

Populations of counties in the Clark Fork Basin for 2013 are listed in **Figure 3**. More than half of the Basin’s residents lived in Missoula and Flathead Counties, Montana’s second and fourth most populous counties. Ravalli, Silver Bow, Lake, and Lincoln Counties rank sixth through tenth on the list. The populations of Lincoln, Powell, and Sanders Counties declined by 1.2 percent, 0.5 and 0.4 percent, respectively, between 2010 and 2013.

Figure 3: Clark Fork Basin Counties Populations - 2013

Deer Lodge	9,329
Flathead	93,068
Granite	3,138
Lake	29,017
Lincoln	19,460
Mineral	4,275
Missoula	111,807
Powell	6,993
Ravalli	40,823
Sanders	11,363
Silver Bow	34,523

Source: U.S. Census Bureau, Population Division

The Clark Fork Basin is home to Montana’s most populous Indian Reservation, the Flathead Indian Reservation. **Figure 4** displays the population of the Flathead Reservation and Off-Reservation Trust Land and the percentage change in population between 2000 and 2010.

Figure 4: Flathead Indian Reservation

<u>Population 2010</u>	<u>% Change (2000-10)</u>
28,359	8.4

Source: U.S. Census Bureau, Population Division

Population estimates from the 2010 Census were aggregated by 8-digit hydrologic unit code (HUC) sub-basins for the Clark Fork and Kootenai Basins. Population estimates for these sub-basins are presented in **Figure 5**. The Bitterroot River, Flathead Lake, and Middle Clark Fork River sub-basins contained more than 60 percent of Basin residents and 22 percent of Montanans.

Just over five percent of Basin residents lived in the Kootenai Basin in 2010—almost all in the Upper Kootenai River sub-basin.

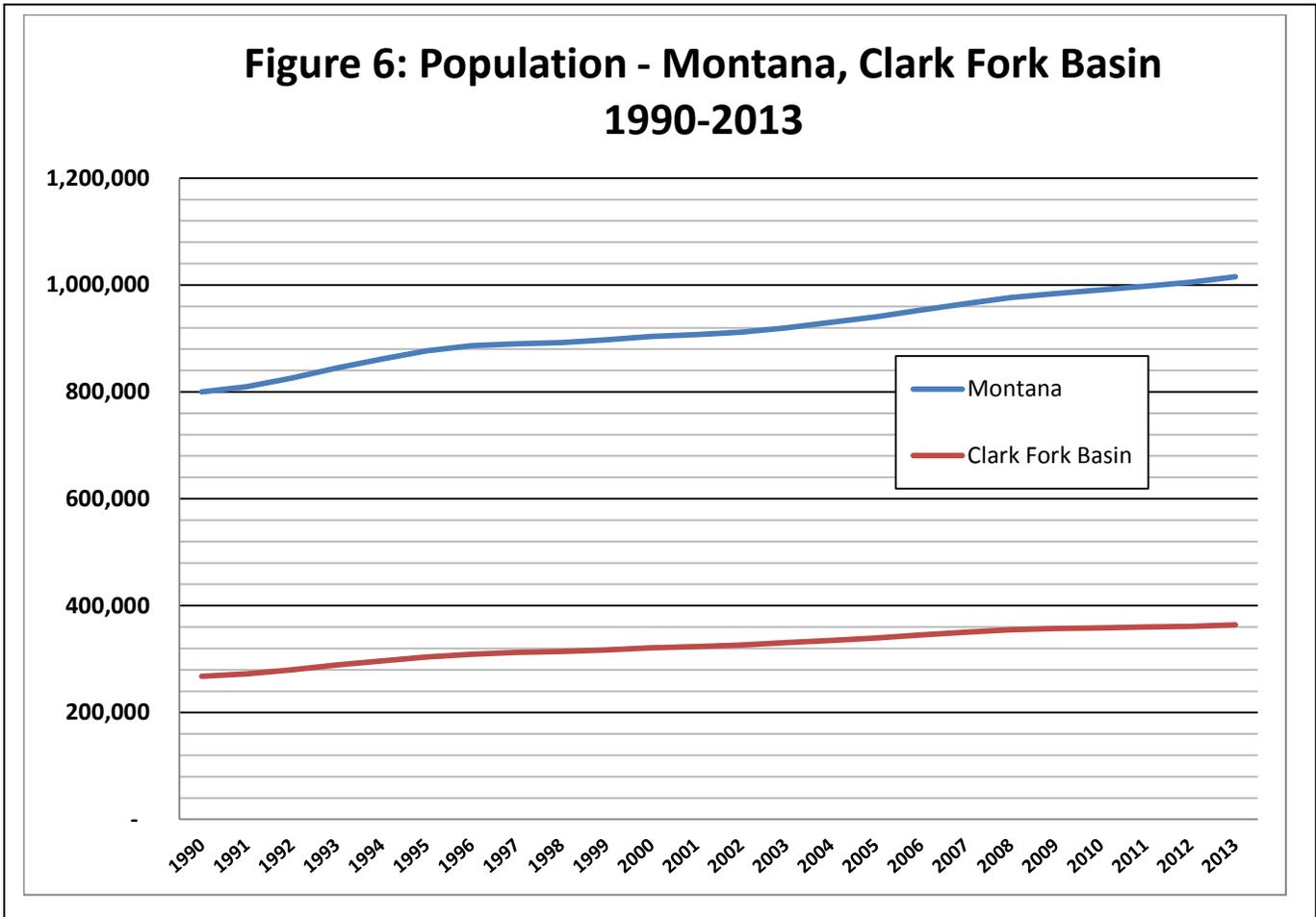
Figure 5: CLARK FORK BASIN POPULATION by SUB-BASIN - 2010

<u>SUB-BASIN</u>	<u>POPULATION</u>
<u>Clark Fork</u>	
Bitterroot River	74,463
Blackfoot River	5,898
Flathead Lake	73,628
Flint-Rock Creeks	5,986
Lower Clark Fork	9,518
Lower Flathead River	20,078
Middle Clark Fork	70,987
Middle Fork Flathead River	354
South Fork Flathead River	189
Stillwater River (Flathead R)	24,419
Swan River	3,986
Upper Clark Fork	49,499
<u>Kootenai</u>	
Fisher River	431
Lower Kootenai River	312
Moyie River	1
Upper Kootenai River	18,630
Yaak River	374

Source: U.S. Census Bureau, Population Division; Montana Department of Natural Resources and Conservation

Trends

Between 1990 and 2013, the population of the Clark Fork Basin increased by 36 percent while Montana's population increased by 27 percent (**Figure 6**). Ravalli, Flathead, and Missoula Counties were the most rapidly growing counties with populations increasing by 63 percent, 56 percent, and 41 percent, respectively. Deer Lodge County was the only county in the Basin with a declining population during the period, decreasing by 10 percent.



The changes in population for the Clark Fork Basin counties for the periods 1990 to 2010 and 2000 to 2010 are displayed in **Figure 7**. Ravalli and Flathead Counties grew most rapidly between 1990 and 2010 with populations increasing by more than 50 percent. Flathead County's population increased by more than 20 percent between 2000 and 2010 while the populations of Missoula, Ravalli, and Sanders Counties grew by more than 10 percent. Three counties experienced population declines during the decade. Montana's population increased by 24 percent between 1990 and 2010 and by 10 percent between 2000 and 2010.

Figure 7: Population Change – Clark Fork Basin Counties

<u>County</u>	<u>Percent Change</u>	
	<u>1990-2010</u>	<u>2000-2010</u>
Deer Lodge	-10.0	-1.1
Flathead	52.7	21.6
Granite	21.6	7.9
Lake	36.7	8.2
Lincoln	12.4	4.6
Mineral	26.6	8.7
Missoula	38.4	13.8
Powell	5.7	-2.5
Ravalli	60.9	11.1
Sanders	31.3	10.8
Silver Bow	1.0	-1.0

The U.S. Census Bureau estimates the populations of cities and towns and “Census designated places” (CDPs). CDPs are identified as “settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located.” Population estimates from the 1990, 2000, and 2010 censuses for cities, towns, and CDPs in the Clark Fork Basin are presented in **Figure 8**. (** indicates a CDP split into two CDPs in 2010.)

