

**MUNICIPAL AND INDUSTRIAL
WATER SUPPLY AND USES
in the
WEBER RIVER BASIN**

(Data Collected for Calendar Year 2003)

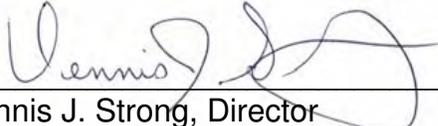
Prepared by

**Utah Department of Natural Resources
Division of Water Resources**

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Dennis J. Strong, Director

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EXECUTIVE SUMMARY

This document describes the municipal and industrial (M&I) water supplies and uses for the Weber River Basin with data collected for the calendar year of 2003. All resultant information presented represents the water supply and demand conditions of the calendar year 2003 only and may not be representative of the conditions of a “normal” year. Total M&I water supplies and uses for the basin are computed by tabulating results of water use studies in the four counties in which the basin is contained. These counties are Davis, Morgan, Weber, and portions of Summit County. The county data was collected through meetings with and/or surveys of each public community and non-community water system.

The basin’s maximum annual potable water supply under present conditions for Public Community Water Systems is 222,890 acre-feet. Springs account for 7 percent of this total, wells 62 percent, and surface sources 31 percent. **Table I** presents this data, broken down into further detail.

TABLE I
WEBER RIVER BASIN
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

County	Springs	Wells	Surface	Total
Davis	460	72,709	30,590	103,759
Morgan	1,411	1,167	0	2,578
Summit	5,119	22,987	2,690	30,796
Weber	8,333	42,024	35,400	85,757
Basin Totals	15,323	138,887	68,680	222,890

Note: All values represent system source capacities limited by water rights, hydrologic constraints, and/or physical system constraints.

The basin's annual reliable potable water supply for the public community water systems in the basin is 145,902 acre-feet. The breakdown of this supply is presented in the following **Table II**.

TABLE II
WEBER RIVER BASIN
Reliable Potable Water Supplies for Public Community Systems
(Acre-feet/year)

County	Springs	Wells	Surface	Total
Davis	230	36,962	29,470	66,662
Morgan	706	584	0	1,290
Summit	3,960	13,309	2,690	19,959
Weber	5,019	27,386	25,586	57,991
Basin Totals	9,915	78,241	57,746	145,902

Total M&I water use can be divided into two categories: potable (culinary) and non-potable (secondary). Potable water is delivered by public community, public non-community, self-supplied industrial, and private domestic water systems. Non-potable water uses include residential, commercial and institutional secondary water (usually delivered by separate irrigation companies), as well as secondary water used by self-supplied industries. **Table III**, on the following page, indicates the total potable and non-potable M&I water use for all systems in the Weber River Basin for the year 2003.

The table indicates that the total potable M&I water use in 2003 was 95,601 acre-feet. Total non-potable water use in the basin for 2003 was 78,562 acre-feet. Therefore, the total M&I water use for the Weber River Basin in 2003 was 174,163 acre-feet. **Table III** also indicates that public community water systems delivered the

TABLE III
WEBER RIVER BASIN
Total M&I Water Use for all System Categories
(Acre-Feet/Year)

Source	Davis County	Morgan County	Summit County	Weber County	Total
Potable Use					
Public Community Systems	40,747.5	1,276.8	9,877.7	38,494.2	90,396.2
Public Non-Community Systems	1,820.1	54.7	60.4	177.3	2,112.5
Self-Supplied Industries	1,535.2	40.0	1.0	586.1	2,162.3
Private Domestic	80.0	400.0	150.0	300.0	930.0
Total Potable	44,182.8	1,771.5	10,089.1	39,557.6	95,601.0
Secondary Use					
Secondary Irrigation Companies	38,505.0	500.0	1,728.0	30,355.0	71,088.0
Non-Community Systems	186.9	380.0	150.0	217.0	933.9
Self-Supplied Industries	0.0	240.0	0.0	6,300.0	6,540.0
Private Domestic	0.0	0.0	0.0	0.0	0.0
Total Secondary	38,691.9	1,120.0	1,878.0	36,872.0	78,561.9
TOTAL WATER USE	82,874.7	2,891.5	11,967.1	76,429.6	174,162.9

majority of the potable water in the basin. For this reason, as well as additional reference, the following **Table IV** shows a further breakdown of the water use data for potable and non-potable categories of water delivered by public community water systems within the basin. Of the total water use, 22% was residential indoor, 51% residential outdoor, 10% commercial, 13% institutional, and 4% light industrial.

TABLE IV
WEBER RIVER BASIN
Categorical Water Use for Public Community Systems
(Acre-Feet/Year)

	Davis County	Morgan County	Summit County	Weber County	Total
Potable Use					
Residential Indoor	17,061.9	405.7	2,880.6	15,120.1	35,468.3
Residential Outdoor	8,137.8	603.4	5,084.7	13,161.4	26,987.3
Commercial	6,403.4	53.2	1,514.7	2,493.1	10,464.4
Institutional	5,598.8	200.1	377.1	5,521.5	11,697.5
Industrial	3,545.6	14.4	20.6	2,198.0	5,778.6
Total Potable	40,747.5	1,276.8	9,877.7	38,494.1	90,396.1
Secondary Use					
Residential	30,405.0	315.0	702.0	23,945.0	55,367.0
Commercial	2,220.0	150.0	845.0	2,745.0	5,960.0
Institutional	5,830.0	35.0	176.0	3,465.0	9,506.0
Industrial	50.0	0.0	5.0	200.0	255.0
Total Secondary	38,505.0	500.0	1,728.0	30,355.0	71,088.0
TOTAL WATER USE	79,252.5	1,776.8	11,605.7	68,849.1	161,484.1

Out of a total 2003 basin population of 509,080, the population served by public community water systems in the basin was approximately 501,570. For the public community systems only, the calculated residential potable per capita water use is then 111 gallons per capita per day (gpcd). Residential non-potable water use is 99 gpcd, resulting in total residential water use of 210 gpcd. Adding commercial, institutional and industrial uses, the public community systems water use is then 161 gpcd for potable and 126 gpcd for non-potable uses, for a total of 287 gpcd. These values are shown in the following **Table V**. By comparison, the 2000 statewide average total per capita water use for public community water systems was 293 gpcd.

TABLE V
WEBER RIVER BASIN
Average Per Capita Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.125	111
Residential Potable Plus Secondary Use	0.235	210
Total Potable Use	0.180	161
Total Potable Plus Secondary Use	0.322	287

Note: Total Potable categories include residential, commercial, institutional and industrial uses.

Table VI includes the M&I water budget for the basin. A water budget indicates the amount of water for use within the system and the amount of water depleted from the system due to use. **Appendix B** contains a table that indicates more specific details about the diversions and depletions from each individual community system within the basin.

TABLE VI
WEBER RIVER BASIN
M&I Water Budget
(Acre-Feet/Year)

COUNTY	Diversions			Depletions		
	Indoor Use	Outdoor Use	Total	Indoor Use	Outdoor Use	Total
Davis	30,133.5	52,741.2	82,874.7	7,515.5	35,076.0	42,591.5
Morgan	945.0	1,946.4	2,891.4	347.4	1,297.7	1,645.1
Summit	4,258.9	7,708.2	11,967.1	266.2	5,138.8	5,405.0
Weber	27,472.8	48,956.8	76,429.6	9,826.2	32,637.8	42,464.0
Basin Totals	62,810.2	111,352.6	174,162.8	17,955.3	74,150.3	92,105.6

INTRODUCTION

Authority

The Utah Division of Water Resources (DWR_e) has the overall responsibility for completing studies, investigations, and plans to assist the responsible development and utilization of the water resources of the state of Utah. The State Water Plan, prepared and distributed in early 1990, provided the foundation and overall direction to establish and implement the state policy framework of water management. As part of the state water planning process, detailed plans are prepared for the 11 hydrologic basins in the state. The Weber River Basin is one of these 11 basins. A location map of the Weber River Basin is shown on the following page in **Figure 1**.

Each basin water plan identifies potential conservation and development projects and describes alternatives to efficiently satisfy the water needs of that basin. As part of this effort, background data reports are completed for each river basin. These include a Water-Related Land Use Report and a Municipal & Industrial (M&I) Water Supply & Use Report.

Scope

As stated earlier, the subject of this report is a determination of the present M&I water supplies and uses within the Weber River Basin. The data presented in all the referenced reports may be used in the State Water Plan for the Weber River Basin, as well as other division reports and studies. Information considered for this report also includes related investigations recently completed by the DWR_e and the Utah Division of Water Rights (DWR_i).

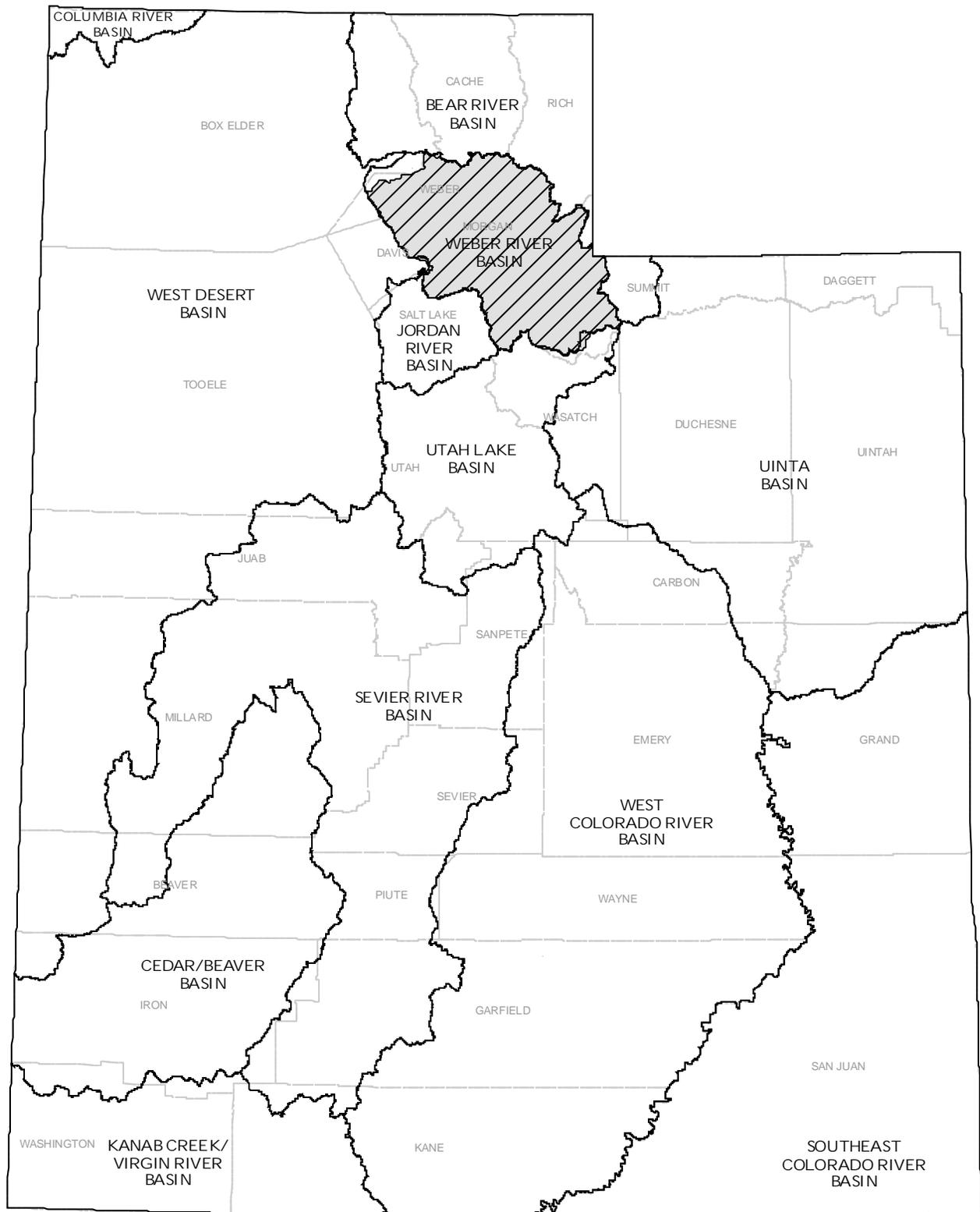


Figure 1. Location of the Weber River Basin

Data Collection

This study was begun in August 2006 by DWRe staff. The 2005 *Municipal and Industrial Water Use Forms*, distributed by the DWRi in cooperation with the DWRe and the Utah Division of Drinking Water (DDW), were used as a basis for the study. In all counties, the data collection process is as described in the following section, *Water Supply and Use Methodology*. Water rights discussions and information presented herein were prepared based, in part, on information provided by John Mann, area engineer of the State Engineer's Office, who is responsible for the oversight of the water rights in the Weber River Basin.

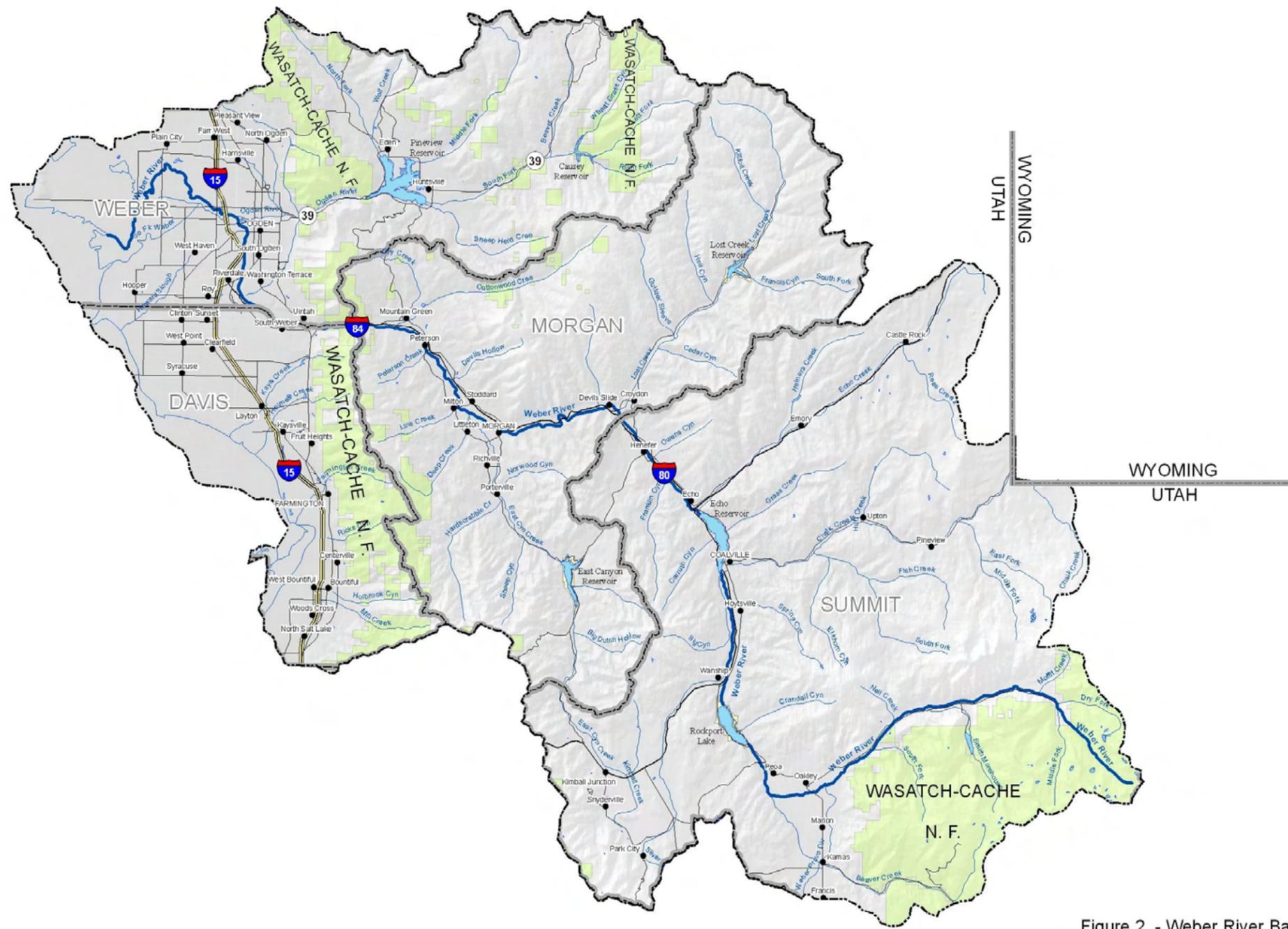
General Description of the Basin

The Weber River Basin contains a total of approximately 2400 square miles in north-central Utah. Bordered by the Great Salt Lake on the west, the land within the basin rises from this low elevation of (on the average) 4200 feet above sea level to approximately 11,900 feet at its western edge in the Uinta Mountains. From the shore of the Great Salt Lake, the basin encompasses the remaining area of Weber and Davis Counties, all of Morgan County, and the western portion of Summit County. See **Figure 2** on page 5 for a detailed drainage map of the basin.

The Weber River itself originates near the west end of the Uinta Mountains at an elevation of about 11,740 feet near Reids Peak and flows northwesterly for approximately 130 miles before it terminates into the Great Salt Lake. About one-half of the length of the river runs through Summit County, 25 miles in Morgan County, and 30 miles in Weber County. Major tributaries of the river that drain the basin include Beaver, Chalk, Echo, East Canyon, Lost, and Silver Creeks, as well as the Ogden River system with its tributaries of North Fork, Middle Fork, South Fork, and Wheeler Creeks.

With the completion of the U.S. Bureau of Reclamation's Weber Basin Project of the 1950's and the 1960's, the Weber River Basin is heavily regulated by man-made reservoirs, including: Smith-Morehouse, Rockport Lake (formerly Wanship Reservoir), Echo, Lost Creek, Causey, Pineview, and East Canyon. Rockport Lake, along with Lost Creek, East Canyon, and Echo Reservoirs regulate the flow of the Weber River before it emerges from its mountain watershed. Causey and Pineview Reservoirs regulate the Ogden River before it emerges from the mountains to join the Weber River as its major tributary.

Under an emergency loan project, the Weber Basin Water Conservancy District constructed a 60-inch pipeline that conveys water pumped from an equalizing reservoir near the Layton Canal into the Davis-Weber Canal, allowing the district to exchange water from Willard Reservoir during periods of drought. There are also nine deep wells within the project that provide emergency standby service for supplemental water during periods of drought and high and/or peak M&I water demand periods.



Basin Location

Figure 2. - Weber River Basin Drainage Map



Within the Weber River Basin, there are 75 public community water systems serving a total population of approximately 501,570 people (most all of the 509,080 total basin population). See **Figure 3** on page 9 for the location of these systems. The basin also has over sixty public non-community water systems. These systems serve Federal Forest Service campgrounds, State Park facilities, isolated commercial and institutional establishments, summer home developments, roadside rest areas and parks. Among the larger non-community systems is the Snow Basin ski resort that includes snowmaking capabilities. The basin also has nine self-supplied industries. Among these industries, an additional 125,000 acre-feet of saline water from the Great Salt Lake is utilized. None of this saline water use is included in any of the water use figures in this report. As can be realized, inclusion of this amount of water would disproportionately skew some water use figures.

Demographically, the basin's population is becoming increasingly more urbanized. Internal growth, migration of the Wasatch Front population, expanding recreational opportunities and areas (particularly ski resorts) are some of the major driving factors of this growth. The basin currently has six ski resorts, including the world-renowned ski areas of Park City, The Canyons, Deer Valley, and Snow Basin. This growth of the ski industry is largely responsible for making Summit County the fastest growing county in Utah from 1990 to the year 2000. Additionally, with large employers, such as Hill Air Force Base, and a broadening economic base throughout the basin, this population trend is likely to continue well into the future.

The Governor's Office of Planning and Budget projects that the basin's population will nearly double from the current population to over 900,000 people by the year 2050. Accordingly, M&I water use is steadily increasing within the basin. In order to facilitate such growth, there will need to be more efficient use of current water supplies, a reduction in per capita use and additional water development.

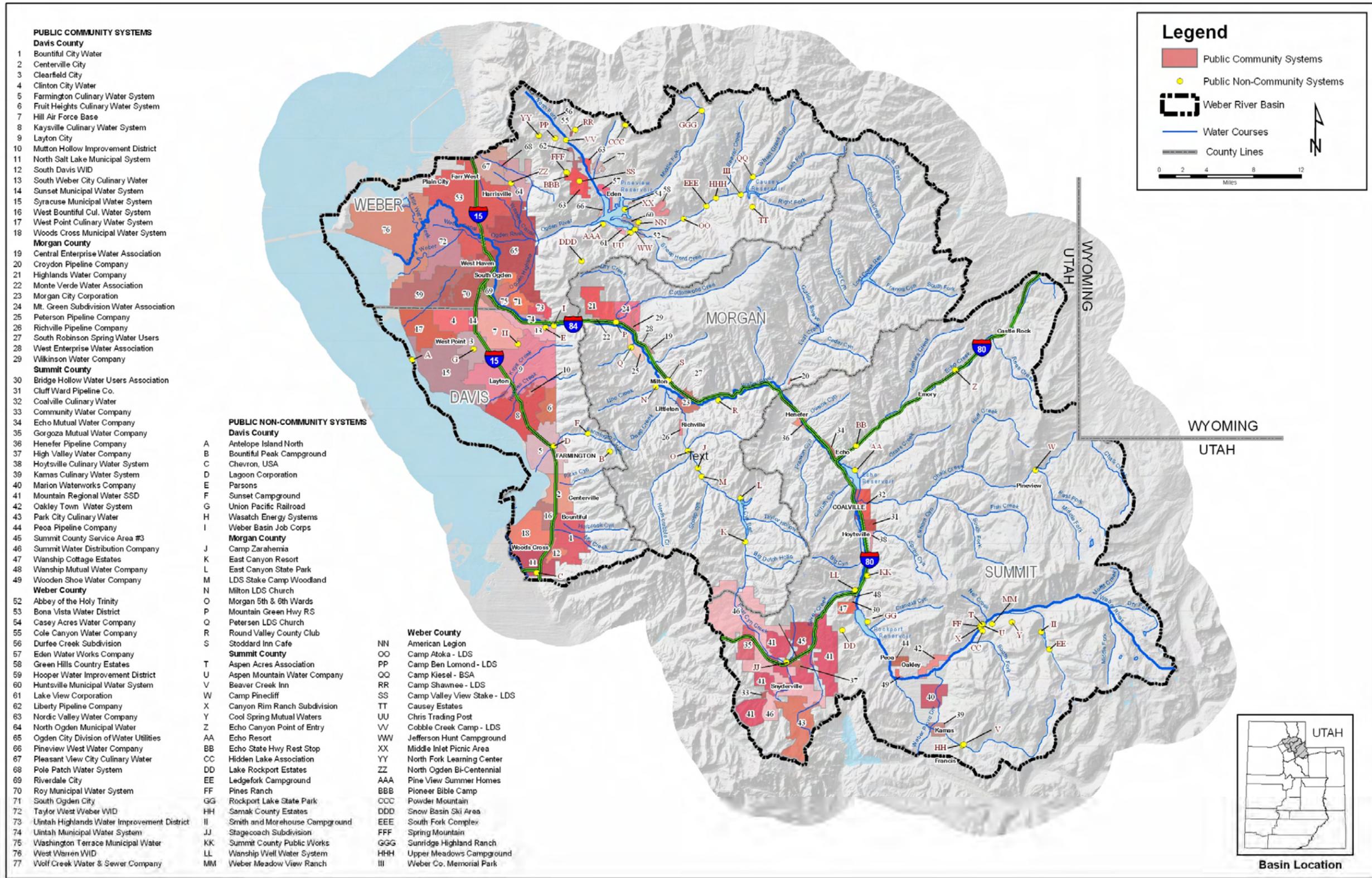


Figure 3. Location of Public Water Systems

WATER SUPPLY AND USE METHODOLOGY

Background

Over the past 45 years the Utah Division of Water Resources (DWRe) has employed various procedures to obtain municipal and industrial (M&I) water use data. In recent years, these procedures have become increasingly more comprehensive. When the division began water planning in the 1960's, available data consisted mainly of supplies and uses for the entire state. At that time, agriculture uses far exceeded M&I uses in Utah. M&I water use was generally calculated by using available or estimated per capita rates and multiplied by the census population data.

By the early 1980's, M&I diversions made up a larger percent of all statewide water uses and the entire water community began to increase their focus on M&I water supplies and uses. The Utah Division of Water Rights (DWRi) launched a program to collect yearly, statewide M&I data from each public community water system. The procedure involved mailing a survey designed to query each of the major public water suppliers about their sources of water supply. Additionally, the United States Geological Survey (USGS) began M&I water use studies. The division relied on both data sources in its planning efforts by the late 1980's.

With the preparation of the State Water Plan Basin reports, and the increasing focus on water conservation, the DWRe saw the need to verify and improve the quality and quantity of the available data. The first method used included assisting the DWRi in the improvement of their M&I data collection program. Secondly, the DWRe began verifying the accuracy of the data through yearly field surveys described in the following four sections.

Present Methodology for Community Water Systems

Each year, the DWRe targets several hydrologic basins for M&I water supply and use analysis. The most recent water use information supplied by the DWRe is the basis used to begin the study. Prior to 2003, each water supplier, using a standard form, submitted this information. An example of the water use data form for South Ogden City is found in **Appendix A**. Since 2003, the program has been updated, allowing for the water suppliers to electronically submit their data.

The DWRe staff contact the manager or operator of each community water system, as defined by the Utah Division of Drinking Water (DDW) to schedule a data collection and analysis meeting. These meetings are necessary because data often is not reported (either on the water use forms or electronically) in the detail required for a complete M&I water use study. During these meetings, staff clarifies and collects additional data as needed. Total water supply and usage of the water systems are calculated based on information gathered during these meetings. When data is not available, it is necessary to estimate a part or all of the system use.

A secondary objective of these meetings is to instruct the operator or manager on how to most accurately and effectively complete the water use data form and/or submit their information electronically. This methodology has been used since 1992.

Water Supply

Two factors define the potable water supply: maximum water supply available under present conditions and reliable water supply. The maximum water supply available under present conditions is defined as the water resource that is presently developed. It is limited by a mechanical constraint (such as pump capacity or pipe size), a hydrologic constraint (such as reliable stream flow or groundwater safe yield) or a legal constraint (such as a water right or contract). The lesser amount of water

supply, due to these three constraints, is considered to be the maximum water supply available under present conditions used in this analysis. The determination of well pump capacities, average annual spring flow estimates, treatment plant capacities, and water right information aid in the calculation of this value. It should be noted that, due to the complexity of water rights, contracts, exchanges, etc., a detailed search of water right limitations associated with each entity is not within the scope of this study.

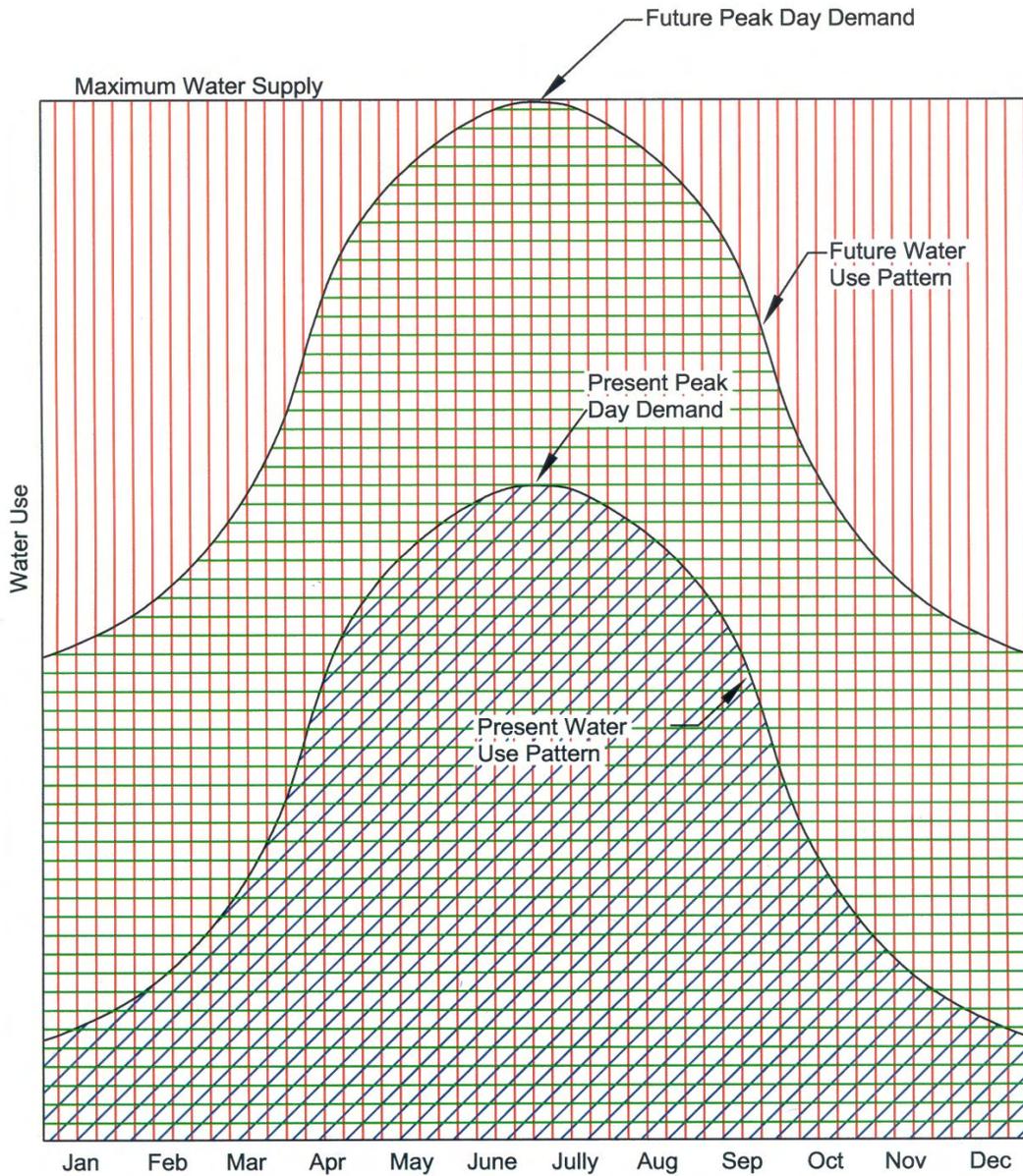
The reliable potable water supply is defined as the capacity to meet peak day demands, expressed as an annual volume. It is valuable in determining future water supply capacities of the particular community water system sources (wells, springs, etc.). The reliable potable water supply is calculated by adding together the maximum water supply capacity of surface sources, one-half of the maximum yield of wells or their pump capacities (unless otherwise indicated by the system manager), and a percentage of the average annual flow of spring sources. The percentage of the spring source flows ranges between 50% and 100%. The determination of the percentage is based on information obtained concerning the yearly fluctuations of the springs.