Figure 8: Estimated Populations for Clark Fork Basin Cities, Towns, and CDPs

	<u>Census Population 2010</u>	<u>Census Population 2000</u>	<u>Census Population 1990</u>	<u>Percent Change 2000 to 2010</u>
Deer Lodge County				
Anaconda-Deer Lodge County ***	9,298	9,417	10,356	-1.3%
Flathead County				
Batavia CDP	385	--	--	--
Bigfork CDP	4,270	1,421	--	200.5%
Columbia Falls city	4,688	3,645	2,921	28.6%
Coram CDP	539	337	--	59.9%
Evergreen CDP	7,616	6,215	4,109	22.5%
Forest Hill Village CDP	206	--	--	--
Helena Flats CDP	1043	--	--	--
Hungry Horse CDP	826	934	--	-11.6%
Kalispell city	19,927	14,223	11,917	40.1%
Kila CDP	392	--	--	--
Lakeside CDP	2,669	1,679	--	59.0%
Little Bitterroot Lake CDP	194	--	--	--
Marion CDP	886	--	--	--
Martin City CDP	500	331	--	51.1%
Olney CDP	191	--	--	--
Somers CDP	1,109	556	--	99.5%
West Glacier CDP	227	--	--	--
Whitefish city	6,357	5,032	4,368	26.3%
Niarada CDP	27	50	--	-46.0%
Granite County				
Drummond town	309	318	264	-2.8%
Maxville CDP	130	--	--	--
Philipsburg town	820	914	925	-10.3%
Lake County				
Arlee CDP	636	602	489	5.6%
Bear Dance CDP	275	--	--	--
Big Arm CDP	177	131	--	35.1%
Charlo CDP	379	439	358	-13.7%
Dayton CDP	84	95	--	-11.6%
Elmo CDP	180	143	--	25.9%
Finley Point CDP	480	493	395	-2.6%
Jette CDP	253	267	--	-5.2%
Kerr CDP	251	17	--	1,376.5%

Source: U.S. Census Bureau, Population Division; Montana Department of Commerce; Montana Department of Natural Resources and Conservation

Figure 8 (cont'd) Estimated Populations for Clark Fork Basin Cities, Towns, and CDPs

	Census Population <u>2010</u>	Census Population <u>2000</u>	Census Population <u>1990</u>	Percent Change <u>2000 to 2010</u>
Kicking Horse CDP	286	80	281	257.5%
Kings Point CDP	151	169	--	-10.7%
Lake Mary Ronan CDP	65	--	--	--
Lindisfarne CDP	284	--	--	--
Pablo CDP	2,254	1,814	1,298	24.3%
Polson city	4,488	4,041	3,291	11.1%
Ravalli CDP	76	119	--	-36.1%
Rocky Point CDP	97	107	--	-9.3%
Rollins CDP	209	183	--	14.2%
Ronan city	1,871	1,812	1,547	3.3%
St. Ignatius town	842	788	778	6.9%
Swan Lake CDP	113	--	--	--
Turtle Lake CDP	209	194	--	7.7%
Woods Bay CDP	661	748	--	-11.6%
Lewis and Clark County				
Lincoln CDP	1,013	1,100	--	-7.9%
Lincoln County				
Eureka town	1,037	1,017	1,043	2.0%
Fortine CDP	325	169	--	92.3%
Happys Inn CDP	164	--	--	--
Indian Springs CDP	31	--	--	--
Libby city	2,628	2,626	2,532	0.1%
Midvale CDP	393	--	--	--
Pioneer Junction CDP	959	--	--	--
Rexford town	105	151	132	-30.5%
Stryker CDP	26	--	--	--
Sylvanite CDP	103	--	--	--
Trego CDP	541	--	--	--
Troy city	938	957	953	-2.0%
West Kootenai CDP	365	--	--	--
White Haven CDP	577	--	--	--
Yaak CDP	248	--	--	--
Mineral County				
Alberton town	420	374	354	12.3%
De Borgia CDP	78	69	--	13.0%
Riverbend CDP	484	442	--	9.5%
St. Regis CDP	319	315	--	1.3%
Superior town	812	893	881	-9.1%

Source: U.S. Census Bureau, Population Division; Montana Department of Commerce; Montana Department of Natural Resources and Conservation

Figure 8 (cont'd) Estimated Populations for Clark Fork Basin Cities, Towns, and CDPs

	Census Population <u>2010</u>	Census Population <u>2000</u>	Census Population <u>1990</u>	Percent Change <u>2000 to 2010</u>
Missoula County				
Bonner-West Riverside CDP	1,663	1,693	1,669	-1.8%
Carlton CDP	694	--	--	--
Clinton CDP	1,052	549	--	91.6%
Condon CDP	343	--	--	--
East Missoula CDP	2,157	2,070	--	4.2%
Evaro CDP	322	329	--	-2.1%
Frenchtown CDP	1,825	883	--	106.7%
Huson CDP	210	--	--	--
Lolo CDP	3,892	3,388	2,746	14.9%
Missoula city	66,788	57,053	42,918	17.1%
Orchard Homes CDP	5,197	5,199	10,317	0.0%
Piltzville CDP	395	--	--	--
Seeley Lake CDP	1,659	1,436	--	15.5%
Turah CDP	306	--	--	--
Wye CDP	511	381	--	34.1%
Powell County				
Avon CDP	111	124	--	-10.5%
Deer Lodge city	3,111	3,421	3,378	-9.1%
Elliston CDP	219	225	--	-2.7%
Garrison CDP	96	112	--	-14.3%
Ovando CDP	81	71	--	14.1%
Ravalli County				
Charlos Heights CDP	120	--	--	--
Conner CDP	216	--	--	--
Corvallis CDP	976	443	--	120.3%
Darby town	720	710	625	1.4%
Florence CDP	765	901	--	-15.1%
Hamilton city	4,348	3,705	2,737	17.4%
Pinesdale town	917	742	670	23.6%
Stevensville town	1,809	1,553	1,221	16.5%
Sula CDP	37	--	--	--
Victor CDP	745	859	--	-13.3%

Source: U.S. Census Bureau, Population Division; Montana Department of Commerce; Montana Department of Natural Resources and Conservation

Figure 8 (cont'd) Estimated Populations for Clark Fork Basin Cities, Towns, and CDPs

	<u>Census Population 2010</u>	<u>Census Population 2000</u>	<u>Census Population 1990</u>	<u>Percent Change 2000 to 2010</u>
Sanders County				
Belknap CDP	158	--	--	--
Camas CDP	58	--	--	--
Dixon CDP	203	216	--	-6.0%
Heron CDP	282	149	--	89.3%
Hot Springs town	544	531	411	2.4%
Lonepine CDP	162	137	--	18.2%
Noxon CDP	218	230	--	-5.2%
Old Agency CDP	107	95	--	12.6%
Paradise CDP	163	184	--	-11.4%
Plains town	1,048	1,126	992	-6.9%
Thompson Falls city	1,313	1,321	1,319	-0.6%
Trout Creek CDP	242	261	--	-7.3%
Weeksville CDP	83	--	--	--
Silver Bow County				
Butte-Silver Bow (balance)***	33,525	33,892	33,336	-1.1%
Walkerville town	675	714	605	-5.5%

Source: U.S. Census Bureau, Population Division; Montana Department of Commerce; Montana Department of Natural Resources and Conservation

Figures 9 and 10 display maps of the population distributions for the Clark Fork Basin as reported in the censuses of 1990 and 2010. The maps illustrate the increasing population density of the portion of the Basin sometimes referred to as the “93 Corridor,” extending from the Flathead through Missoula to the headwaters of the Bitterroot River. Population growth is evident also in the northwestern part of the Basin.

Figure 9: Population distribution for the Clark Fork Basin as reported in the censuses of 1990.