Figure 4, on page 15, graphically presents the relationship between the maximum potable water supply and the reliable potable water supply of a system. By quantifying the maximum and the reliable potable water supply of a system, the population that a system can potentially support can be determined. The current total yearly water use is the volume under the lower curve (*Present Water Use Pattern*). The future total yearly water use is the volume under the upper curve (*Future Water Use Pattern*). This total is equivalent to the reliable potable water supply.

The maximum water supply under present conditions is the volume under the upper line (Maximum Water Supply) in **Figure 4**. Because this amount is a yearly volume based upon a maximum daily flow rate (limited by the water right or system capacity), the line passes through the peak day demand point on the future water use curve (Future Peak Day Demand). Due to this, and the fact that most culinary water

system storage tanks are designed to store only about one day's water demand, not all of the total maximum water supply is available to meet future water needs. Therefore, the reliable water supply, rather than the maximum water supply, is the limiting factor in determining when future water demand equals current supplies.

Reliable secondary water supply is defined to be equal to the secondary use determined for each community system. The methodology for calculating secondary use is explained on page 17 under *Residential Use*.



-  Present Yearly Water Use (Volume under curve)
-  Present Reliable Water Supply/Future Water Use (Volume under Curve)
 When this volume is divided by annual per capita water use, this yields the population that can be reliably served.
-  Maximum Water Supply Available Under Present Conditions (Volume under line)

Figure 4. Water Supply and Use Hydrograph

Water Use

Present water use, as defined herein, is the developed water supply that is actually diverted into the distribution system from surface or subsurface sources. Water use is divided into four categories: residential, commercial, institutional and industrial. For comparative purposes, the DWRe chose these categories to correlate with the USGS categories of domestic, commercial, industrial, and mining.

The DWRe's residential category is equivalent to the USGS domestic category and includes water used for both indoor and outdoor purposes at residences. The USGS commercial category is equivalent to the DWRe's combined commercial and institutional categories. The DWRe's commercial category includes water use for retail establishments and businesses. The DWRe's institutional category includes water use for government facilities, military facilities, schools, hospitals, churches, parks, cemeteries, golf courses, etc. The DWRe's industrial category is equivalent to the combined USGS categories of industrial and mining that includes a wide variety of water uses associated with businesses that produce a specific product (including stockwatering).

Residential Use

The DWRe staff collects data about the number of residential connections and the amount of water used by those connections from a water system representative. Water use in this category is divided into three subcategories: culinary-outdoor, culinary-indoor, and secondary-outdoor. While most systems will meter the total residential water use, these subcategories are rarely metered separately. Therefore, the DWRe usually estimates these subcategory totals.

Typically, culinary indoor use will be estimated first. One method to estimate the indoor use is to review residential meter reading totals for the system from the winter months, if available. It can be assumed that the water used in winter months is for indoor use only, since outdoor watering does not typically occur during the winter months. This estimated indoor water use is then used to determine the total yearly indoor use.

When the above method does not yield a reasonable value for indoor use, the indoor use per capita water use for a system can be estimated by using an equation that was developed in a detailed residential study, "Identifying Residential Water Use", completed by the DWRe in 2001. The mathematical equation that was developed for per capita indoor water is as follows:

$$\text{GPCD}_{\text{Indoor}} = 90.3 / P_{\text{PH}} + 42.3$$

Where:

$\text{GPCD}_{\text{Indoor}}$ = Gallons per Capita Day (per capita indoor water use)

P_{PH} = Persons per Household (US Census Bureau)

The total yearly indoor water use is then calculated for the system by multiplying the result of the above equation by the current population. Outdoor culinary water use can then be estimated by subtracting the total yearly indoor water use from the given total residential culinary water use.

Because very few entities meter secondary outdoor water use, the DWRe staff estimates the outdoor secondary water use by using the average lot size, percent irrigated, percent of residences that are supplied by separate secondary (pressurized and ditch) irrigation systems, water right-duty rates (volume of water required for turf growth) in the area, and other related information for each system. In determining residential secondary use, care is taken to not include irrigation water use for small pastures or farm fields that can often be found adjacent to residences, particularly in rural communities.

Commercial Use

For most systems, the system operator can separate metered commercial water use data from the total water use. In cases where this data is not available or is extremely difficult to obtain, the DWRe staff attempts to estimate commercial water use by inventorying commercial businesses in the area and using published commercial water use estimates. The DDW and the Utah State Water Lab, among others, publish these estimates. In some rural communities where there are a relatively small number of commercial connections, the businesses are visited individually by DWRe staff and asked about their water use.

Some commercial facilities use secondary water to irrigate outside landscapes. This is especially typical for commercial golf courses. As is this cases many times, secondary water is not metered. The DWRe staff estimates this use by multiplying the size of the irrigated area by a water right-duty rate or the evapotranspiration rate (ET). The ET indicates the amount of water, in inches, necessary for turf growth.

Institutional Use

Institutional water use is water used for city, county, state and federal government facilities, parks, municipal golf courses, schools, hospitals, churches, military facilities, as well as fire hydrant testing and other municipal losses in the water system. Because this water use is often not metered, the process to acquire this data is difficult. Again, the system operator is asked to provide information about city facilities such as the number and size (irrigated acreage) of parks, schools, churches, and municipal golf courses. Water right-duty rates (and/or the ET) are used to calculate the amount of water is used to irrigate these areas. Estimates of leakage and water use for testing of water system facilities and are also included in this category.

Industrial Use

Industrial water use is defined as water used in the production of a product. Therefore, such commercial establishments as dairies, mink farms, and greenhouses, as well as stockwatering, are included in this category, provided a community water system serves them. Industrial water use within community water systems is acquired with the same process used to obtain commercial water use data discussed earlier.

Present Methodology for Non-Community Water Systems

DWRe staff attempts to contact each non-community system and/or make a personal visit to these systems. Non-community systems rarely meter their water use, so DWRe staff estimate their annual water use. Questions are asked to determine the type of facility, population served, water source information, irrigation of outside areas, etc. This data, along with information found in water-related publications, is used to determine water use. The maximum and reliable water supplies for these systems are often not available and are not in the scope of this study.

Present Methodology for Self-Supplied Industrial Water Systems

Although self-supplied industries are included in the Non-Community Water Systems category as defined by the DDW, the DWRe has separated them into their own category due to their importance. The category is equivalent to the DDW's Non-Community, Non-Transient category.

Water use is acquired for self-supplied industries by using data from the DWRI's Industrial Water Use Form and/or electronically submitted data. The DWRI collects annual water use data from most of the major self-supplied industrial water users in the state. This data is confidential. Therefore, the data presented in this M&I study is only

given as county totals. As with other non-community systems, the maximum and reliable water supplies are often not available and are not in the scope of this study.

Present Methodology for Private Domestic Water Systems

Private domestic systems are residences that are not connected to any public community or non-community water system. They are usually supplied by individual wells. To determine the water use data for this category, the population of those served by private domestic systems is estimated. This population is estimated by subtracting the population served by community water systems from the county population data acquired from the Governor's Office of Planning and Budget (GOPB). The remainder is assumed to be the population that is served by private domestic systems. The per capita water use rate for this category is assumed to be the same as the per capita water use rate for the public community system residential category for that county. To determine the total water use by private domestic systems, the estimated population is then multiplied by this rate. Again, the maximum and reliable water supplies for private wells are not in the scope of this study.

DEFINITIONS OF WATER TERMS

Water Supply Terms

Water is supplied by a variety of systems for many users. The general term supply is defined as the amount of water available. Municipalities own most of the individual water supply systems. However, in some cases the owner/operator is a private company or a state or federal agency. Thus, a "public" water supply may be either publicly or privately owned. Also, systems may supply treated or untreated water. Following are definitions of some terms used in this study:

Maximum Potable Water Supply - The annual volume of potable (culinary) water which is the lesser of the hydrologic capacity of the water source, the physical capacity of the water system, or the amount allowed by the collective water rights.

Reliable Potable Water Supply - The annual quantity of the maximum water supply that is available to meet peak demands. This is generally calculated as 100% of the maximum supply from surface water sources, 50% of the maximum yield of wells, and between 50% and 100% of the average annual spring flows. When this number is divided by the average per capita usage, the resulting number represents the theoretical maximum population that the water source can serve.

Municipal and Industrial (M&I) Water Supply - Includes all water (potable and non-potable) supplied for residential, commercial, institutional, light industry, and self-supplied industries. This supply is delivered by public community systems, public non-community (transient and non-transient) systems, self-supplied industrial systems, unregulated Indian water systems and private wells.

Potable Water Supply – Includes water meeting all applicable safe drinking water requirements for residential, commercial, institutional and industrial uses. It is sometimes referred to as culinary, or municipal, water supply.

Public Community Water Supply - Includes potable and non-potable water supplied by either privately or publicly owned community systems which serve at least 15 service connections or 25 individuals year round. Water from public community supplies may be used for both indoor and outdoor uses for residential, commercial, institutional, and industrial purposes.

Public Non-Community Water Supply - Includes potable and non-potable water supplied by either privately or publicly owned systems of two types: transient and non-transient. Transient systems are systems that do not serve 25 of the same non-resident persons per day for more than six months per year. Examples include campgrounds, RV parks, restaurants, convenience stores, etc. Non-transient systems are systems that regularly serve 25 of the same non-resident persons per day for more than six months per year. Examples include churches, schools and industries. This report lists the industrial non-transient systems as self-supplied industries.

Secondary Water Supply – Includes water not meeting safe drinking water requirements. Sometimes referred to as non-potable (non-culinary) water supply. This water is usually delivered by pressurized or open ditch water supply systems for irrigation of privately and publicly owned landscapes, gardens, parks, cemeteries, golf courses and other open areas. These systems, sometimes called "dual" water systems, are installed to provide an alternative to irrigating with culinary water for these outdoor areas. Irrigation companies often provide this water. However, some public community water systems may deliver this water as well. Self-supplied industries may also use secondary water for industrial processes.

Self-Supplied Industrial Supply - Includes potable and non-potable water supplied by individual privately owned industries (usually from their own wells or springs). This category is the equivalent of the Utah Division of Drinking Water's (DDW) Non-Community, Non-Transient systems category.

Water Use Terms

Water is used in a variety of ways and for many purposes. It is often said that water is "used" when it is diverted, demanded, withdrawn, depleted or consumed. But it is also "used" in place for such things as fish and wildlife habitat, recreation and hydropower production. **Water use in this report is defined as “diverted” water.** However, a table that includes the basin's municipal and industrial water depletions is provided in **Appendix B**.

In most of the previous water supply terms the word “use” can be inserted where the word “supply” is written to define the current demand associated with those definitions. Some additional water use terms are as follows:

Commercial Use - Use normally associated with small business operations that may include drinking water, food preparation, personal sanitation, facility cleaning and maintenance and irrigation of facility landscapes. Examples include retail businesses, restaurants and hotels.

Industrial Use - Use associated with the manufacturing or production of products. The volume of water used by industrial businesses can be considerably greater than water used by commercial businesses. Examples include manufacturing plants, oil and gas producers, mining companies, mink farms and dairies.

Institutional Use - Use normally associated with general operation of various public agencies and institutions (i.e. schools, municipal buildings, churches) including drinking water, personal sanitation, facility cleaning and maintenance and irrigation of parks, cemeteries, playgrounds, recreational areas, golf courses, and other facilities. The amount of water used by cities for outside irrigation of public areas typically is not metered.

Municipal and Industrial (M&I) Use - Use includes all residential, commercial, institutional, and industrial uses. It includes total uses (potable and non-potable) supplied by public water systems (community and non-community), self-supplied industries, private domestic systems, and secondary irrigation companies.

Private Domestic Use – Use includes water from private wells or springs for use in individual homes, usually in rural areas not accessible to public community water systems.

Residential Use - Use associated with residential cooking, drinking water, washing clothes, miscellaneous cleaning, personal grooming and sanitation, irrigation of lawns, gardens and landscapes, and washing automobiles, driveways and other outside residential facilities. Examples include single-family homes, apartments, duplexes and condominiums.

Other Water Terms

Consumption - Water evaporated, transpired or irreversibly bound in either a physical, chemical or biological process. Consumed water results in a loss of the original water supplied.

Consumptive Use - Losses of water brought about by human endeavors when used for residential, commercial, institutional, industrial, agricultural, power generation, and recreation. Naturally occurring vegetation and fish and wildlife also consumptively use water.

Depletion - Water consumed and made unavailable for return to a given designated area, river system or basin. It is intended to represent the net loss to a system. The terms consumption and depletion are often used interchangeably but are not the same. For example, water exported from a basin is depletion from the basin system but is not consumed in the basin. The exported water is available for use (consumption) in another basin or system. Water diverted to irrigate crops in a given system, but not returned for later use, is depletion. Precipitation that falls on irrigated crops is not considered a part of the supply like surface water and groundwater diversions. For this reason, precipitation falling on and consumed by irrigated crops is not considered as being depletion from the system.

Diversion - Water diverted from supply sources such as streams, lakes, reservoirs or groundwater for a variety of purposes, including cropland irrigation, as well as residential, commercial, institutional and industrial uses.

Withdrawal - Water withdrawn from supply sources such as lakes, streams, reservoirs or groundwater. This term is normally used in association with groundwater withdrawal. The terms *diversion* and *withdrawal* are often used interchangeably. **Water use as presented in this report deals with diversions.**

WATER RIGHTS IN THE WEBER RIVER BASIN

In general, all surface waters in the basin have been fully appropriated. The 1937 Weber River Decree and the 1948 Ogden River Decree, for water rights prior to those dates, adjudicated the majority of the basin. No updates of those decrees or the inclusion of groundwater have yet been ordered.

With the exception of the Snyderville/Park City area, which is closed to all new appropriations of both surface and ground water, there is a limited amount of groundwater resource available. Applications for the appropriation of one acre-foot per year or less will generally be considered, particularly if there is no public water supply available. Any applications for larger amounts of water will be extensively reviewed on an individual basis.

Although a detailed analysis of water rights is not within the scope of this report, brief overview statements of the water rights status for each sub-area of the basin are listed below. Each statement is intended to only generally explain water right regulations in the Weber River Basin pertaining to municipal and industrial (M&I) uses. For more detailed and current water right regulations in the area, contact the Utah Division of Water Rights (DWRi).

Davis County

There have been five Proposed Determination of Water Rights books published for the county. Four were published in 1966 for the Southern Davis Division, and one for the Centerville Division in 1970. As recently as December 2006 there have been no final decrees issued.

In 1995 a groundwater management plan for the Bountiful sub-area was issued, stating that approval of any new applications for appropriation of water would not serve the long-term interests of the county. The opinion was expressed that the area's groundwater resources have been over appropriated. Total maximum groundwater withdrawals were therefore limited to 30,000 acre-feet, with the average annual recharge estimated at 26,000 acre-feet per year. Although the area is generally closed to new applications, those limited to one acre-foot or less are considered. However, all approved applications must abandon their water rights when a public water system becomes available.

Also in 1995, the groundwater management plan for the Weber Delta sub-area was issued. Recognizing a general decline (some as great as 40 feet) in groundwater levels, diversions from wells was limited to a total of 90,000 acre-feet on a five year moving average. Any single year's total withdrawals cannot exceed 120,000 acre-feet. For quantities greater than a single acre-foot per year, preference will be given to municipal water supplies with a demonstrated immediate need. There are, however, restricted areas, mostly in and around Hill Air Force Base, where no groundwater development can occur due to identified contamination.

Weber and Ogden Rivers

This area basically includes the remainder of the basin. The surface waters are considered to be fully appropriated through the two river decrees previously discussed. Water uses not included in the decrees and established prior to 1903 for surface water and 1935 for groundwater may file Diligence Claims. Any new diversions or consumptive uses of this "old" water are to be considered only through change applications.

Groundwater resources of this area are considered limited. No new appropriations are to be approved at the mouths of the canyons. Only currently owned or acquired water rights can be used in this area through change applications. New appropriations below the canyons are reviewed on an individual basis. Further limitations have been imposed in the Samak and Garff Ranch/Kamas areas.

Following is a separate discussion of the Snyderville/Park City sub-basin due to the dramatic recent growth in the area and a recently issued Interim Policy.

Snyderville/Park City Sub-Basin

The Weber River Decree closed this area to any new appropriation of surface water in 1937. Groundwater appropriations were closed in 1973. By the late 1970's, a moratorium was put into effect that prevented the transfer of any water rights into the basin in excess of one acre-foot per year. The moratorium boundaries were expanded in 1988 and revised to include transfer of any water right, regardless of amount.

The State Engineer's interim policy for the area went into effect in February of 1999, with the latest revision issued December 24, 2002. The policy closed the area to all new appropriations of both surface and ground water. Applications that transfer and/or exchange water rights into the area will be considered, on a case-by-case basis. Aquifer tests, as well as other tests and sampling, will be required for any new well in the area. The Weber River Commissioner is responsible for regulating and monitoring the policy requirements. Additionally, the Commissioner shall distribute the waters of the area by their priority date in conjunction with other water rights on the Weber River system.

DAVIS COUNTY M&I WATER SUPPLIES AND USES

With the exception of Antelope Island in the Great Salt Lake, the Weber River Basin encompasses all of the land area of Davis County. Within Davis County are the incorporated communities of Bountiful, Centerville, Clearfield, Clinton, Farmington, Fruit Heights, Kaysville, Layton, North Salt Lake, South Weber, Sunset, Syracuse, West Bountiful, West Point, and Woods Cross. Also within the county is the large institutional complex of Hill Air Force Base. There are 18 public community water systems, nine public non-community water systems, and three self-supplied industries in the county. Locations of these systems are shown in **Figure 3** on page 9.

Mutton Hollow Improvement District serves customers in the Kaysville area that are not on the Kaysville City system. South Davis Water Improvement District serves the unincorporated area between North Salt Lake and Bountiful. Weber Basin Water Conservancy District (WBWCD) wholesales culinary, as well as secondary (non-potable), water to the above-mentioned systems (with the exception of the communities of Clearfield and Sunset).

The WBWCD operates and maintains the Weber Basin Project that was built in the 50's and 60's to provide both culinary and secondary water to most of the communities and agricultural areas of Davis County. Myriad canal and irrigation companies, as well as other districts, provide secondary water to individual customers. **Table 3**, on page 34, shows the tiers of organizations and the amounts of secondary water delivered to the community water systems by each secondary provider.

Shown in the following **Table 1**, the maximum potable water supply of the public community water systems in Davis County is 102,289 acre-feet: 460 acre-feet from springs, 72,709 acre-feet from wells, and 29,120 acre-feet from surface supplies.

TABLE 1
DAVIS COUNTY
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs	Wells	Surface	Total
Bountiful City Water	0.0	9,920.0	1,120.0	11,040.0
Centerville City	0.0	5,645.5	0.0	5,645.5
Clearfield City	0.0	9,516.6	0.0	9,516.6
Clinton City Water	0.0	1,290.0	0.0	1,290.0
Farmington Culinary Water System	0.0	3,500.0	0.0	3,500.0
Fruit Heights Culinary Water System	0.0	322.6	0.0	322.6
Hill Air Force Base	0.0	7,823.1	0.0	7,823.1
Kaysville Culinary Water System	0.0	0.0	0.0	0.0
Layton City	0.0	14,000.0	0.0	14,000.0
Mutton Hollow Impr. District	0.0	0.0	0.0	0.0
North Salt Lake Municipal System	120.0	8,550.0	0.0	8,670.0
South Davis Water Imp. District	340.0	3,200.0	0.0	3,540.0
South Weber City Culinary Water	0.0	398.2	0.0	398.2
Sunset Municipal Water System	0.0	1,000.0	0.0	1,000.0
Syracuse Municipal Water System	0.0	0.0	0.0	0.0
¹ Weber Basin Water Conservancy District	0.0	0.0	28,000.0	28,000.0
West Bountiful Culinary Water System	0.0	1,292.0	0.0	1,292.0
West Point Culinary Water System	0.0	1,411.4	0.0	1,411.4
Woods Cross Municipal Water System	0.0	4,840.0	0.0	4,840.0
DAVIS COUNTY TOTALS	460.0	72,709.4	29,120.0	102,289.4

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or physical system constraints.

¹ WBWCD supplies are a combination of wells and surface water. All were put under surface supplies due to the inability to separately quantify each type of source.

The reliable potable water supply, at 66,312 acre-feet, is about 65 percent of the maximum. The breakdown of the reliable supply for the public community water systems is presented in the following **Table 2**.

TABLE 2
DAVIS COUNTY
Reliable Potable Water Supplies for
Public Community Systems

WATER SUPPLIER	SPRINGS	WELLS	SURFACE	TOTAL
Bountiful City Water	0.0	4,960.0	1,120.0	6,080.0
Centerville City	0.0	2,822.8	0.0	2,822.8
Clearfield City	0.0	5,322.9	0.0	5,322.9
Clinton City Water	0.0	645.0	0.0	645.0
Farmington Culinary Water System	0.0	1,750.0	0.0	1,750.0
Fruit Heights Culinary Water System	0.0	161.3	0.0	161.3
Hill Air Force Base	0.0	3,911.6	0.0	3,911.6
Kaysville Culinary Water System	0.0	0.0	0.0	0.0
Layton City	0.0	7,000.0	0.0	7,000.0
Mutton Hollow Impr. District	0.0	0.0	0.0	0.0
North Salt Lake Municipal System	60.0	4,275.0	0.0	4,335.0
South Davis Water Imp. District	170.0	1,600.0	0.0	1,770.0
South Weber City Culinary Water	0.0	242.0	0.0	242.0
Sunset Municipal Water System	0.0	500.0	0.0	500.0
Syracuse Municipal Water System	0.0	0.0	0.0	0.0
¹ Weber Basin Water Conservancy District	0.0	0.0	28,000.0	28,000.0
West Bountiful Culinary Water System	0.0	646.0	0.0	646.0
West Point Culinary Water System	0.0	705.7	0.0	705.7
Woods Cross Municipal Water System	0.0	2,420.0	0.0	2,420.0
DAVIS COUNTY TOTALS	230.0	36,962.3	29,120.0	66,312.3

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic, and/or physical system constraints.

¹ WBWCD supplies are a combination of wells and surface water. All were put under surface supplies due to the inability to separately quantify each type of source.

Several of the public community water systems in Davis County, as part of their water supply, have wholesale purchase contracts. WBWCD is the major wholesale water provider in the county. **Table 3** shows the contracted and purchased amounts of wholesale potable water for each of the public community water systems from WBWCD in 2003.

**TABLE 3
DAVIS COUNTY
Wholesale Potable Water Suppliers,
Customers and Deliveries**

WATER SUPPLIER/CUSTOMER	Contracted Amount (Acre-Feet)	Purchased Amount (Acre-Feet)
Weber Basin Water Conservancy District		
Bountiful City Water	1,000.0	999.1
Centerville City	625.0	620.4
Chevron, USA	2,000.0	1,403.2
Clearfield City	4,380.0	4,092.7
Clinton City Water	1,600.0	1,316.1
Farmington Culinary Water System	501.0	294.9
Fruit Heights Culinary Water System	445.0	359.0
Geneva Rock	42.0	36.8
Hill Air Force Base	1,018.8	1,018.8
Kaysville Culinary Water System	2,500.0	2,287.5
Layton City	6,631.0	6,211.7
Mutton Hollow Improvement District	205.0	205.0
North Salt Lake Municipal System	1,905.0	1,647.8
South Davis Water Improvement District	360.0	357.9
South Weber City Culinary Water	600.0	504.3
Sunset Municipal Water System	1,400.0	1,085.1
Syracuse Municipal Water System	1,225.0	1,211.1
Wasatch Energy Systems	353.0	313.5
Webbs Canyon Water Co.	9.0	7.8
West Bountiful Culinary Water System	750.0	646.8
West Point Culinary Water System	700.0	479.9
Woods Cross Municipal Water System	100.0	0.0
DAVIS COUNTY TOTALS	28,349.8	25,099.4

The following **Table 4** is a breakdown of the potable water use for each of the public community water systems. The table shows an annual potable water use of 40,748 acre-feet. This current annual use is 61 percent of the reliable water supply of the county.

Non-potable water use for each of the public community water systems, broken down by provider, is presented in **Table 5**.

TABLE 4
DAVIS COUNTY
Water Use for Public Community Systems

DAVIS COUNTY WATER SUPPLIER	POTABLE WATER USAGE (Acre-Feet/Year)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	TOTAL M & I		
Bountiful City	2,364.3	1,407.2	568.5	693.8	92.7	5,126.5	31,740	144.2
Centerville City	1,327.5	50.6	234.2	130.6	0.0	1,743.0	15,340	101.4
Clearfield City	1,182.1	1,474.8	532.5	346.1	2,599.5	6,135.0	23,050	237.6
Clinton City	1,242.2	0.0	50.8	23.0	0.0	1,316.0	16,120	72.9
Farmington City	1,100.9	105.9	377.7	94.5	0.0	1,679.0	13,340	112.4
Fruit Heights	309.0	52.3	8.4	4.2	0.0	374.0	4,800	69.6
Hill Air Force Base	0.0	0.0	0.0	3,039.0	0.0	3,039.0	8,000	339.1
Kaysville City	1,602.8	217.9	375.4	56.3	37.5	2,290.0	22,730	89.9
Layton City	4,103.7	3,137.7	2,393.0	202.6	0.0	9,837.0	63,220	138.9
Mutton Hollow Impr. District	57.1	147.8	0.0	0.1	0.0	205.0	750	244.0
North Salt Lake	466.0	269.6	1,124.3	608.8	310.3	2,779.0	8,780	282.6
South Davis Water Imp. District	410.0	386.3	134.7	13.9	0.0	945.0	6,660	126.7
South Weber City	179.0	78.9	1.6	11.3	136.2	407.0	5,300	68.6
Sunset Municipal Water System	318.7	482.4	71.0	141.9	0.0	1,014.0	5,130	176.5
Syracuse Water System	885.8	20.4	48.2	9.6	0.0	964.0	15,900	54.1
West Bountiful Water System	335.4	273.3	197.6	192.7	0.0	999.0	4,410	202.2
West Point Water System	449.0	0.0	40.9	5.1	0.0	495.0	7,980	55.4
Woods Cross Water System	728.4	32.6	244.5	25.2	369.4	1,400.0	8,110	154.1
DAVIS COUNTY TOTALS	17,061.9	8,137.8	6,403.4	5,598.8	3,545.6	40,747.5	261,360	139.2
A	B	C	D	E	F	G	H	J

B, C, D, E, F, and H
G=B+C+D+E+F
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H

These values are all input data.
This value represents only Potable M&I Water Use.
Average gallons per capita per day potable water use.

TABLE 5
DAVIS COUNTY
Secondary (Non-Potable) Water Use
Within Public Community Water System Service Areas
(Acre-Feet/Year)

DAVIS COUNTY WATER SUPPLIER	Residential Use (Ac-Ft/Yr)	Commercial Use (Ac-Ft/Yr)	Institutional Use (Ac-Ft/Yr)	Industrial/ Stockwater (Ac-Ft/Yr)	Total Secondary Use (Ac-Ft/Yr)
Bountiful City Water					
Bountiful Water Subcons. Dist.	6,925.0	200.0	800.0	0.0	7,925.0
South Davis Water Imp. District	1,115.0	0.0	0.0	0.0	1,115.0
Deuel Creek Irrigation	300.0	0.0	0.0	0.0	300.0
Centerville City					
Bountiful Water Subcons. Dist.	50.0	0.0	0.0	0.0	50.0
Deuel Creek Irrigation	1,725.0	100.0	100.0	0.0	1,925.0
Weber Basin Water Cons. Dist.	1,000.0	200.0	50.0	0.0	1,250.0
Clearfield City	0.0	0.0	0.0	0.0	0.0
Clinton City Water					
Davis & Weber Canal Co.	2,000.0	200.0	300.0	0.0	2,500.0
Farmington Culinary Water System					
Farmington Area Press. Irrig.	1,700.0	200.0	500.0	0.0	2,400.0
Weber Basin Water Cons. Dist.	250.0	0.0	0.0	0.0	250.0
Fruit Heights Culinary Water System					
Hights Creek Irrig. Co.	700.0	25.0	30.0	0.0	755.0
Farmington Area Press. Irrig.	50.0	0.0	0.0	0.0	50.0
Hill Air Force Base	0.0	0.0	2,500.0	0.0	2,500.0
Weber Basin Water Cons. Dist.	0.0	0.0	575.0	0.0	575.0
Kaysville City					
Hights Creek Irrig. Co.	1,000.0	200.0	0.0	0.0	1,200.0
Davis & Weber Canal Co.	1,200.0	0.0	0.0	0.0	1,200.0
Farmington Area Press. Irrig.	1,800.0	0.0	100.0	0.0	1,900.0
Weber Basin Water Cons. Dist.	500.0	100.0	200.0	0.0	800.0
Layton City					
Layton Canal & Irrig. Co.	1,300.0	200.0	100.0	0.0	1,600.0
Kays Creek Irrigation	400.0	40.0	60.0	0.0	500.0
Davis & Weber Canal Co.	170.0	30.0	0.0	0.0	200.0
Holmes Creek Irrigation	60.0	0.0	0.0	0.0	60.0
Mutton Hollow Imp. District					
Kaysville Irrigation Co.	270.0	0.0	0.0	0.0	270.0
North Salt Lake Municipal System					
Salmaho Irrigation Co.	100.0	0.0	0.0	0.0	100.0
South Davis Water Imp. District	300.0	0.0	0.0	0.0	300.0
Weber Basin Water Cons. Dist.	10.0	0.0	15.0	0.0	25.0
South Davis Water Imp. District	70.0	0.0	0.0	0.0	70.0
Weber Basin Water Cons. Dist.	1,700.0	200.0	50.0	0.0	1,950.0
South Weber City Culinary Water					
South Weber Water Imp. Dist.	450.0	0.0	0.0	0.0	450.0
Weber Basin Water Cons. Dist.	800.0	100.0	50.0	0.0	950.0
Sunset Municipal Water System	0.0	0.0	0.0	0.0	0.0
Syracuse Municipal Water System					
Davis & Weber Canal Co.	1,170.0	0.0	0.0	0.0	1,170.0
Layton Canal & Irrig. Co.	500.0	75.0	25.0	0.0	600.0
Weber Basin Water Cons. Dist.	150.0	0.0	0.0	0.0	150.0
West Bountiful Culinary Water System					
Bountiful Subconservancy Dist.	30.0	0.0	0.0	0.0	30.0
Weber Basin Water Cons. Dist.	800.0	0.0	175.0	0.0	975.0
West Point Culinary Water System					
Davis & Weber Canal Co.	700.0	200.0	100.0	0.0	1,000.0
Woods Cross Municipal Water System					
Bountiful Subconservancy Dist.	10.0	0.0	0.0	0.0	10.0
Weber Basin Water Cons. Dist.	1,100.0	150.0	100.0	50.0	1,400.0
DAVIS COUNTY TOTALS	30,405.0	2,220.0	5,830.0	50.0	38,505.0

Various per capita water use rates for the public community water systems are given in the following **Table 6**.

TABLE 6
DAVIS COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.096	86
Residential Potable Plus Secondary Use	0.213	190
Total Potable Use	0.156	139
Total Potable Plus Secondary Use	0.303	271

Note: Total Potable categories include residential, commercial, institutional and industrial uses.