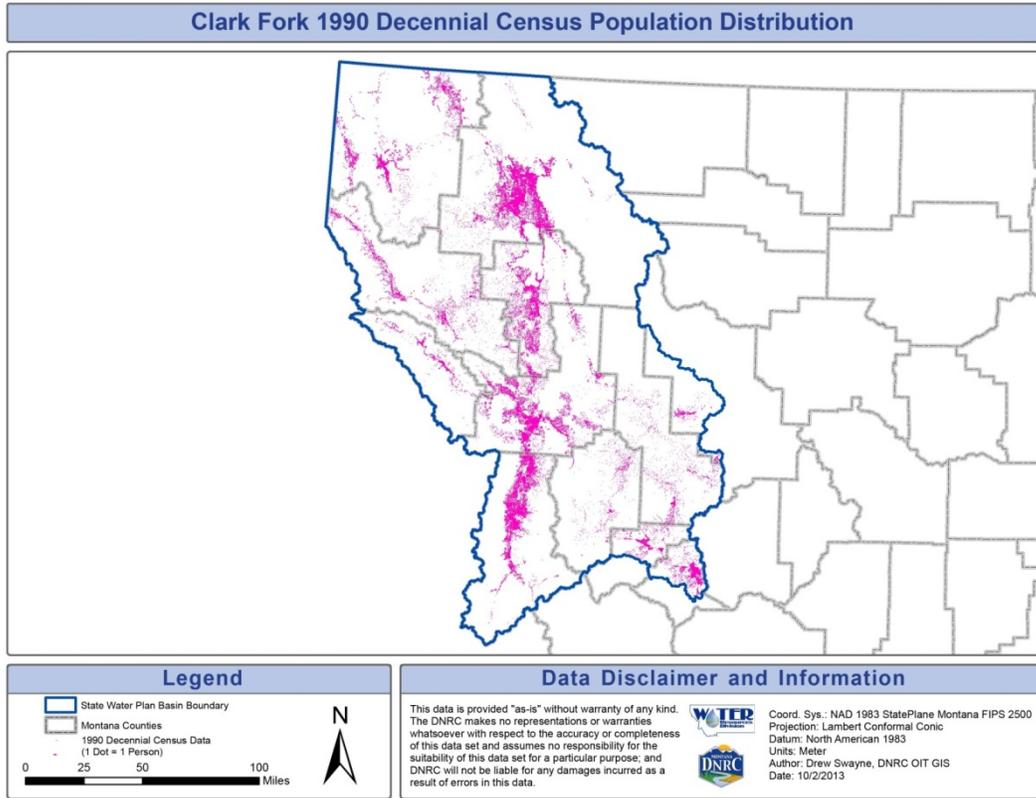
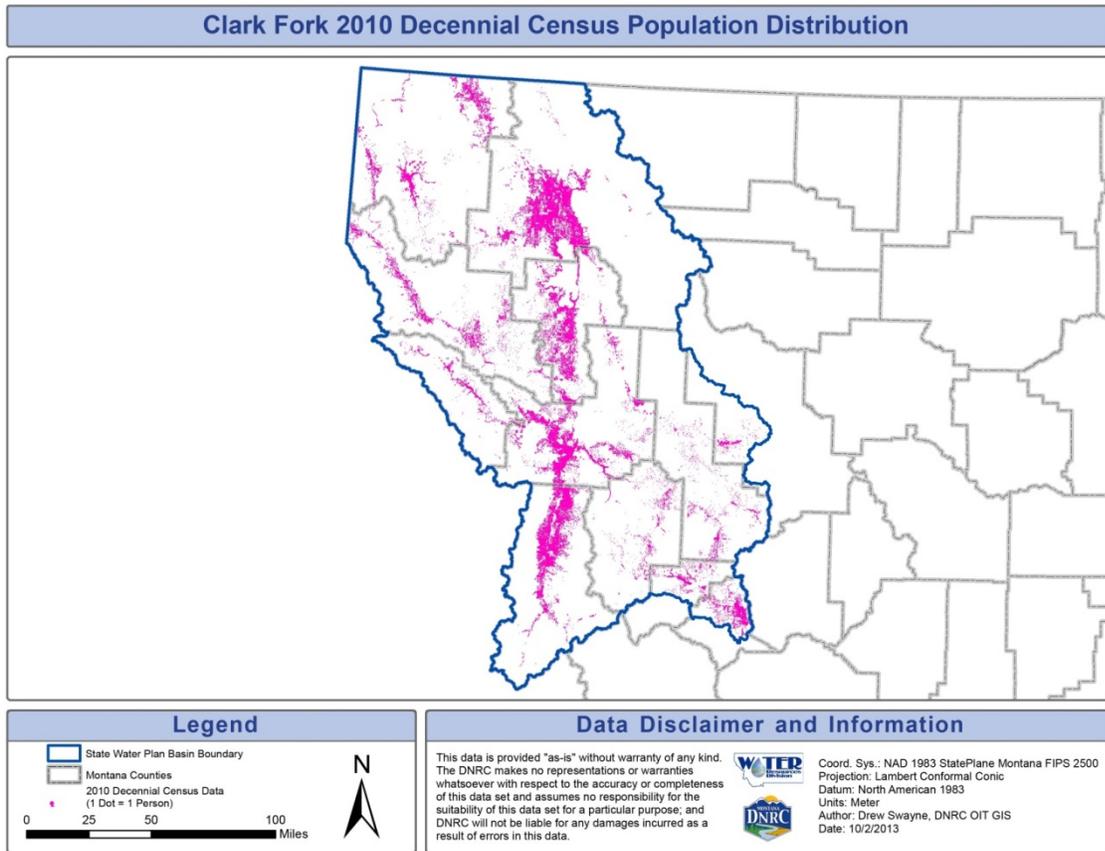


Figure 10: Population distribution for the Clark Fork Basin as reported in the censuses of 2010.



The Clark Fork was the largest and the fastest growing major basin in Montana between 1990 and 2010, with a population increasing by 36 percent to 339,005. **Figure 11** displays population trends for the Clark Fork’s sub-basins for 1990, 2000, and 2010. The populations of the Flathead Lake, the Bitterroot River, and the Stillwater sub-basins increased by approximately 50 percent between 1990 and 2010. Among the larger sub-basins, the populations of the Flint-Rock Creeks, the Middle Clark Fork, the Lower Clark Fork, the Lower Flathead River, and the Swan River sub-basins each grew by more than one-third. For each of these sub-basins, population growth was strongest during the 1990s. Only the Upper Clark Fork sub-

Figure 11: Population Trends – Clark Fork Sub-Basins – 1990-2010

<u>SUB-BASIN</u>	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>% Change 1990-2010</u>	<u>% Change 2000-2010</u>
<u>Clark Fork</u>					
Bitterroot River	50,510	67,241	74,463	47.4	10.7
Blackfoot River	4,829	6,006	5,898	22.1	-1.8
Flathead Lake	48,075	60,275	73,628	53.2	22.2
Flint-Rock Creeks	4,173	5,190	5,986	43.4	15.3
Lower Clark Fork	7,000	8,384	9,518	36.0	13.5
Lower Flathead River	14,832	18,338	20,078	35.4	9.5
Middle Clark Fork	50,454	60,675	70,987	40.7	17.0
Middle Fork Flathead River	326	374	354	8.6	-5.3
South Fork Flathead River	182	199	189	3.8	-5.0
Stillwater River (Flathead R)	16,579	20,982	24,419	47.3	16.4
Swan River	2,957	3,779	3,986	34.8	5.5
Upper Clark Fork	49,883	50,210	49,499	-0.8	-1.4
<u>Kootenai</u>					
Fisher River	300	368	431	43.7	17.1
Lower Kootenai River	225	212	312	38.7	47.2
Moyie River	2	13	1	-50.0	-92.3
Upper Kootenai River	16,692	17,950	18,630	11.6	3.8
Yaak River	284	313	374	31.7	19.5

Source: U.S. Census Bureau, Population Division; Compiled by Montana Department of Natural Resources and Conservation

basin saw no increase in population.

Components of Population Change

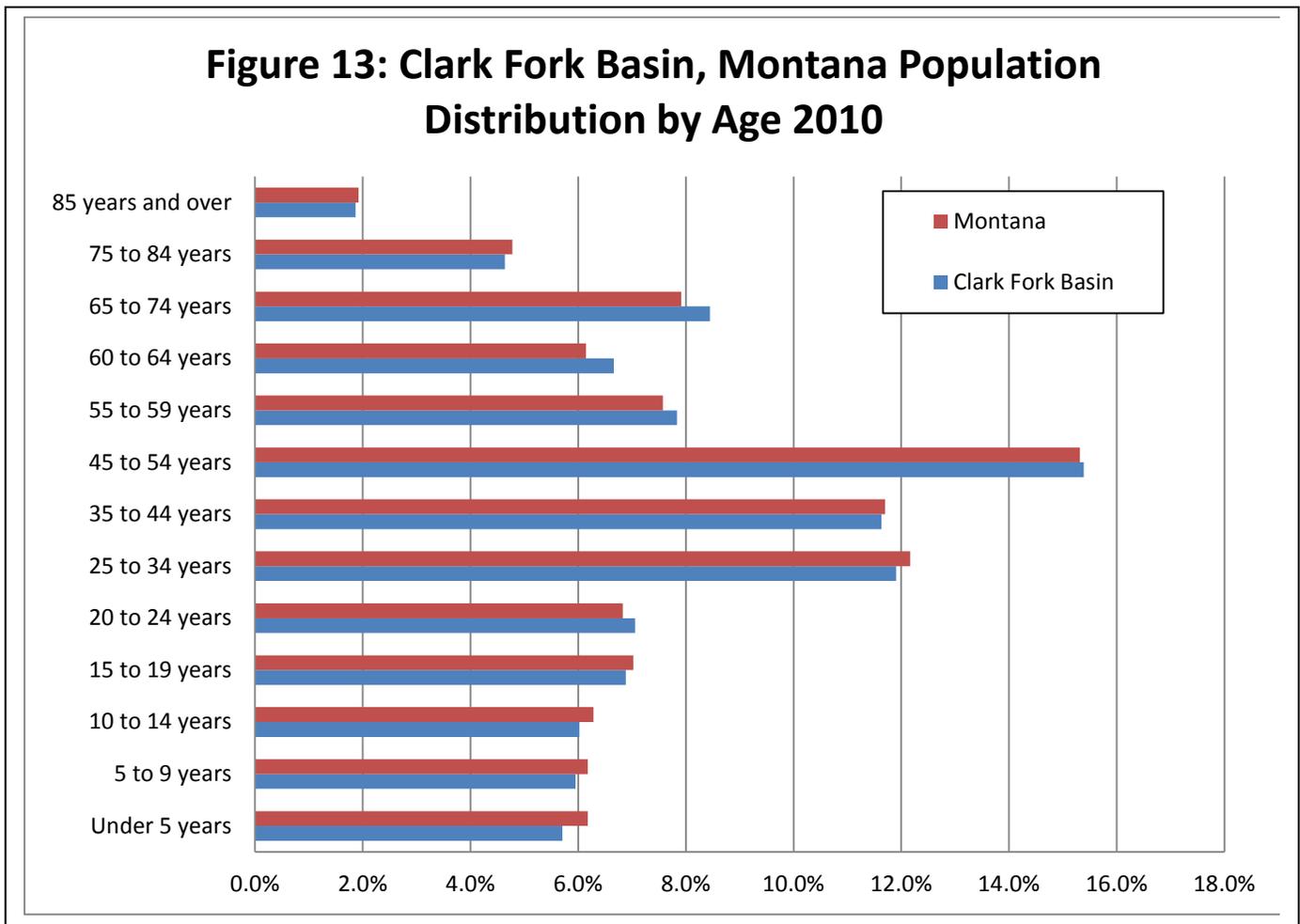
The Clark Fork Basin’s population change of 33,601 between 2000 and 2010 was the result of a natural increase of 9,430 and net migration of 25,843. The components of population change are displayed in **Figure 12**. (The components of population change do not reconcile with the total population change due to the variance in estimation methods applied to different demographic characteristics.) Of the two components of population change, net migration accounts for approximately 77 percent and reflects the substantially larger number of people moving to the Clark Fork from other parts of Montana and from other states compared to the number leaving. The level of natural increase—or the number of births in excess of the number of deaths—amounted to 28 percent of the change in the Basin’s population. The growth in the Basin’s population is primarily due to immigration to—and, to a lesser degree, natural increase in— Flathead and Missoula Counties. The composition of population change for counties within the Basin varies significantly. For more than half of the Basin’s counties, for example, natural increases in county populations during the decade were negative. For four of those counties, the negative natural increase was offset by net immigration to the county.

Figure 12: Components of Population Change – Clark Fork Basin Counties 2000-2010

	<u>Births</u>	<u>Deaths</u>	<u>Natural Increase</u>	<u>% Pop. Chg. Nat. Inc.</u>	<u>Intl. Migration</u>	<u>Domestic Migration</u>	<u>Net Migration</u>	<u>% Pop. Change Migration</u>
Deer Lodge	803	1,250	-447	-4.7	5	-205	-200	-2.1
Flathead	11,036	7,387	3,649	4.9	371	11,473	11,844	15.9
Granite	216	245	-29	-1.0	6	71	77	2.7
Lake	3,964	2,614	1,350	5.1	48	850	898	3.4
Lincoln	1,840	2,073	-233	-1.2	10	188	198	1.1
Mineral	454	435	19	0.5	7	-60	-53	-1.4
Missoula	12,376	7,145	5,231	5.5	536	8,268	8,804	9.2
Powell	550	729	-179	-2.5	26	12	38	0.5
Ravalli	4,265	3,740	525	1.5	43	4,382	4,425	12.3
Sanders	1,039	1,193	-154	-1.5	52	857	909	8.9
Silver Bow	3,957	4,259	-302	-0.9	39	-1,136	-1,097	-3.2
TOTAL	40,500	31,070	9,430	2.9	1,143	24,700	25,843	8.1

In 2010, the median age of residents of counties in the Clark Fork Basin ranged from 34 years in Missoula County to 51.4 years in Granite County. The median age for Montana was 39.7 years and 36.9 for the U.S.

Compared to the state-wide age distribution in 2010, the Clark Fork Basin had proportionately more residents between the ages of 20 and 24 and between the ages of 45 and 75 (**Figure 13**). The age structure of the Basin’s population is affected by the large number of young residents in the Basin’s largest population center, Missoula County, and by the large number of migrants to the region that have relocated after beginning careers elsewhere, particularly during the 1990s.



Projections

Population trends can be somewhat mysterious. States have experienced various trends reflecting each state’s particular natural endowments and historical circumstances. Those circumstances arise from unique, complex national, regional, and local dynamics that determine the geography of socioeconomic development and patterns of population change over time. For example: Iowa has seen consistent, low levels of population growth broken only by negative growth in the 1980s; California experienced very

high levels of growth throughout the twentieth century, tapering off in recent decades at lower, but still high, levels; North Dakota’s pattern of low levels of alternating population increases and declines is now being broken by rapid growth since 2010.

Predicting population changes is an undertaking that grows increasingly speculative as the time horizon expands and the region under consideration diminishes in size. For the purposes of this planning effort, population projections are provided to inform deliberations of water management issues in which population levels are one factor among many comprising the demand for water. The intent of these projections is neither to predict nor forecast precise population levels at particular points in time and locations in the Clark Fork Basin; the purpose, rather, is to offer reasonable estimates of magnitudes of population growth that would presumably relate to the supply and demand for water in various ways over the course of the planning period.

Two sets of population projections are offered here. One set extrapolates trends seen in the period between the 1990 and the 2010 censuses. These projections are provided at the state, county, basin, and sub-basin levels. The other set relies on projections at the state and county levels developed by the Montana Department of Commerce (MT Commerce) using eREMI, a population projection product of Regional Economic Models, Inc. (REMI). Population levels were projected through the twenty-year planning period to 2035.

Figure 14 displays projections of the Clark Fork Basin’s population based on each method. The MT Commerce forecasts predict a population increase for the Clark Fork Basin by 2035 that is less than half of the projection that relies on extrapolations of trends from 1990 to 2010. Extrapolating Basin-wide population growth at the average annual rate of population change for the period between 1990 and 2010 would result in 159,492 additional Basin residents in 2035. If the 1990 to 2010 trend were to continue, the Clark Fork population would exceed half a million by 2035 and comprise approximately 40 percent of the state’s population. Nearly 80 percent of the projected increase in population would occur in three sub-basins, Flathead Lake, the Bitterroot, and the Middle Clark Fork.

Rather than extrapolate recent trends, the MT Commerce projections forecast declining rates of population change through 2035, reflecting assumptions about the Basin’s age structure, natality and survival rates, and migration patterns over the period. This projection forecasts a substantially lower average annual rate of growth and an increase of 61,047 in the Basin’s population to 419,407 by 2035.