Table 7, on the following page, shows the water use for public non-community system and private domestic systems. There are three self-supplied industries and several private domestic wells. Collectively, these uses amount to 3,435 acre-feet of potable water use and 187 acre-feet of secondary water use.

TABLE 7
DAVIS COUNTY
Water Use for Public Non-Community Systems,
Self-Supplied Industries and Private Domestic Systems

DAVIS COUNTY WATER SUPPLIER	POTABLE WATER USAGE (Acre-Feet/Year)					Total Secondary Water Use (Ac-Ft/Yr)
	Residential	Commercial	Institutional	Industrial	Total Potable Use	
Chevron, USA	0.0	0.0	0.0	1,403.2	1,403.2	76.7
Forest Service Facilities:						
Bountiful Peak Campground	0.0	0.0	0.1	0.0	0.1	0.0
Sunset Campgrounds	0.0	0.0	0.1	0.0	0.1	0.0
Lagoon Corporation	0.0	53.2	0.0	0.0	53.2	82.0
Parsons	0.0	20.0	0.0	0.0	20.0	0.0
State Parks Facilities:						
Antelope Island North	0.0	0.0	25.0	0.0	25.0	5.0
Union Pacific Railroad	0.0	5.0	0.0	0.0	5.0	0.0
Wasatch Energy Systems	0.0	313.5	0.0	0.0	313.5	0.0
Weber Basin Job Corps	0.0	0.0	0.0	0.0	0.0	23.2
Non-Community SubTotals	0.0	391.7	25.2	1,403.2	1,820.1	186.9
SELF-SUPPLIED INDUSTRIES ¹	0.0	0.0	0.0	1,535.2	1,535.2	0.0
PRIVATE DOMESTIC SYSTEMS	80.0	0.0	0.0	0.0	80.0	0.0
DAVIS COUNTY TOTALS	80.0	391.7	25.2	2,938.4	3,435.3	186.9

¹Jack B. Parson Co.'s, Silver Eagle Refining, Woods Cross Refining Co., LLC

The combined total potable M&I water use of all categories of water systems in the county is 44,183 acre-feet, while secondary water use is 38,692 acre-feet; giving an overall total M&I water use of 82,875 acre-feet. With the 2003 population of Davis County at about 262,040, the total M&I per capita use for all water systems is then 282 gallons per capita per day.

MORGAN COUNTY M&I WATER SUPPLIES AND USES

The Weber River Basin encompasses all of Morgan County, which includes the incorporated communities of Croyden, Enterprise, Littleton, Milton, Mountain Green, Morgan City, Peterson, Porterville, and Richville. Within the area there are 11 public community systems, 10 public non-community systems, and two self-supplied industries. The locations of these systems in Morgan County are shown in **Figure 3** on page 9.

Table 8 shows that the maximum annual potable water supply for public community systems in Morgan County is 2,579 acre-feet: 1,412 acre-feet from springs and 1,167 acre-feet from wells. There are currently to developed surface water sources for the county.

TABLE 8
MORGAN COUNTY
Maximum Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs (Ac-Ft/Yr)	Wells (Ac-Ft/Yr)	Surface (Ac-Ft/Yr)	Total (Ac-Ft/Yr)
Central Enterprise Water Assc.	0.0	49.2	0.0	49.2
Croydon Pipeline Company	20.0	0.0	0.0	20.0
Highlands Water Company	585.0	0.0	0.0	585.0
Monte Verde Water Association	82.3	26.0	0.0	108.3
Morgan City Corporation	629.5	890.5	0.0	1,520.0
Mt. Green Subdivision Water Assc	0.0	10.0	0.0	10.0
Peterson Pipeline Company	0.0	98.5	0.0	98.5
Richville Pipeline Company	65.0	0.0	0.0	65.0
S. Robinson Spring Water Users	29.7	0.0	0.0	29.7
West Enterprise Water Association	0.0	13.0	0.0	13.0
Wilkinson Water Company	0.0	80.0	0.0	80.0
MORGAN COUNTY TOTALS	1,411.5	1,167.2	0.0	2,578.7

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or physical system constraints.

The reliable potable water supply for public community systems in Morgan County is 1,290 acre-feet or about 80 percent of the maximum annual water supply. The breakdown of this supply is presented in the following **Table 9**.

TABLE 9
MORGAN COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	SPRINGS	WELLS	SURFACE	TOTAL
Croydon Pipeline Company	10.0	0.0	0.0	10.0
Enterprise Estates Water Assc.	0.0	24.6	0.0	24.6
Highlands Water Company	292.5	0.0	0.0	292.5
Monte Verde Water Association	41.2	13.0	0.0	54.2
Morgan City Corporation	314.8	445.3	0.0	760.1
Mt. Green Subdivision Water Assc	0.0	5.0	0.0	5.0
Peterson Pipeline Company	0.0	49.3	0.0	49.3
Richville Pipeline Company	32.5	0.0	0.0	32.5
S. Robinson Spring Water Users	14.9	0.0	0.0	14.9
West Enterprise Water Association	0.0	6.5	0.0	6.5
Wilkinson Water Company	0.0	40.0	0.0	40.0
MORGAN COUNTY TOTALS	705.9	583.7	0.0	1,289.6

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.

Table 10 shows a breakdown of the potable water use for each public community system. This table shows that for Morgan County the current annual potable water use of public community water systems is 1,277 acre-feet. Although this is about equal to the reliable system source capacity, it is only 50 percent of the maximum annual potable water supply.

TABLE 10
MORGAN COUNTY
Water Use for Public Community Systems

MORGAN COUNTY WATER SUPPLIER	POTABLE USAGE (Acre-Feet/Year)						Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	TOTAL M & I		
Central Enterprise Water Assc.	23.5	22.2	0.0	0.0	0.0	18.0	320	50.2
Croydon Pipeline Company	10.6	7.4	0.0	0.0	0.0	45.8	60	681.0
Highlands Water Company	76.7	106.7	4.9	5.5	0.0	193.8	1,120	154.5
Monte Verde Water Association	8.0	25.0	0.0	0.0	0.0	33.0	120	245.3
Morgan City Corporation	154.3	247.2	43.6	189.9	13.1	648.1	2,860	202.3
Mt. Green Subdivision Water Assc	7.3	11.5	0.0	0.0	0.0	18.9	90	187.0
Peterson Pipeline Company	29.7	48.3	0.4	0.0	1.3	79.7	400	177.8
Richville Pipeline Company	12.8	4.1	0.0	4.7	0.0	21.7	110	175.9
S. Robinson Spring Water Users	7.4	22.3	0.0	0.0	0.0	29.7	40	662.4
West Enterprise Water Association	2.4	10.0	0.0	0.0	0.0	12.4	30	369.0
Wilkinson Water Company	73.0	98.7	4.2	0.0	0.0	175.9	990	158.6
MORGAN COUNTY TOTALS A	405.7 B	603.4 C	53.2 D	200.1 E	14.4 F	1,276.8 G	6,140 H	185.6 J

B, C, D, E, F, and H

G=B+C+D+E+F

J=G*(325,851 gallons per acre-foot)/(365 days per year)/H

These values are all input data.

This value represents only Potable M&I Water Use.

Average per capita potable water use.

Secondary water is another important aspect of municipal and industrial (M&I) water use. **Table 11** gives the annual amount of secondary water used for various categorical uses within the boundaries of the public community systems. In Morgan County, several separate irrigation companies provide secondary water to customers within the public communities. None of the communities operate their own secondary water systems. Total secondary water use for the public community water systems is 500 acre-feet.

TABLE 11
MORGAN COUNTY
Secondary (Non-Potable) Water Use
Within Public Community Water System Service Areas
(Acre-Feet/Year)

WATER SUPPLIER	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Secondary Use
Central Enterprise Water Assc.					
Spring Hollow Grove Home Owners Assc.	30.0	0.0	0.0	0.0	30.0
Croydon Pipeline Company					
Croydon Irrigation Company	15.0	0.0	0.0	0.0	15.0
Highlands Water Company	0.0	0.0	0.0	0.0	0.0
Monte Verde Water Association	0.0	0.0	0.0	0.0	0.0
Morgan City Corporation					
East Richfield Ditch Co.	20.0	0.0	0.0	0.0	20.0
North Morgan Irrigation Co.	40.0	0.0	0.0	0.0	40.0
South Morgan Water Ditch Co.	40.0	0.0	0.0	0.0	40.0
Weber Canal Company	75.0	150.0	25.0	0.0	250.0
Mt. Green Subdivision Water Assc	0.0	0.0	0.0	0.0	0.0
Peterson Pipeline Company					
Peterson Irrigation Company	60.0	0.0	5.0	0.0	65.0
Richville Pipeline Company					
Richville Irrigation Company	25.0	0.0	5.0	0.0	30.0
West Porterville Irrigation	10.0	0.0	0.0	0.0	10.0
S. Robinson Spring Water Users	0.0	0.0	0.0	0.0	0.0
West Enterprise Water Association	0.0	0.0	0.0	0.0	0.0
Wilkinson Water Company	0.0	0.0	0.0	0.0	0.0
MORGAN COUNTY TOTALS	315.0	150.0	35.0	0.0	500.0

Various per capita rates for the public community systems of Morgan County are shown in the following **Table 12**.

TABLE 12
MORGAN COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.164	147
Residential Potable Plus Secondary Use	0.216	193
Total Potable Use	0.208	186
Total Potable Plus Secondary Use	0.289	258

Note: Total Potable categories include residential, commercial, institutional and industrial uses.

Table 13, on the following page, shows the annual water use for public non-community systems, self-supplied industries, and private domestic systems. The total water use of these water systems is 495 acre-feet of potable water and 620 acre-feet of secondary water use.

TABLE 13
MORGAN COUNTY
Water Use for Public Non-Community Systems,
Self-Supplied Industries and Private Domestic Systems
(Acre-Feet/Year)

MORGAN COUNTY WATER SUPPLIER	POTABLE USAGE					Total Secondary Water Use
	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Potable Use	
Camp Zarahemla	0.0	0.0	1.0	0.0	1.0	10.0
East Canyon Resort	0.0	30.0	0.0	0.0	30.0	180.0
LDS Stake Camp Woodland	0.0	0.0	8.5	0.0	8.5	0.0
Milton LDS Church	0.0	0.0	1.0	0.0	1.0	0.0
Morgan 5th & 6th Wards	0.0	0.0	1.0	0.0	1.0	0.0
Peterson LDS Church	0.0	0.0	1.0	0.0	1.0	0.0
Round Valley Country Club	0.0	0.2	0.0	0.0	0.2	180.0
State Facilities:						
East Canyon State Park	0.0	0.0	10.0	0.0	10.0	10.0
Mountain Green Hwy RS	0.0	0.0	1.5	0.0	1.5	0.0
Stoddard Inn Café	0.0	0.5	0.0	0.0	0.5	0.0
Non-Community SubTotals	0.0	30.7	24.0	0.0	54.7	380.0
SELF SUPPLIED INDUSTRIES ¹	0.0	0.0	0.0	40.0	40.0	240.0
PRIVATE DOMESTIC SYSTEMS	400.0	0.0	0.0	0.0	400.0	0.0
MORGAN COUNTY TOTALS	400.0	30.7	24.0	40.0	494.7	620.0

¹ Browing Arms, Holcim (US), Inc.

Total potable M&I water use for all categories of water systems in the county is then about 1,772 acre-feet, while non-potable use is 1,120 acre-feet. The overall total annual M&I water use is then 2,892 acre-feet. With the 2003 population of Morgan County at about 7,940 people, the combined M&I per capita water use of all water systems for the county is 325 gallons per capita per day.

SUMMIT COUNTY M&I WATER SUPPLIES AND USES

The Weber River Basin encompasses only the western end of Summit County, which includes most of the population of the county in the communities of Coalville, Echo, Francis Town, Henefer Town, Hoytsville, Kamas, Marion, Oakley Town, Park City, Peoa, Wanship, and Woodland Hills. Within this area are 20 public community systems, 20 public non-community systems, and two self-supplied industries. Locations of these systems are shown in **Figure 3** on page 9.

Table 14 shows that the maximum annual potable water supply for public community systems in Summit County is 30,796 acre-feet; 5,119 acre-feet from springs, 22,987 acre-feet from wells, and 2,690 acre-feet from surface supplies.

TABLE 14
SUMMIT COUNTY
Maximum Potable Water Supplies for Public Community Systems
(Acre-Foot/Year)

WATER SUPPLIER	Springs	Wells	Surface	Total
Bridge Hollow Water Assoc.	0.0	74.0	0.0	74.0
Cluff Ward Pipeline Co.	128.9	0.0	0.0	128.9
Coalville Culinary Water	350.0	500.0	0.0	850.0
Community Water Co.	0.0	267.8	290.3	558.1
Echo Mutual Water Co.	50.0	0.0	0.0	50.0
Gorgoza Mutual Water Co.	161.3	1,221.7	0.0	1,383.0
Henefer Pipeline Co.	400.0	0.0	0.0	400.0
High Valley Water Co.	0.0	285.0	0.0	285.0
Hoytsville Pipeline Co.	86.9	123.1	0.0	210.0
Kamas Culinary Water System	224.5	627.3	0.0	851.8
Marion Waterworks Co	48.4	161.3	0.0	209.7
Mountain Regional Water SSD	500.0	4,500.0	0.0	5,000.0
Oakley Town Water System	800.0	75.0	0.0	875.0
Park City Culinary Water	1,613.0	12,258.8	1,000.0	14,871.8
Peoa Pipeline Company	282.3	0.0	0.0	282.3
Summit Co Service #3	0.0	255.0	0.0	255.0
Summit Water Distribution	408.2	2,606.4	1,400.0	4,414.6
Wanship Cottage Estates	0.0	10.0	0.0	10.0
Wanship Mutual Water Co	35.0	22.0	0.0	57.0
Wooden Shoe Water Company	30.0	0.0	0.0	30.0
SUMMIT COUNTY TOTALS	5,118.5	22,987.4	2,690.3	30,796.2

Note: All values represent maximum system source capacities limited by water rights, hydrologic constraints, and/or system constraints.

The reliable potable water supply is shown in **Table 15**. At 19,959 acre-feet per year, the reliable potable water supply is about 65 percent of the maximum potable water supply.

TABLE 15
SUMMIT COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	SPRINGS	WELLS	SURFACE	TOTAL
Bridge Hollow Water Assoc.	0.0	37.0	0.0	37.0
Cluff Ward Pipeline Co.	91.9	0.0	0.0	91.9
Coalville Culinary Water	200.0	250.0	0.0	450.0
Community Water Co.	0.0	133.9	290.3	424.2
Echo Mutual Water Co.	25.0	0.0	0.0	25.0
Gorgoza Mutual Water Co.	96.8	1221.7	0.0	1,318.5
Henefer Pipeline Co.	200.0	0.0	0.0	200.0
High Valley Water Co.	0.0	285.0	0.0	285.0
Hoytsville Pipeline Co.	86.9	123.1	0.0	210.0
Kamas Culinary Water System	224.5	627.3	0.0	851.8
Marion Waterworks Co	29.0	161.3	0.0	190.3
Mountain Regional Water SSD	250.0	2750.0	0.0	3,000.0
Oakley Town Water System	550.0	37.5	0.0	587.5
Park City Culinary Water	1,613.0	6129.4	1,000.0	8,742.4
Peoa Pipeline Company	282.3	0.0	0.0	282.3
Summit Co Service #3	0.0	161.3	0.0	161.3
Summit Water Distribution	245.0	1303.2	1,400.0	2,948.2
Wanship Cottage Estates	0.0	5.0	0.0	5.0
Wanship Mutual Water Co	35.0	22.0	0.0	57.0
Wooden Shoe Water Company	30.0	61.6	0.0	91.6
SUMMIT COUNTY TOTALS	3,959.4	13,309.3	2,690.3	19,959.0

Note: All values represent reliable supplies (9 out of 10 years) adjusted for meeting peak day demands from the maximum system source capacities which are limited by water rights, hydrologic constraints, and/or physical system constraints.