Figure 14: Population Projections – Clark Fork Basin			
	<u>Average Annual Rate</u>	<u>2035</u>	<u>Change 2010-35</u>
1990-2010 Extrapolation	1.54%	518,245	159,492
MT Commerce	0.63%	419,407	61,047

Figure 15 displays estimated populations for the Basin’s counties in 2035 as projected by each method. Generally, the MT Commerce forecasts predict more moderate rates of population change for counties compared to the trends of recent decades. That is, rapidly growing counties are predicted to grow less rapidly, counties with very slow rates of growth are expected to see increasing rates of growth, and counties with declining populations are predicted to shrink at decreasing rates. For example, the MT Commerce forecast predicts that the rate of population growth for Silver Bow County will increase slightly relative to recent trends and the recent negative rate of growth for Deer Lodge County will become positive and reflect population increases in the coming decades. The sum of the county projections does not equal the basin population projected due to compounding effects related to the basin and county projection calculations.

Figure 15: Population Projections – 2035		
Clark Fork Basin Counties		
	1990-2010	
	<u>Extrapolation</u>	<u>MT Commerce</u>
Deer Lodge	8,165	10,832
Flathead	149,142	114,980
Granite	3,907	3,187
Lake	41,487	28,631
Lincoln	22,321	21,363
Mineral	5,478	4,180
Missoula	161,352	137,055
Powell	7,576	7,256
Ravalli	69,899	45,265
Sanders	15,625	11,813
Silver Bow	<u>34,763</u>	<u>34,845</u>
TOTAL	519,714	419,407

Figure 16 presents the projected populations for the Clark Fork sub-basins in 2035. If trends of 1990 to 2010 were to continue, 86 percent of the Basin’s population increase would occur in the Flathead Lake (33 percent), the Bitterroot River (30 percent), and the Middle Clark Fork (24 percent) sub-basins. Nearly all of the population growth in the Kootenai Basin would occur in the Upper Kootenai River sub-basin.

Figure 16: Population Projections –Clark Fork Sub-Basins 2035			
1990-2010 Trends			
		Estimated	Estimated
		Population	Change
<u>SUB-BASIN</u>	<u>2010</u>	<u>2035</u>	<u>2010-35</u>
<u>Clark Fork</u>			
Bitterroot River	74,463	120,961	46,498
Blackfoot River	5,898	7,573	1,675
Flathead Lake	73,628	125,443	51,815
Flint-Rock Creeks	5,986	9,397	3,411
Lower Clark Fork	9,518	13,975	4,457
Lower Flathead River	20,078	29,317	9,239
Middle Clark Fork	70,987	108,776	37,789
Middle Fork Flathead River	354	392	38
South Fork Flathead River	189	198	9
Stillwater River (Flathead R)	24,419	39,622	15,203
Swan River	3,986	5,790	1,804
Upper Clark Fork	49,499	49,023	-476
Totals	339,005	496,562	157,557
<u>Kootenai</u>			
Fisher River	431	678	247
Lower Kootenai River	312	469	157
Moyie River	1	0	-1
Upper Kootenai River	18,630	21,372	2,742
Yaak River	374	528	154
Totals	19,748	22,963	3,215

While the courses of population change in the Clark Fork Basin and in particular parts of the state are highly uncertain from the perspective of the present, these projections offer two distinct scenarios for consideration when regarding prospects for future water use in the Basin. They should be viewed as potentially useful tools in examining various factors affecting—and consequences affected by—the supply and demand of the Clark Fork’s waters.

HOUSING

The number of households in the Clark Fork Basin in 2010 was 149,004 with an average size of 2.3 people (U.S. Census Bureau; 2007-2011 American Community Survey Profile Report). The total number of housing units was 179,585 with 147,580 occupied and 17,315 for seasonal, recreational, or occasional use.

INCOME and EMPLOYMENT

Total personal income (TPI) is comprised of: net earnings in the forms of wages and salaries, supplemental earnings, and proprietors' income; transfer payments; and income from dividends, interest, and rent. In 2012, TPI in the Clark Fork Basin was \$13.0 billion, 33 percent of TPI for Montana of \$39.3 billion.¹ Between 1990 and 2012, TPI in the Clark Fork Basin increased by 85 percent, compared to an increase for Montana of 80 percent.

Per capita personal income (PCPI) in the Clark Fork Basin in 2012 was reported to be \$35,896, compared to \$39,126 for Montana. Personal income in 2012 (adjusted to 2013 \$s) for the major basins in Montana is displayed in **Figure 17**. With \$13.0 billion, the Clark Fork Basin was the basin with the highest amount of total personal income, but the lowest per capita personal income by a substantial margin. The sparsely populated Lower Missouri had the lowest TPI by a considerable amount, but the Basin nearly matched the Upper Missouri's \$40,676 for the highest PCPI among the state's four major basins.

Figure 17: Personal Income – Major Basins 2012

	<u>Total</u>	<u>Per Capita</u>
Clark Fork	13.0 billion	35,896
Lower Missouri	3.1 billion	40,528
Upper Missouri	12.8 billion	40,676
Yellowstone	10.4 billion	41,448
Montana	39.3 billion	39,126

Adjusted to 2013 \$s.

¹ Figures are from the U.S. Department of Commerce, Bureau of Economic Analysis, Table CA30, adjusted for inflation to 2013 dollars. Estimates are based on administrative records and survey and census data collected by various agencies.

Between 1990 and 2012, per capita income in the Clark Fork Basin and in Montana, adjusted for inflation, increased by 37 percent. **Figure 18** presents similar upward trends in PCPI for each of the major basins over the period. PCPI in the Lower Missouri and the Yellowstone Basins increased at rates greater than the statewide increase with increases of 61 percent and 58 percent, respectively. Between 2007 and 2012, PCPI in the Lower Missouri increased by 19 percent while PCPI in the Clark Fork declined by 1 percent. The impacts of the recent recession are evident from the graph as are the contributions of strong prices for agricultural commodities and activity in the energy sector.

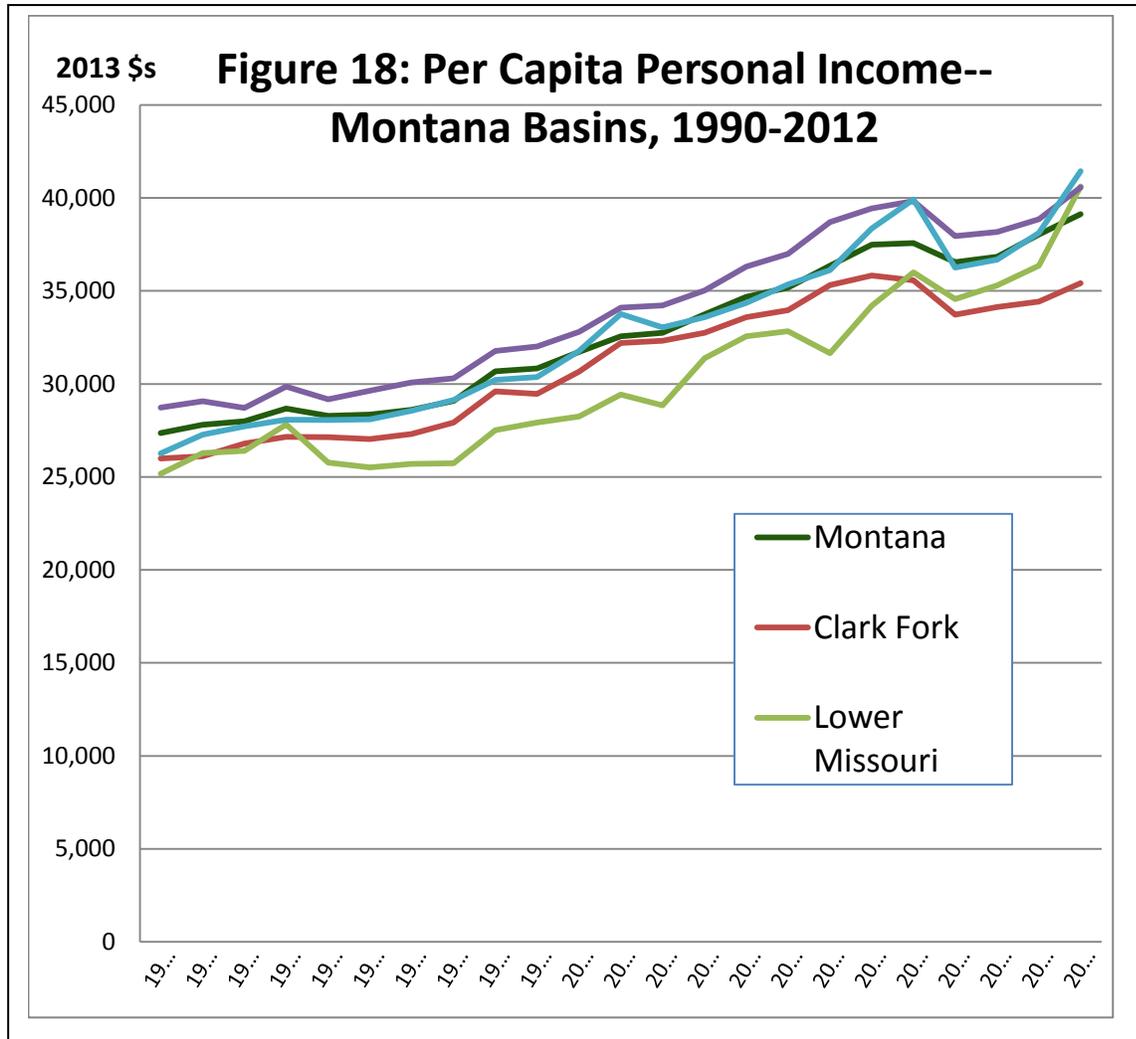


Figure 19 displays TPI and PCPI for the Metropolitan Statistical Area and Micropolitan Statistical Areas in the Clark Fork Basin for 2012. TPI for these areas totaled \$9 billion—22 percent of Montana’s TPI. Overall, PCPI in the Metropolitan and Micropolitan Areas was below PCPI for the state. PCPI for Butte was well above PCPI for Montana’s seven Metropolitan and Micropolitan Areas.

Figure 19: Personal Income—Metropolitan Areas and Micropolitan Areas—Clark Fork Basin—2012

<u>Metropolitan Areas</u>	<u>Total Personal Income</u>	<u>Per Capita Personal Income</u>
Missoula	4.1 billion	37,126
<u>Micropolitan Areas</u>		
Butte	1.5 billion	45,302
Kalispell	<u>3.4 billion</u>	<u>37,548</u>
TOTAL	4.9 billion	39,086
<u>METROPOLITAN, MICROPOLITAN AREAS TOTAL</u>		
	9.1 billion	37,916

Adjusted to 2013 \$s

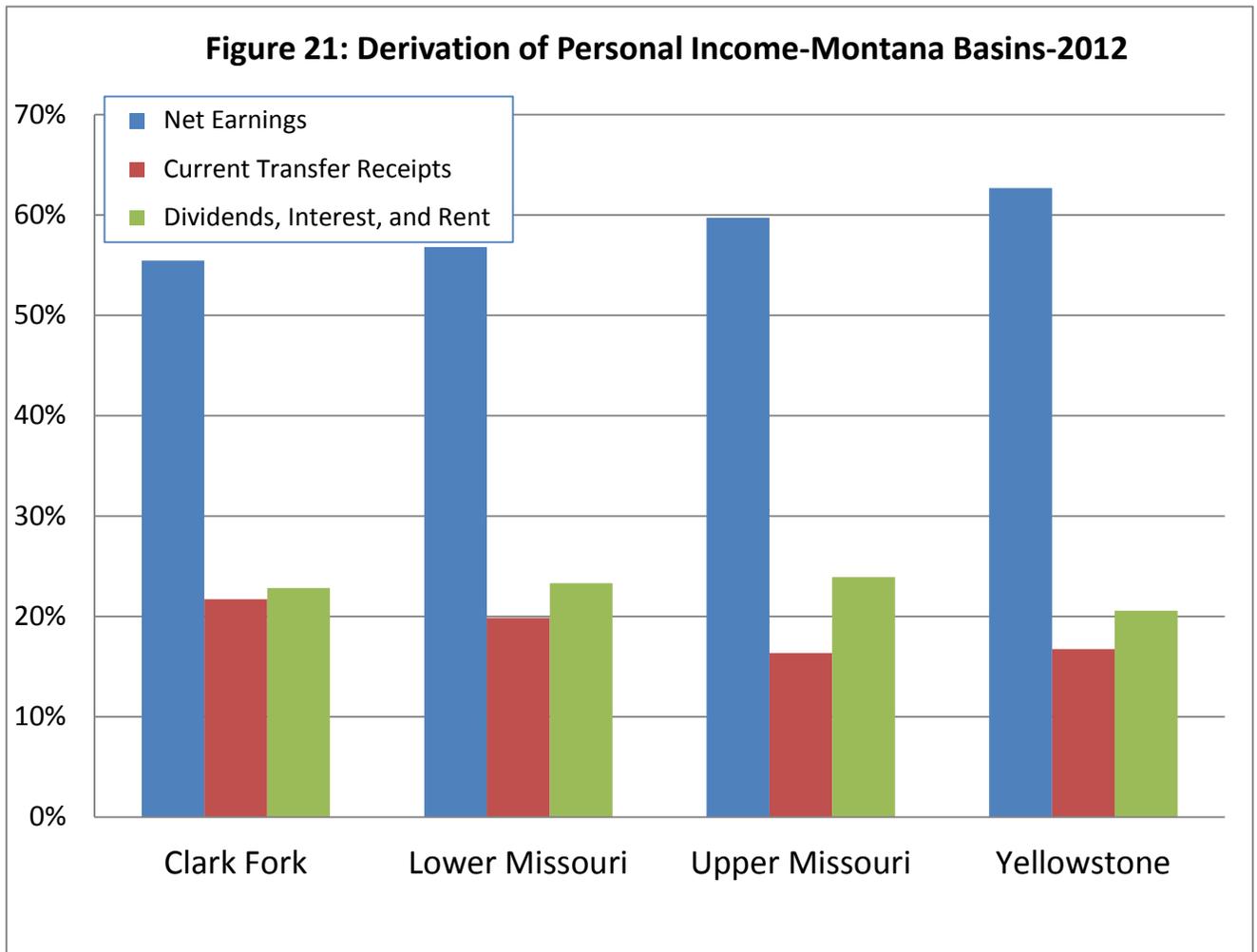
Figure 20 displays TPI and PCPI for Clark Fork Basin counties for 2012. The counties with the highest TPI tend to be the more populous counties. Missoula and Flathead Counties accounted for 58 percent of the Basin’s income. These counties had the second and fourth highest levels of TPI among Montana’s 56 counties in 2012. Silver Bow had the ninth highest level of PCPI. Sanders, Mineral, Lake, Powell, and Lincoln Counties were five of the six counties with lowest PCPI in 2012.

Figure 20: Personal Income—Clark Fork Basin Counties—2012

<u>County</u>	<u>TPI (\$billion)</u>	<u>PCPI (\$)</u>
Deer Lodge	0.3	33,478
Flathead	3.4	37,548
Granite	0.1	33,643
Lake	0.9	29,662
Lincoln	0.6	30,003
Mineral	0.1	29,285
Missoula	4.1	37,126
Powell	0.2	29,956
Ravalli	1.3	32,806
Sanders	0.3	27,877
Silver Bow	1.6	45,302

Adjusted to 2013 \$s

The composition of personal income in Montana has changed over time. The portion of personal income derived from net earnings—primarily in the form of wages and salaries—has declined to 59 percent in 2012. The portion of income from retirement programs and other transfer payments has increased to 18 percent and income derived from dividends, interest, and rent accounted for 22 percent in 2012. For the U.S. in 2012, 65 percent of personal income was derived from net earnings and income from transfer payments and from dividends, interest, and rent comprised, respectively, 17 percent and 18 percent of personal income. **Figure 21** displays the derivation of personal income in 2012 for Montana’s four major basins. The Upper Missouri Basin had a similar reliance on non-labor income relative to earnings compared to Montana. For Montana’s major basins in 2012, net earnings comprised the largest portion of personal income in the Yellowstone at 63 percent. Transfer receipts were lowest in the Upper Missouri and Yellowstone Basins with approximately 16 percent of personal income for each basin. The portion of personal income provided by dividends, interest, and rent ranged between 21 percent and 24 percent across the basins. For the Clark Fork Basin, 55 percent of earnings were derived from net earnings, 22 percent were from transfer payments, and 23 percent were from dividends, interest, and rent.