Table 16 shows a breakdown of the potable water use for each public community system. This table shows that for Summit County the total current annual potable water use is 9,878 acre-feet, 50 percent of the reliable potable water supply.

**TABLE 16
SUMMIT COUNTY
Water Use for Public Community Systems**

SUMMIT COUNTY WATER SUPPLIER	POTABLE USAGE (Acre-Feet/Year)							Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total	TOTAL M & I			
Bridge Hollow Water Assoc.	4.4	4.4	0.0	0.0	0.0	8.8	50	157.1	
Cluff Ward Pipeline Co.	8.2	10.5	0.0	0.0	0.0	18.7	170	98.1	
Coalville Culinary Water Community Water Co.	72.8	55.3	23.2	17.5	10.8	179.6	1,400	114.5	
Echo Mutual Water Co.	77.6	41.1	40.8	0.0	0.0	159.6	1,150	123.9	
Gorgoza Mutual Water Co.	5.3	4.5	6.7	3.0	0.0	19.5	80	217.6	
Henefer Pipeline Co.	328.6	385.1	13.4	53.4	0.0	780.6	3,460	201.4	
High Valley Water Co.	51.3	130.7	9.6	14.4	1.9	208.0	700	265.3	
Hoytville Pipeline Co.	32.0	43.0	0.0	0.0	0.0	75.0	480	139.5	
Kamas Culinary Water System	28.3	40.8	9.0	4.5	0.0	82.6	440	167.6	
Marion Waterworks Co	166.4	373.5	48.5	13.0	2.2	603.6	1,170	460.6	
Mountain Regional Water SSD	18.6	39.5	11.6	0.0	0.0	69.7	320	194.4	
Oakley Town Water System	618.9	803.0	64.8	17.6	5.8	1,493.7	8,500	156.9	
Park City Culinary Water	79.2	80.8	10.0	20.0	0.0	190.0	1,140	148.8	
Peoa Pipeline Company	840.0	1,769.3	1,219.7	159.6	0.0	3,988.7	7,500	474.8	
Summit Co Service #3	16.0	14.0	8.0	2.0	0.0	40.0	230	155.3	
Summit Water Distribution	33.9	45.8	0.3	0.0	0.0	80.0	460	155.3	
Wanship Cottage Estates	475.5	1,233.3	47.9	71.9	0.0	1,828.6	5,070	322.0	
Wanship Mutual Water Co	1.2	0.2	0.0	0.0	0.0	1.5	20	67.8	
Wooden Shoe Water Company	14.8	7.4	0.0	0.0	0.0	22.2	220	90.1	
	7.5	2.5	1.0	0.0	0.0	11.0	40	245.5	
SUMMIT COUNTY TOTALS	2,880.5	5,084.7	1,514.7	377.1	20.6	9,877.7	32,600	270.5	
A	B	C	D	E	F	G	H	J	

A, B, C, D, E, F, H, and K These values are all input data.
G=B+C+D+E+F This value represents only Potable M&I Water Use.
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H Average gallons per capita per day potable water use.

Secondary water is another important aspect of total M&I water use. **Table 17** shows the amount of secondary water use for public community systems. In Summit County, separate irrigation companies supply secondary water for several of the communities for a total use of 1,728acre-feet.

TABLE 17
SUMMIT COUNTY
Secondary (Non-Potable) Water Use
Within Public Community Water System Service Areas
(Acre-Feet/Year)

SUMMIT COUNTY WATER SUPPLIER	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Secondary Use
Bridge Hollow Water Assoc.	0.0	0.0	0.0	0.0	0.0
Cluff Ward Pipeline Co.	10.0	0.0	0.0	0.0	10.0
Coalville Culinary Water	150.0	0.0	0.0	0.0	150.0
Community Water Company	0.0	0.0	0.0	0.0	0.0
Echo Mutual Water Company					
Echo Ditch Company	15.0	0.0	1.0	0.0	16.0
Gorgoza Mutual Water Co.	0.0	0.0	0.0	0.0	0.0
Henefer Town					
Henefer Irrigation Company	50.0	5.0	5.0	0.0	60.0
High Vallely Water Co.	0.0	0.0	0.0	0.0	0.0
Hoytsville Culinary Water System					
Hoytsville Ditch Company	40.0	0.0	0.0	0.0	40.0
Kamas Culinary Water System	0.0	0.0	0.0	0.0	0.0
Marion Waterworks Co					
Lower Ditch Irrigation Co.	4.0	0.0	0.0	0.0	4.0
Upper Ditch Irrigation Co.	4.0	0.0	0.0	0.0	4.0
Ditch Sprinkler Group	12.0	0.0	0.0	0.0	12.0
Mountain Regional Water SSD	20.0	0.0	0.0	0.0	20.0
Oakley Town Water System					
New Field & N. Bench Irr. Co.	200.0	10.0	20.0	0.0	230.0
North Bench Canal Co.	10.0	0.0	0.0	0.0	10.0
Smith & Morehouse Res. Co.	30.0	0.0	0.0	0.0	30.0
Park City Culinary Water	100.0	700.0	150.0	0.0	950.0
Peoa Pipeline Company	15.0	0.0	0.0	5.0	20.0
Summit Co Service #3	0.0	0.0	0.0	0.0	0.0
Summit Water Distribution	0.0	130.0	0.0	0.0	130.0
Wanship Cottage Estates	2.0	0.0	0.0	0.0	2.0
Wanship Mutual Water Co					
Wanship Ditch Co.	30.0	0.0	0.0	0.0	30.0
Wooden Shoe Water Company	10.0	0.0	0.0	0.0	10.0
SUMMIT COUNTY TOTALS	702.0	845.0	176.0	5.0	1,728.0

Table 18 gives various gallons per capita per day water use rates for the public community systems.

TABLE 18
SUMMIT COUNTY
Average Per Capita M&I Water Use for Public Community Systems

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.244	218
Residential Potable Plus Secondary Use	0.266	237
Total Potable Use	0.303	270
Total Potable Plus Secondary Use	0.356	318

Note: Total Potable categories include residential, commercial, institutional and industrial uses.

Table 19 indicates the water use for public non-community systems and private domestic systems. Rockport State Park facilities, several summer and year-round developments, Campgrounds, and Summit County Public Works are among the 20 non-community systems. There are two self-supplied industries in Summit County. All these uses amount to 211 acre-feet of potable water and 150 acre-feet of non-potable water.

TABLE 19
SUMMIT COUNTY
Water Use for Public Non-Community Systems,
Self-Supplied Industries and Private Domestic Systems
(Acre-Feet/Year)

SUMMIT COUNTY WATER SUPPLIER	POTABLE USAGE					Total Secondary Water Use
	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Potable Use	
Aspen Acres Association	5.0	0.0	0.0	0.0	5.0	0.0
Aspen Mountain Water Co.	5.0	0.0	0.0	0.0	5.0	0.0
Beaver Creek Inn	0.0	0.3	0.0	0.0	0.3	0.0
Camp Pinecliff	0.0	0.0	1.0	0.0	1.0	0.0
Canyon Rim Ranch Subdivision	4.0	0.0	0.0	0.0	4.0	0.0
Cool Spring Mutual Waters	6.0	0.0	0.0	0.0	6.0	0.0
County Facilities:						
Summit County Public Works	0.0	0.0	2.0	0.0	2.0	0.0
Echo Resort	0.0	4.0	0.0	0.0	4.0	0.0
Forest Service Systems:						
Ledgefork CG	0.0	0.0	0.3	0.0	0.3	0.0
Smith Morehouse CG	0.0	0.0	0.3	0.0	0.3	0.0
Hidden Lake Association	3.0	0.0	0.0	0.0	3.0	0.0
Lake Rockport Estates	2.0	0.0	0.0	0.0	2.0	0.0
Pines Ranch	3.0	0.0	0.0	0.0	3.0	150.0
Samak Country Estates	2.0	0.0	0.0	0.0	2.0	0.0
Stagecoach Subdivision	2.0	0.0	0.0	0.0	2.0	0.0
State Facilities:						
Echo Canyon Port of Entry	0.0	0.0	2.0	0.0	2.0	0.0
Echo State Hwy Rest Stop	0.0	0.0	10.0	0.0	10.0	0.0
Rockport State Park	0.0	0.0	4.0	0.0	4.0	0.0
Wanship Well Water System	0.5	0.0	0.0	0.0	0.5	0.0
Weber Meadow View Ranch	4.0	0.0	0.0	0.0	4.0	0.0
Non-Community SubTotals	36.5	4.3	19.6	0.0	60.4	150.0
SELF-SUPPLIED INDUSTRIES ¹	0.0	0.0	0.0	1.0	1.0	0.0
PRIVATE DOMESTIC SYSTEMS	150.0	0.0	0.0	0.0	150.0	0.0
SUMMIT COUNTY TOTALS	186.5	4.3	19.6	1.0	211.4	150.0

¹Citation Oil Co., Western Gas Resources

Total potable M&I water use for all categories of water systems in the county is then 10,089 acre-feet, while total non-potable water use is 1,878 acre-feet, giving a total overall M&I water use in 2003 of about 11,967 acre-feet for Summit County. Since the current population of the Weber River Basin portion of Summit County is about 34,120, the total M&I per capita water use in this part of Summit County is then 313 gallons per capita per day (gpcd).

WEBER COUNTY M&I WATER SUPPLIES AND USES

The Weber River Basin encompasses most of the land area of Weber County. Included within the basin are the communities of Eden, Hooper, Huntsville, Liberty, North Ogden, Ogden City, Pleasant View, Riverdale City, Roy, South Ogden City, Taylor, West Weber, Uintah, Washington Terrace, and Warren.

Within this area are 26 public community systems, 22 public non-community systems, and two self-supplied industries. Locations of these systems are shown in **Figure 3** on page 9.

As shown in **Table 20** on the following page, the maximum annual potable water supply for the public community systems of Weber County is 90,588 acre-feet; 8,916 acre-feet from springs, 48,001 acre-feet from wells, and 33,671 acre-feet from surface sources.

TABLE 20
WEBER COUNTY
Maximum Potable Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	Springs	Wells	Surface	Total
Abbey of the Holy Trinity	544.0	0.0	0.0	544.0
Bona Vista Water District	150.0	1,900.0	0.0	2,050.0
Casey Acres Water Co.	0.0	13.0	0.0	13.0
Cole Canyon Water Co.	116.0	0.0	0.0	116.0
Durfee Creek Subdivision	0.0	20.0	0.0	20.0
Eden Waterworks Co.	217.2	100.0	0.0	317.2
Green Hills Country Estates	0.0	110.0	0.0	110.0
Hooper Water Improvement Dist.	0.0	6,515.7	0.0	6,515.7
Huntsville Municipal Water Sys.	324.2	0.0	0.0	324.2
Lake View Corporation	0.0	100.0	0.0	100.0
Liberty Pipeline Company	88.7	300.0	0.0	388.7
Nordic Valley Water Co.	0.0	121.0	0.0	121.0
North Ogden Municipal Water	1,200.0	2,000.0	0.0	3,200.0
Ogden City Div. of Water Utilities	3,811.9	20,000.0	13,000.0	36,811.9
Pineview West Water Co.	0.0	78.0	0.0	78.0
Pleasant View City Culinary Water	967.8	1,242.0	0.0	2,209.8
Pole Patch Water System	0.0	0.0	0.0	0.0
Riverdale City	0.0	3,266.3	0.0	3,266.3
Roy Municipal Water System	586.4	5,518.1	0.0	6,104.5
South Ogden City	0.0	806.5	3,170.9	3,977.4
Taylor-West Weber WID	0.0	1,448.0	0.0	1,448.0
Uintah Highlands Water Imp. Dist.	156.5	429.6	0.0	586.1
Uintah Municipal Water System	753.0	0.0	0.0	753.0
Washington Terrace Muni. Water	0.0	3,883.4	0.0	3,883.4
¹ Weber Basin Water Conservancy Dist.	0.0	0.0	17,500.0	17,500.0
West Warren Improvement Dist.	0.0	0.0	0.0	0.0
Wolf Creek Water & Sewer Co.	0.0	150.0	0.0	150.0
WEBER COUNTY TOTALS	8,915.7	48,001.6	33,670.9	90,588.2

Note: All values represent maximum system source capacities limited by water rights, hydrologic and/or physical system constraints.

¹ WBWCD supplies are a combination of wells and surface water. All were put under surface supplies due to the inability to separately quantify each type of source. WBWCD only provides wholesale water.

The reliable potable water supply is shown in **Table 21** on the following page to be 57,991 acre-feet, about 64 percent of the maximum supply.

TABLE 21
WEBER COUNTY
Reliable Potable Water Supplies for Public Community Systems
(Acre-Feet/Year)

WATER SUPPLIER	SPRINGS	WELLS	SURFACE	TOTAL
Abbey of the Holy Trinity	272.0	0.0	0.0	272.0
Bona Vista Water District	75.0	950.0	0.0	1,025.0
Casey Acres Water Co.	0.0	13.0	0.0	13.0
Cole Canyon Water Co.	58.0	0.0	0.0	58.0
Durfee Creek Subdivision	0.0	20.0	0.0	20.0
Eden Waterworks Co.	108.6	50.0	0.0	158.6
Green Hills Country Estates	0.0	92.7	0.0	92.7
Hooper Water Improvement Dist.	0.0	4,314.8	0.0	4,314.8
Huntsville Municipal Water Sys.	162.1	0.0	0.0	162.1
Lake View Corporation	0.0	50.0	0.0	50.0
Liberty Pipeline Company	53.2	150.0	0.0	203.2
Nordic Valley Water Co.	0.0	60.5	0.0	60.5
North Ogden Municipal Water	600.0	1,000.0	0.0	1,600.0
Ogden City Div. of Water Utilities	2,287.1	10,000.0	6,500.0	18,787.1
Pineview West Water Co.	0.0	39.0	0.0	39.0
Pleasant View City Culinary Water	580.7	621.0	0.0	1,201.7
Pole Patch Water System	0.0	0.0	0.0	0.0
Riverdale City	0.0	3,266.3	0.0	3,266.3
Roy Municipal Water System	351.8	2,759.0	0.0	3,110.8
South Ogden City	0.0	403.2	1,585.5	1,988.7
Taylor-West Weber WID	0.0	1,290.4	0.0	1,290.4
Uintah Highlands Water Imp. Dist.	93.9	214.8	0.0	308.7
Uintah Municipal Water System	376.5	0.0	0.0	376.5
Washington Terrace Muni. Water	0.0	1,941.7	0.0	1,941.7
¹ Weber Basin Water Conservancy District	0.0	0.0	17,500.0	17,500.0
West Warren Improvement Dist.	0.0	0.0	0.0	0.0
Wolf Creek Water & Sewer Co.	0.0	150.0	0.0	150.0
WEBER COUNTY TOTALS	5,018.9	27,386.4	25,585.5	57,990.8

Note: Wells are limited to 50% of their maximum supply capacity. Spring and surface supplies are considered equal to their maximum capacity.

¹ WBWCD supplies are a combination of wells and surface water. All were put under surface supplies due to the inability to separately quantify each type of source. WBWCD only provides wholesale water.

Several of the public community water systems in Weber County, as part of their water supply, have wholesale purchase contracts. WBWCD is the major wholesale water provider in the county. Ogden City also provides some wholesale water. **Table 22** shows the contracted and purchased amounts of wholesale water for each of the public community water systems in Weber County.