The derivation of personal income for the Clark Fork Basin counties is presented in **Figure 22**. For Silver Bow and Missoula Counties, net earnings comprised more than 60 percent of personal income. The portion of income derived from transfer payments was highest in Sanders, Mineral, and Lincoln Counties. Income from dividends, interest, and rent was between 20 percent and 30 percent in all Basin counties except for Silver Bow County.

Figure 22: Derivation of Personal Income—Clark Fork Basin Counties - 2012

	<u>Net Earnings</u>	<u>Transfer Payments</u>	<u>Dividends, Interest, and Rent</u>
Deer Lodge	52.0%	27.8%	20.2%
Flathead	56.5%	20.0%	23.6%
Granite	45.9%	24.7%	29.5%
Lake	46.2%	29.3%	24.5%
Lincoln	43.1%	34.2%	22.6%
Mineral	44.6%	35.3%	20.1%
Missoula	61.0%	17.1%	21.9%
Powell	51.0%	24.1%	24.9%
Ravalli	47.3%	25.4%	27.3%
Sanders	39.7%	35.9%	24.4%
Silver Bow	67.0%	18.4%	14.7%

Net earnings are comprised of wages and salaries, supplemental contributions by employers for pension and insurance programs, and proprietors' income for owners of businesses and farms. Trends for earnings in the Clark Fork Basin for the period 1990 to 2012—adjusted for inflation—are presented in **Figure 23**. Total earnings for wages and salaries increased by nearly 65 percent to \$5.4 billion and income in the form of supplemental employer contributions increased 80 percent to \$1.5 billion. Non-farm proprietors' income doubled over the period to \$1.4 billion. Farm proprietors' income declined to -\$17 million in 2012, fluctuating between -\$38 million and \$34 million and averaging -\$14 million in real terms since 1990.

Between 1990 and 2011, average real wages and salaries in the Clark Fork Basin rose 10 percent to \$34,935, just below the state average of \$36,652. State-wide, wages and salaries, adjusted for inflation, increased 19 percent over the period. Over the same period, average non-farm proprietors' income in the Basin declined 2 percent to \$22,587, exceeding the state-wide average that also declined by 2 percent to \$21,057.

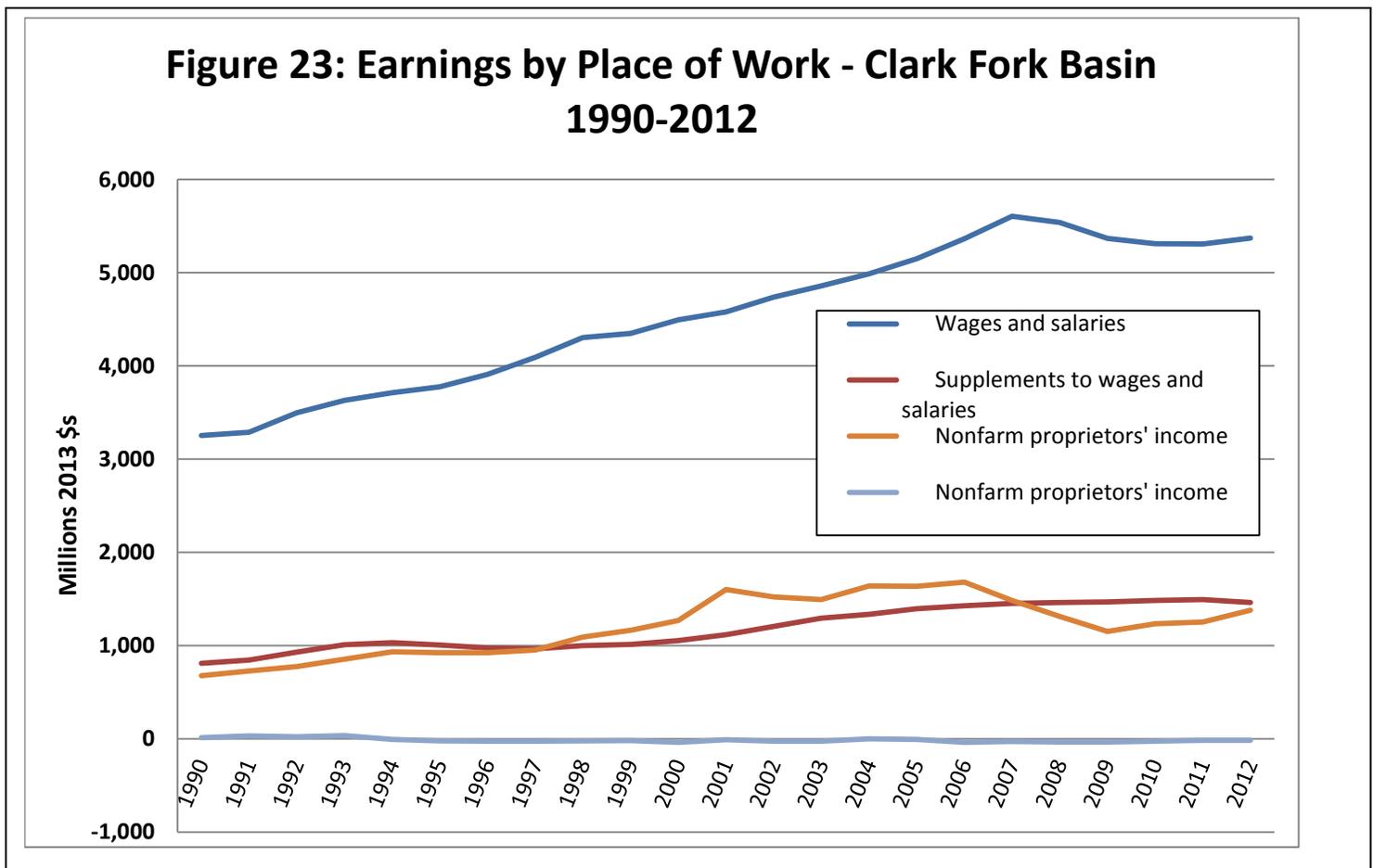


Figure 24 displays wage and salary and employment information for the Clark Fork Basin by three-digit North American Industrial Classification System (NAICS) industrial sub-sector. The data reported are from the U.S. Department of Labor, Bureau of Labor Statistics' Quarterly Census of Employment and Wages for the period of the fourth quarter of 2012 through the third quarter of 2013. The reported employment figures are combined part-time and full-time employment for each sub-sector. Wages and salaries totaling \$4.0 billion were paid to 118,318 employees in the private sector in the Clark Fork Basin during the period. Total wages and salaries were highest in the health care sector in the amount of \$902 million where more than one-sixth of private sector workers were employed. Total wages and salaries were next highest in the retail trade, manufacturing, and professional and technical services sectors. More than ten percent of Basin employees worked in food services and drinking places. Average wages and salaries were highest in the sub-sector related to financial services pertaining to securities, commodity contracts, and investments. Federal, state, and local levels of government in the Basin paid \$1.1 billion to 25,395 employees.

Figure 24 Wages and Salaries and Employment – Clark Fork Basin 2012-2013

	Wages and Salaries (\$ millions)	Employment	Average Wages and Salaries (\$s)
Agriculture, forestry, fishing and hunting			
Crop production	6.479	268	24,175
Animal production and aquaculture	5.494	192	28,615
Forestry and logging	22.743	577	39,416
Agriculture and forestry support activities	18.809	378	49,759
Mining, quarrying, and oil and gas extraction			
Oil and gas extraction	0.914	14	65,278
Mining, except oil and gas	62.167	898	69,229
Support activities for mining	8.132	110	73,927
Utilities	98.378	1,226	80,243
Construction			
Construction of buildings	58.585	1,569	37,339
Heavy and civil engineering construction	68.762	1,296	53,057
Specialty trade contractors	141.556	3,921	36,102

ND: Data not disclosed.

Source: U.S. Department of Labor, Bureau of Labor Statistics; Quarterly Census of Employment and Wages; Fourth Quarter 2012 through Third Quarter 2013; Compiled by: Montana Department of Labor and Industry, Research and Analysis Bureau; Montana Department of Natural Resources and Conservation.