TABLE 22
WEBER COUNTY
Wholesale Potable Water Suppliers,
Customers and Deliveries

WATER SUPPLIER/CUSTOMER	Contracted Amount (Acre-Feet)	Purchased Amount (Acre-Feet)
Weber Basin Water Conservancy District		
Bona Vista Water District	2,361.0	2,206.8
Hooper Water Improvement Dist.	5.0	0.2
Ogden City Div. of Water Utilities	6,800.0	6,312.1
Parsons	22.0	20.0
Riverdale City	1,100.0	1,160.8
Roy Municipal Water System	3,628.0	3,161.0
South Ogden City	785.0	785.0
Taylor-West Weber WID	450.0	425.6
Uintah Highlands Water Imp. Dist.	237.0	177.6
Uintah Municipal Water System	358.0	303.4
Washington Terrace Muni. Water	1,000.0	934.4
West Warren Improvement Dist.	300.0	212.8
Ogden City Div. of Water Utilities		
Bona Vista Water District	1,450.0	1,450.0
WEBER COUNTY TOTALS	18,496.0	17,149.7

Table 23 on the following page presents the breakdown of the potable water use for each public community system of the county. As indicated by the table, the current total annual potable water use is 38,494 acre-feet, which is about 66 percent of the current reliable potable water supply.

**TABLE 23
WEBER COUNTY
Water Use for Public Community Systems**

WEBER COUNTY WATER SUPPLIER	POTABLE WATER USAGE (Acre-Feet/Year)						TOTAL M & I	Service Population	Gallons Per Capita Per Day
	Residential Indoor	Residential Outdoor	Commercial Total	Institutional Total	Industrial Total				
Abbey of the Holy Trinity	0.0	0.0	7.2	5.2	0.0		12.4	40	276.8
Bona Vista Water District	839.4	1,184.1	374.7	56.8	1,085.1		3,540.0	13,500	234.1
Casey Acres Water Co.	3.0	0.0	0.0	0.0	0.0		3.0	40	67.0
Cole Canyon Water Co.	6.3	12.8	0.0	10.9	0.0		30.0	70	382.6
Durfee Creek Subdivision	3.1	5.9	0.0	0.0	0.0		9.0	40	200.9
Eden Waterworks Co.	82.2	72.7	16.2	7.9	0.0		179.0	930	171.8
Green Hills Country Estates	26.9	14.4	0.0	0.0	0.0		41.3	300	122.9
Hooper Water Improvement Dist.	837.3	382.1	40.7	94.9	0.0		1,355.0	11,500	105.2
Huntsville Municipal Water Sys.	54.4	97.7	5.2	7.5	1.1		166.0	800	185.2
Lake View Corporation	3.9	6.1	0.0	1.0	0.0		11.0	140	70.1
Liberty Pipeline Company	148.4	227.3	0.0	6.3	0.0		382.0	550	620.1
Nordic Mountain Water Co.	41.2	10.3	2.1	0.0	0.0		53.5	400	119.4
North Ogden Municipal Water	1,168.3	84.0	50.7	26.1	0.0		1,329.0	15,480	76.6
Ogden City Div. of Water Utilities	6,195.0	8,234.3	962.0	4,328.8	962.0		20,682.0	77,590	238.0
Pineview West Water Co.	4.0	6.0	0.0	0.0	0.0		10.0	50	178.5
Pleasant View City Culinary Water	229.6	155.7	6.2	12.5	0.0		404.0	4,880	73.9
Pole Patch Water System	5.8	34.2	0.0	0.0	0.0		40.0	70	510.1
Riverdale City	609.0	1,132.0	412.4	154.4	15.1		2,323.0	8,030	258.3
Roy Municipal Water System	2,163.4	295.8	325.7	532.1	0.0		3,317.0	33,820	87.6
South Ogden City	1,260.8	201.7	172.3	85.1	0.0		1,720.0	15,030	102.2
Taylor-West Weber WID	373.9	499.8	2.2	29.2	96.8		1,002.0	4,950	180.7
Uintah Highlands Water Imp. Dist.	184.5	14.0	10.0	19.5	0.0		228.0	2,710	75.1
Uintah Municipal Water System	87.9	181.1	5.0	40.0	0.0		314.0	1,160	241.7
Washington Terrace Muni. Water	686.4	159.3	52.5	84.0	17.8		1,000.0	8,410	106.2
West Warren Improvement Dist.	61.7	101.0	20.1	10.1	20.1		213.0	700	271.6
Wolf Creek Water & Sewer Co.	43.6	49.2	27.9	9.3	0.0		130.0	280	414.5
WEBER COUNTY TOTALS	15,120.1	13,161.4	2,493.1	5,521.5	2,198.0		38,494.2	201,470	170.6
A	B	C	D	E	F	G	H	J	

A, B, C, D, E, F, H, and K
G=B+C+D+E+F
J=G*(325,851 gallons per acre-foot)/(365 days per year)/H

These values are all input data.
This value represents only Potable M&I Water Use.
Average gallons per capita per day potable water use.

Secondary water is another important aspect of municipal and industrial (M&I) water use. **Table 24** shows the amount of secondary water use within the public community water systems service areas. Some communities partially supply their own secondary water. By far, however, several different canal and irrigation companies, as well as large conservancy districts deliver the bulk of the secondary water. The total secondary water use for the area is 30,355 acre-feet.

TABLE 24
WEBER COUNTY
Secondary (Non-Potable) Water Use
Within Public Community Water System Service Areas
(Acre-Feet/Year)

WEBER COUNTY WATER SUPPLIER	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Secondary Use
Abbey of the Holy Trinity	200.0	300.0	0.0	0.0	500.0
Bona Vista Water District					
Marriott Irrigation Co.	0.0	50.0	0.0	0.0	50.0
Three Mile Creek Irrigation Co.	150.0	25.0	25.0	0.0	200.0
Weber Box Elder Cons. Dist.	1,275.0	75.0	200.0	0.0	1,550.0
Western Irrigation Co.	250.0	50.0	150.0	100.0	550.0
Casey Acres Water Co.					
Mountain Canal Irrigation	25.0	0.0	0.0	0.0	25.0
Cole Canyon Water Co.	30.0	0.0	0.0	0.0	30.0
Durfee Creek Subdivision	0.0	0.0	0.0	0.0	0.0
Eden Waterworks Co.					
Eden Irrigation Co.	150.0	0.0	0.0	0.0	150.0
Green Hills Country Estates	0.0	0.0	0.0	0.0	0.0
Hooper Water Improvement Dist.					
Hooper Irrigation Co.	600.0	100.0	200.0	0.0	900.0
Roy Water Cons. Dist.	400.0	50.0	50.0	0.0	500.0
Weber Basin Water Cons. Dist.	1,200.0	0.0	0.0	0.0	1,200.0
Wilson Irrigation Co.	20.0	0.0	0.0	0.0	20.0
Huntsville Municipal Water Sys.					
Huntsville South Bench Canal Co.	300.0	40.0	60.0	0.0	400.0
Huntsville Waterworks Corp.	250.0	0.0	50.0	0.0	300.0
Lake View Corporation	0.0	0.0	0.0	0.0	0.0
Liberty Pipeline Company					
Liberty Irrigation Co.	70.0	0.0	5.0	0.0	75.0
Nordic Valley Water Co.	0.0	0.0	0.0	0.0	0.0
North Ogden Municipal Water					
North Ogden Irrigation Co.	400.0	50.0	150.0	0.0	600.0
Weber Box Elder Cons. Dist.	2,100.0	50.0	50.0	0.0	2,200.0

(table continued on next page)

**TABLE 24 (cont.)
WEBER COUNTY
Secondary (Non-Potable) Water Use
Within Public Community Water System Service Areas
(Acre-Feet/Year)**

WEBER COUNTY WATER SUPPLIER	Residential Use	Commercial Use	Institutional Use	Industrial/ Stockwater Use	Total Secondary Use
Ogden City Div. of Water Utilities					
Lynn Irrigation Co.	150.0	50.0	0.0	0.0	200.0
Ogden River Water Users Assoc.	2,000.0	150.0	400.0	50.0	2,600.0
South Ogden Water Cons. Dist.	2,500.0	200.0	500.0	0.0	3,200.0
Weber Basin Water Cons. Dist.	1,500.0	500.0	450.0	0.0	2,450.0
Weber Box Elder Cons. Dist.	800.0	50.0	100.0	50.0	1,000.0
Pineview West Water Co.	35.0	0.0	0.0	0.0	35.0
Pleasant View Culinary Water					
Bona Vista Water Imp. Dist.	300.0	25.0	50.0	0.0	375.0
Pineview Water Systems	200.0	0.0	25.0	0.0	225.0
Pole Patch Water System	0.0	0.0	0.0	0.0	0.0
Riverdale City					
Pineview Water Systems	120.0	0.0	0.0	0.0	120.0
Weber Basin Water Cons. Dist.	50.0	0.0	0.0	0.0	50.0
Roy Municipal Water System					
Roy Water Cons. Dist.	3,500.0	200.0	300.0	0.0	4,000.0
South Ogden City					
South Ogden Water Cons. Dist.	750.0	50.0	200.0	0.0	1,000.0
Weber Basin Water Cons. Dist.	1,250.0	50.0	200.0	0.0	1,500.0
Taylor-West Weber WID					
Hooper Irrigation Co.	500.0	100.0	50.0	0.0	650.0
Weber Basin Water Cons. Dist.	400.0	0.0	0.0	0.0	400.0
Wilson Irrigation Co.	350.0	50.0	100.0	0.0	500.0
Uintah Municipal Water System					
Mountain Stream Irrigation Co.	100.0	20.0	0.0	0.0	120.0
Pioneer Irrigation Co.	20.0	0.0	0.0	0.0	20.0
Uintah Central Irrigation Co.	50.0	10.0	0.0	0.0	60.0
Uintah Highlands Water Imp. Dist.					
Weber Basin Water Cons. Dist.	600.0	50.0	50.0	0.0	700.0
Washington Terrace Muni. Water					
Pineview Water Systems	500.0	20.0	30.0	0.0	550.0
Weber Basin Water Cons. Dist.	500.0	30.0	70.0	0.0	600.0
West Warren Improvement Dist.					
Warren Irrigation Co.	100.0	400.0	0.0	0.0	500.0
Weber Basin Water Cons. Dist.	200.0	0.0	0.0	0.0	200.0
Wolf Creek Water & Sewer Co.					
Wolf Creek Irrigation Co.	50.0	0.0	0.0	0.0	50.0
WEBER COUNTY TOTALS	23,945.0	2,745.0	3,465.0	200.0	30,355.0

Table 25 gives various gpcd use rates for the public community water systems of the county.

**TABLE 25
WEBER COUNTY
Average Per Capita M&I Water Use for Public Community Systems**

CATEGORY	Average Per Capita Use (Ac-Ft/Yr)	Average Per Capita Use (GPCD)
Residential Potable Use	0.140	125
Residential Potable Plus Secondary Use	0.259	231
Total Potable Use	0.191	171
Total Potable Plus Secondary Use	0.342	305

Note: Total Potable categories include residential, commercial, institutional and industrial uses.

Table 26 on the following page gives the water use for public non-community, self-supplied industries, and private domestic water systems. There are several campgrounds, both private and public, summer home developments, private businesses, as well as the two ski resort areas of Powder Mountain and Snow Basin. There are also two self-supplied industries.

An additional large amount of saline water (125,000 acre-feet) is utilized for industrial purposes. However, this water is not included in any reported water use and/or supply numbers. Inclusion of such a large amount of non-potable water would result in disproportionate per capita water use numbers that would not be useful for comparative purposes. Therefore, the collective water use of these systems is about 1,063 acre-feet of potable and 6,517 acre-feet of secondary water.

TABLE 26
WEBER COUNTY
Water Use for Public Non-Community Systems,
Self-Supplied Industries and Private Domestic Systems
(Acre-Feet/Year)

WEBER COUNTY WATER SUPPLIER	POTABLE WATER USAGE (Acre-Feet/Year)					Total Secondary Water Use
	Residential Use	Commercial Use	Institutional Use	Industrial Use	Total Potable Use	
American Legion	0.0	0.2	0.0	0.0	0.2	0.0
Camp Atoka - LDS	0.0	0.0	2.0	0.0	2.0	12.0
Camp Ben Lomond - LDS	0.0	0.0	4.0	0.0	4.0	0.0
Camp Kiesel - BSA	0.0	0.0	10.0	0.0	10.0	0.0
Camp Shawnee - LDS	0.0	0.0	2.0	0.0	2.0	0.0
Camp Valley View Stake - LDS	0.0	0.0	4.0	0.0	4.0	0.0
Causey Estates	50.0	0.0	0.0	0.0	50.0	0.0
Chris Trading Post	0.0	1.0	0.0	0.0	1.0	0.0
Cobble Creek Camp - LDS	0.0	0.0	5.0	0.0	5.0	0.0
Forest Service Facilities:						
Jefferson Hunt Campground	0.0	0.0	0.3	0.0	0.3	0.0
Middle Inlet Picnic Area	0.0	0.0	0.1	0.0	0.1	0.0
South Fork Complex	0.0	0.0	0.4	0.0	0.4	0.0
Upper Meadows Campground	0.0	0.0	0.2	0.0	0.2	0.0
North Fork Learning Center	0.0	0.0	3.0	0.0	3.0	0.0
North Ogden Bi-Centennial	0.0	0.0	0.1	0.0	0.1	0.0
Pine View Summer Homes	10.0	0.0	0.0	0.0	10.0	0.0
Pioneer Bible Camp	0.0	0.0	1.0	0.0	1.0	0.0
Powder Mountain	0.0	6.0	0.0	0.0	6.0	0.0
Snow Basin Ski Area	0.0	35.0	0.0	0.0	35.0	200.0
Spring Mountain	30.0	0.0	0.0	0.0	30.0	5.0
Sunridge Highland Ranch	10.0	0.0	0.0	0.0	10.0	0.0
Weber Co. Memorial Park	0.0	0.0	3.0	0.0	3.0	0.0
Non-Community SubTotals	100.0	42.2	35.1	0.0	177.3	217.0
SELF-SUPPLIED INDUSTRIES ¹	0.0	20.0	0.0	566.1	586.1	6,300.0
PRIVATE DOMESTIC SYSTEMS	300.0	0.0	0.0	0.0	300.0	0.0
WEBER COUNTY TOTALS	400.0	62.2	35.1	566.1	1,063.4	6,517.0

¹ Granite Construction, Great Salt Lake Minerals (an additional 125,000 ac-ft of saline water is used in the basin)

Total M&I potable water use for all water systems in the county is 39,558 acre-feet, while non-potable use is 36,872 acre-feet for a total overall M&I water use of 76,430 acre-feet. With a current population of about 204,150 people, the county has an overall water use rate of 334 gallons per capita per day.

APPENDIX A

**SOUTH OGDEN CITY
WATER USE DATA FORM**

REV 2/15/02 2/17/02

UTAH WATER USE DATA FORM DATA FOR 2001

Information jointly requested by:
Utah Division of Water Resources, 538-7264
Utah Division of Drinking Water, 536-4200; and
Utah Division of Water Rights, 538-7392.

Return completed form to:
Utah Division of Water Rights
PO Box 146300
Salt Lake City, UT 84114-6300

System Name: South Ogden City
Address: 5590 S 600 E
South Ogden, UT 84405

Population Served: 15,556 DEQ#: 29017
County: Weber
E-Mail Address:

Contact Person: Bruce Miller
Form filled out by: Bob Shafer

Phone Number: (801) 479-7130
Phone Number: SAME

I. STORAGE INVENTORY Total treated storage capacity: 5 Million in gallons. Number of Tanks: 5

II. SOURCE INVENTORY

1 Source Name: Strong & Burch Creek Can Type: Location: Sec 02, TSN, R1W, S186W WR Number: 35-8100 35-8132 35-8107 35-8092 35-5633
Method of Measurement: Master Meter, Estimate, Other
Units of Measurement: ACRE FT

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
80.00	70.00	50.51	80.00	102.37	100.01	80.00	80.00	70.00	40.00	20.00	38.94	811.83 A.F.T.