Figure 24, continued
Wages and Salaries and Employment – Clark Fork Basin
2012-2013

	Wages and Salaries		Average
	(\$ millions)	Employment	Wages and Salaries
			(\$)
Manufacturing			
Food manufacturing	15.900	712	22,332
Beverage and tobacco product manufacturing	12.487	439	28,444
Textile product mills	0.422	26	16,233
Apparel manufacturing	0.056	4	14,057
Leather and allied product manufacturing	0.496	23	21,548
Wood product manufacturing	94.626	2,154	43,931
Paper manufacturing	ND	ND	ND
Printing and related support activities	8.263	262	31,537
Petroleum and coal products manufacturing	0.737	16	46,090
Chemical manufacturing	14.051	351	40,031
Plastics and rubber products manufacturing	5.109	127	40,226
Nonmetallic mineral product manufacturing	30.381	494	61,499
Primary metal manufacturing	4.378	127	34,470
Fabricated metal product manufacturing	34.980	962	36,361
Machinery manufacturing	46.450	782	59,399
Computer and electronic product manufacturing	8.769	204	42,985
Electrical equipment and appliance mfg.	1.851	31	59,710
Transportation equipment manufacturing	3.691	98	37,666
Furniture and related product manufacturing	7.441	238	31,264
Miscellaneous manufacturing	22.331	621	35,960
Wholesale trade			
Merchant wholesalers, durable goods	90.699	1,826	49,671
Merchant wholesalers, nondurable goods	57.402	1,468	39,102
Electronic markets and agents and brokers	24.536	328	74,805
Retail trade			
Motor vehicle and parts dealers	104.987	2,713	38,698
Furniture and home furnishings stores	17.671	613	28,827
Electronics and appliance stores	14.021	511	27,438
Building material and garden supply stores	57.453	1,965	29,238
Food and beverage stores	83.486	3,786	22,051
Health and personal care stores	26.378	845	31,216
Gasoline stations	29.139	1,650	17,660
Clothing and clothing accessories stores	14.500	960	15,104
Sporting goods, hobby, book and music stores	20.207	1,158	17,450
General merchandise stores	88.649	3,827	23,164
Miscellaneous store retailers	18.988	1,075	17,663
Nonstore retailers	14.457	441	32,782

Figure 24, continued
Wages and Salaries and Employment – Clark Fork Basin
2012-2013

	Wages and Salaries		Average
	(\$ millions)	Employment	Wages and Salaries
			(\$)
Transportation and warehousing			
Air transportation	5.010	133	37,671
Rail transportation	ND	ND	ND
Truck transportation	60.971	1,547	39,413
Transit and ground passenger transportation	7.161	446	16,057
Pipeline transportation	ND	ND	ND
Scenic and sightseeing transportation	0.570	19	29,975
Support activities for transportation	17.066	429	39,782
Postal service	0.151	9	16,747
Couriers and messengers	19.864	466	42,627
Warehousing and storage	1.489	61	24,417
Information			
Publishing industries, except internet	18.177	512	35,502
Motion picture and sound recording industries	5.676	283	20,056
Broadcasting, except internet	11.640	308	37,792
Telecommunications	46.250	809	57,170
Data processing, hosting and related services	8.347	156	53,507
Other information services	1.826	46	39,706
Finance and insurance			
Credit intermediation and related activities	119.768	2,635	45,453
Securities, commodity contracts, investments	33.808	303	111,579
Insurance carriers and related activities	90.510	1,771	51,107
Real estate and rental and leasing			
Real estate	38.208	1,276	29,944
Rental and leasing services	11.933	496	24,059
Lessors of nonfinancial intangible assets	0.437	12	36,452
Professional and technical services	307.458	5,946	51,708
Management of companies and enterprises	53.511	723	74,013
Administrative and waste services			
Administrative and support services	185.970	7,046	26,394
Waste management and remediation services	24.693	563	43,859
Educational services	34.152	1,393	24,517
Health care and social assistance			
Ambulatory health care services	361.118	7,782	46,404
Hospitals	428.740	7,846	54,644
Nursing and residential care facilities	112.348	4,686	23,975
Social assistance	58.019	3,295	17,608

Figure 24, continued
Wages and Salaries and Employment – Clark Fork Basin
2012-2013

	Wages and Salaries (\$ millions)	Employment	Average Wages and Salaries (\$s)
Arts, entertainment, and recreation			
Performing arts and spectator sports	11.175	431	25,927
Museums, historical sites, zoos, and parks	1.338	91	14,705
Amusements, gambling, and recreation	57.389	3,672	15,629
Accommodation and food services			
Accommodation	74.580	3,928	18,987
Food services and drinking places	168.137	12,391	13,569
Other services, except public administration			
Repair and maintenance	45.569	1,496	30,461
Personal and laundry services	16.947	868	19,524
Membership associations and organizations	57.583	2,852	20,190
Private households	5.606	233	24,062
Unclassified	0.140	9	15,506
Private	3,973.608	118,318	33,584
Government			
Federal	243.762	3,763	64,779
State	307.995	7,356	41,870
Local	528.716	14,276	37,035

Summary data about the labor force in the Clark Fork Basin are presented in **Figure 25**. As of March 2014, one-third of the state’s labor force was located in the Clark Fork Basin and over one-third of the Basin’s labor force was located in Missoula County. Flathead and Ravalli Counties contained another third of the Basin’s labor force. Forty-three percent of the state’s unemployed persons resided in the Basin resulting in an unemployment rate in the Basin of 7.6 percent. Lincoln and Sanders Counties ranked first and second among Montana counties with unemployment rates of 16.1 percent and 14.8 percent, respectively. Nine of the twelve counties with the highest unemployment rates were in the Clark Fork Basin. Missoula County had the lowest unemployment rate among the Basin’s counties. The unemployment rate for the entire state was 6.0 percent.

**Figure 25: Labor Force Data – Clark Fork Basin Counties
February 2013 – March 2014**

	<u>Labor Force</u>	<u>Employed</u>	<u>Unemployed</u>	<u>Unemployment Rate (%)</u>
Deer Lodge	4,100	3,788	312	7.6
Flathead	44,153	40,530	3,623	8.2
Granite	1,345	1,209	136	10.1
Lake	11,277	10,327	950	8.4
Lincoln	7,321	6,143	1,178	16.1
Mineral	1,900	1,700	200	10.5
Missoula	61,433	57,924	3,509	5.7
Powell	2,759	2,516	243	8.8
Ravalli	18,448	16,962	1,486	8.1
Sanders	4,123	3,513	610	14.8
Silver Bow	18,203	17,121	1,082	5.9
Total	175,062	161,733	13,329	7.6

Source: U.S. Department of Labor, Bureau of Labor Statistics; Local Area Unemployment Statistics (LAUS)

In 2012, 153,105 Montanans—15.6 percent—were reported to be living in poverty, just below the U.S. rate of 15.9 percent. Thirty-nine percent (59,765) resided in the Clark Fork Basin. Sanders and Lake Counties ranked fourth and fifth among Montana counties with the highest poverty rates. Glacier County had the state’s highest rate with 30.4 percent and Fallon County reported the lowest poverty rate with 8.6 percent. The poverty rate for the Clark Fork Basin was estimated to be 15.2 percent in 2012. Poverty rates for the Basin over recent decades are provided in **Figure 26**.

Figure 26: Poverty Rates (Percent) – Clark Fork Basin Counties

	<u>1989</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2012</u>
Deer Lodge	16.7	19.8	14.6	16.1	20.3
Flathead	14.0	14.4	11.6	12.5	14.3
Granite	19.1	19.4	15.9	14.7	16.1
Lake	22.9	22.8	18.2	17.4	23.9
Lincoln	15.0	18.3	17.0	19.1	20.7
Mineral	14.5	20.0	17.7	17.5	17.8
Missoula	14.7	16.3	13.0	15.2	15.1
Powell	16.4	19.6	15.6	15.8	21.1
Ravalli	17.1	16.0	13.5	14.4	16.3
Sanders	17.1	20.6	18.2	18.2	24.3
Silver Bow	14.9	16.0	14.4	15.3	18.7
Clark Fork Basin	17.0	15.0	13.9	16.8	15.7

Source: U.S. Department of Commerce, Census Bureau; Small Area Income and Poverty Estimates (SAIPE).

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