2 Source Name: Weber Basin W.C.D.
Method of Measurement: Master Meter, Estimate, Other
Units of Measurement: ACRE FT

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
51.40	48.94	70.37	45.43	45.65	58.95	73.37	82.89	70.84	95.00	95.07	87.86	825.66 A.F.T.
1637.49 A.F.T. TOTAL												

3 Source Name: Well (8")
Method of Measurement: Master Meter, Estimate, Other
Units of Measurement:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL

RECEIVED

FEB 14 2002

WATER RIGHTS
SALT LAKE

** If you are using other sources which are not shown above, please enter the appropriate data in the space provided below. **

4 Source Name: _____ Type: _____ Location: _____ WR Number: _____
 Method of Measurement: [] Master Meter, [] Estimate, [] Other _____
 Units of Measurement: _____

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL

5 Source Name: _____ Type: _____ Location: _____ WR Number: _____
 Method of Measurement: [] Master Meter, [] Estimate, [] Other _____
 Units of Measurement: _____

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL

6 Source Name: _____ Type: _____ Location: _____ WR Number: _____
 Method of Measurement: [] Master Meter, [] Estimate, [] Other _____
 Units of Measurement: _____

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL

SOURCE COMMENTS: Water supply conditions were: [] Above normal, [] Below normal

III. WATER USE BREAKDOWN (Please use sum of the readings from individual meters, not master meter readings at source, if quantities are not known. Please estimate. See instructions for definition of uses shown in bold.)

Units of Measurement: _____

Residential: Annual quantity of water delivered for residential purposes 85% Total number of residential connections 4654
 Meter readings at individual connections or Estimated ()
 Number of connections serving multiple units (apartments) from a single connection 0 Units per connection (avg) _____

Commercial: Annual quantity of water delivered for commercial purposes 10% Total number of commercial connections 189
 Meter readings at individual connections or Estimated ()

Industrial: Annual quantity of water delivered for industrial purposes 4% Total number of industrial connections 0
 Meter readings at individual connections () or Estimated ()

Institutional: Annual quantity of water delivered for institutional purposes _____ Total number of institutional connections 13
 Meter readings at individual connections or Estimated ()

Stockwatering: Annual quantity of water delivered for stockwatering purposes _____ Total number of stockwatering connections 0
 Meter readings at individual connections () or Estimated ()

Wholesale: Annual quantity of water delivered for wholesale purposes _____ Please attach a listing of those supplied: _____

Other Uses: Annual quantity of water delivered for other purposes 1% Total number of other connections 1
 Meter readings at individual connections or Estimated ()

Unmetered: Annual estimate of water delivered by unmetered connections _____ Total number of unmetered connections _____
 Unmetered connections used for _____

Total annual quantity of water delivered for all purposes 100% Total number of all connections 4857
 Of this total, how many connections are active _____

IV. IRRIGATION SYSTEM (Separate lawn and garden irrigation system, whether controlled by the drinking water supplier or not)

Is any of your area served by a separate ditch or pipe fed irrigation water system? Yes, () No If Yes, please provide the following information:
 What percent of your customers are served by a separate irrigation system? 95
 Of these customers, what percent are served by ditch? 0
 What percent are served by pressurized pipe? 95
 Do you operate and maintain the separate lawn and garden irrigation water system? () Yes, () No
 If the separate irrigation system is operated by other entities, please give name of companies, contact person & phone number:
Five View Water TERRY LAMDRIGHT 601-6555

Weber Basin Water Scott Paxman 771-1677

APPENDIX B

2005 WEBER RIVER BASIN

M&I DEPLETIONS

2003 WEBER RIVER BASIN MUNICIPAL AND INDUSTRIAL DEPLETION TABLE
(Acre-Feet/Year)

WATER SUPPLIER	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Deliveries	Total Depletions
Davis County																				
Bountiful City	2,364.3	1,407.2	568.5	693.8	92.7	5,126.5	9,340.0	3,050.5	11,416.0	2,317.0	445.7	136.0	0.0	2,898.7	0.0	2,840.7	3,805.3	6,646.0	14,466.5	7,820.5
Centerville City	1,327.5	50.6	234.2	130.6	0.0	1,743.0	3,225.0	1,541.0	3,427.0	1,301.0	183.6	25.6	0.0	1,510.2	0.0	1,480.0	1,142.3	2,622.3	4,968.0	2,345.7
Clearfield City	1,182.1	1,474.8	532.5	346.1	2,599.5	6,135.0	0.0	4,276.8	1,858.2	1,158.5	417.5	67.8	0.0	1,643.8	0.0	1,610.9	619.4	2,230.3	6,135.0	3,904.7
Clinton City	1,242.2	0.0	50.8	23.0	0.0	1,316.0	2,500.0	1,287.5	2,528.5	1,217.4	39.8	4.5	0.0	1,261.7	0.0	1,236.5	842.8	2,079.3	3,816.0	1,736.7
Farmington City	1,100.9	105.9	377.7	94.5	0.0	1,679.0	2,650.0	1,422.0	2,907.0	1,078.9	296.1	18.5	0.0	1,393.5	0.0	1,365.7	969.0	2,334.7	4,329.0	1,994.3
Fruit Heights	309.0	52.3	8.4	4.2	0.0	374.0	805.0	316.6	862.4	302.8	6.6	0.8	0.0	310.3	0.0	304.1	287.5	591.5	1,179.0	587.5
Hill Air Force Base	0.0	0.0	0.0	3,039.0	0.0	3,039.0	3,075.0	607.8	5,506.2	0.0	0.0	595.6	0.0	595.6	0.0	583.7	1,835.4	2,419.1	6,114.0	3,694.9
Kaysville City	1,602.8	217.9	375.4	56.3	37.5	2,290.0	5,100.0	1,951.9	5,438.1	1,570.8	294.3	11.0	0.0	1,876.1	0.0	1,838.6	1,812.7	3,651.3	7,390.0	3,738.7
Layton City	4,103.7	3,137.7	2,393.0	202.6	0.0	9,837.0	2,360.0	6,058.6	6,138.4	4,021.6	1,876.1	39.7	0.0	5,937.4	0.0	5,818.7	2,046.1	7,864.8	12,197.0	4,332.2
Mutton Hollow Impr. District	57.1	147.8	0.0	0.1	0.0	205.0	270.0	57.1	417.9	56.0	0.0	0.0	0.0	56.0	0.0	54.9	139.3	194.2	475.0	280.8
North Salt Lake	466.0	269.6	1,124.3	608.8	310.3	2,779.0	425.0	1,797.5	1,406.5	456.7	881.5	119.3	0.0	1,457.5	0.0	1,428.3	468.8	1,897.1	3,204.0	1,306.9
South Davis Water Imp. District	410.0	386.3	134.7	13.9	0.0	945.0	2,020.0	520.6	2,444.4	401.8	105.6	2.7	0.0	510.2	0.0	500.0	814.8	1,314.8	2,965.0	1,650.2
South Weber City	179.0	78.9	1.6	11.3	136.2	407.0	1,400.0	318.8	1,488.2	175.4	1.2	2.2	0.0	178.9	0.0	175.3	496.1	671.4	1,807.0	1,135.6
Sunset Municipal Water System	318.7	482.4	71.0	141.9	0.0	1,014.0	0.0	403.9	610.1	312.3	55.7	27.8	0.0	395.8	0.0	387.9	203.4	591.2	1,014.0	422.8
Syracuse Water System	885.8	20.4	48.2	9.6	0.0	964.0	1,920.0	926.3	1,957.7	868.1	37.8	1.9	0.0	907.7	0.0	889.6	652.6	1,542.2	2,884.0	1,341.8
West Bountiful Water System	335.4	273.3	197.6	192.7	0.0	999.0	1,005.0	532.0	1,472.0	328.7	154.9	37.8	0.0	521.4	0.0	510.9	490.7	1,001.6	2,004.0	1,002.4
West Point Water System	449.0	0.0	40.9	5.1	0.0	495.0	1,000.0	482.7	1,012.3	440.0	32.1	1.0	0.0	473.1	0.0	463.6	337.4	801.0	1,495.0	694.0
Woods Cross Water System	728.4	32.6	244.5	25.2	369.4	1,400.0	1,410.0	1,298.3	1,511.7	713.8	191.7	4.9	0.0	910.4	0.0	892.2	503.9	1,396.1	2,810.0	1,413.9
TOTAL COMMUNITY SYSTEMS	17,061.9	8,137.8	6,403.4	5,598.8	3,545.6	40,747.5	38,505.0	26,850.0	52,402.5	16,720.7	5,020.2	1,097.4	0.0	22,838.3	0.0	22,381.5	17,467.5	39,849.0	79,252.5	39,403.5
Non-community Systems	0.0	0.0	391.7	25.2	1,403.2	1,820.1	186.9	1,721.6	285.4	0.0	307.1	4.9	0.0	312.0	0.0	296.4	95.1	391.6	2,007.0	1,615.4
Self-Supplied Industries	0.0	0.0	0.0	0.0	1,535.2	1,535.2	0.0	1,535.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,535.2	1,535.2
Private Domestic Systems	26.7	53.3	0.0	0.0	0.0	80.0	0.0	26.7	53.3	26.2	0.0	0.0	0.0	26.2	0.0	24.9	17.8	42.6	80.0	37.4
COUNTY TOTALS	17,088.6	8,191.1	6,795.1	5,624.0	6,484.0	44,182.8	38,691.9	30,133.5	52,741.2	16,746.9	5,327.3	1,102.3	0.0	23,176.5	0.0	22,702.8	17,580.4	40,283.2	82,874.7	42,591.5

Morgan County																				
Central Enterprise Water Association	23.5	22.2	0.0	0.0	0.0	45.7	30.0	23.5	52.2	23.0	0.0	0.0	0.0	23.0	0.0	21.9	17.4	39.3	75.7	36.4
Croyden Pipeline Company	10.6	7.4	0.0	0.0	0.0	18.0	15.0	10.6	22.4	10.4	0.0	0.0	0.0	10.4	0.0	9.9	7.5	17.3	33.0	15.7
Highlands Water Company	76.7	106.7	4.9	5.5	0.0	193.8	0.0	81.7	112.1	75.1	3.8	1.1	0.0	80.0	2.3	76.1	37.4	113.5	193.8	80.3
Monte Verde Water Association	8.0	25.0	0.0	0.0	0.0	33.0	0.0	8.0	25.0	7.8	0.0	0.0	0.0	7.8	0.2	7.4	8.3	15.7	33.0	17.2
Morgan City Corporation	154.3	247.2	43.6	189.9	13.1	648.1	350.0	240.3	757.8	151.2	34.2	37.2	0.0	222.6	15.1	203.1	252.6	455.7	998.1	542.4
Mt. Green Subdivision Water Assc	7.3	11.5	0.0	0.0	0.0	18.9	0.0	7.3	11.5	7.2	0.0	0.0	0.0	7.2	0.1	6.9	3.8	10.7	18.9	8.1
Peterson Pipeline Company	29.7	48.3	0.4	0.0	1.3	79.7	65.0	31.3	113.4	29.1	0.3	0.0	0.0	29.4	0.0	27.9	37.8	65.7	144.7	78.9
Richville Pipeline Company	12.8	4.1	0.0	4.7	0.0	21.7	40.0	13.8	47.9	12.6	0.0	0.9	0.0	13.5	0.0	12.8	16.0	28.8	61.7	32.9
S. Robinson Spring Water Users	7.4	22.3	0.0	0.0	0.0	29.7	0.0	7.4	22.3	7.3	0.0	0.0	0.0	7.3	0.2	7.0	7.4	14.4	29.7	15.3
West Enterprise Water Association	2.4	10.0	0.0	0.0	0.0	12.4	0.0	2.4	10.0	2.3	0.0	0.0	0.0	2.3	0.0	2.2	3.3	5.6	12.4	6.8
Wilkinson Water Company	73.0	98.7	4.2	0.0	0.0	175.9	0.0	76.4	99.5	71.5	3.3	0.0	0.0	74.9	2.1	71.2	33.2	104.4	175.9	71.5
TOTAL COMMUNITY SYSTEMS	405.7	603.4	53.2	200.1	14.4	1,276.7	500.0	502.6	1,274.1	397.6	41.7	39.2	0.0	478.5	20.1	446.4	424.7	871.1	1,776.7	905.6
Non-community systems	0.0	0.0	30.7	24.0	0.0	54.7	380.0	29.4	405.3	0.0	24.1	4.7	0.0	28.8	0.0	27.3	135.1	162.4	434.7	272.3
Self-Supplied Industries	0.0	0.0	0.0	0.0	40.0	40.0	240.0	280.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	280.0	280.0
Private Domestic Systems	133.0	267.0	0.0	0.0	0.0	400.0	0.0	133.0	267.0	130.3	0.0	0.0	0.0	130.3	0.0	123.8	89.0	212.8	400.0	187.2
COUNTY TOTALS	538.7	870.4	83.9	224.1	54.4	1,771.4	1,120.0	945.0	1,946.4	527.9	65.8	43.9	0.0	637.6	20.1	597.6	648.8	1,246.4	2,891.4	1,645.1

Summit County																				
Bridge Hollow Water Assoc.	4.4	4.4	0.0	0.0	0.0	8.8	0.0	4.4	4.4	4.3	0.0	0.0	0.0	4.3	0.0	4.1	1.5	5.6	8.8	3.2
Cluff Ward Pipeline Co.	8.2	10.5	0.0	0.0	0.0	18.7	10.0	8.2	20.5	8.0	0.0	0.0	0.0	8.0	0.0	7.6	14.4	14.4	28.7	14.2
Coalville City Water System	72.8	55.3	23.2	17.5	10.8	179.6	150.0	105.7	224.0	71.4	18.2	3.4	0.0	93.0	0.0	91.1	74.7	165.8	329.6	163.8
Community Water System	77.6	41.1	40.8	0.0	0.0	159.6	0.0	110.2	49.3	76.0	32.0	0.0	0.0	108.0	0.0	105.9	16.4	122.3	159.6	37.2
Echo Mutual Water System	5.3	4.5	6.7	3.0	0.0	19.5	16.0	11.3	24.2	5.2	5.3	0.6	0.0	11.0	0.0	10.5	8.1	18.6	35.5	16.9
Gorgoza Mutual Water Co.	328.6	385.1	13.4	53.4	0.0	780.6	0.0	350.0	430.5	322.1	10.5	10.5	0.0	343.0	0.0	336.2	143.5	479.7	780.6	300.9
Henefer Town	51.3	130.7	9.6	14.4	1.9	208.0	60.0	63.8	204.2	50.3	7.5	2.8	0.0	60.7	27.8	31.7	68.1	99.8	268.0	168.2
High Valley Water Co.	32.0	43.0	0.0	0.0	0.0	75.0	0.0	32.0	43.0	31.4	0.0	0.0	0.0	31.4	0.0	29.8	14.3	44.1	75.0	30.9
Hoytsville Pipeline Co.	28.3	40.8	9.0	4.5	0.0	82.6	40.0	36.4	86.2	27.7	7.1	0.9	0.0	35.7	0.0	33.9	28.7	62.6	122.6	60.0
Kamas City Water System	166.4	373.5	48.5	13.0	2.2	603.6	0.0	210.0	393.6	163.0	38.0	2.6	0.0	203.6	31.6	168.0	131.2	299.2	603.6	304.4
Marion Waterworks Co	18.6	39.5	11.6	0.0	0.0	69.7	20.0	27.9	61.8	18.2	9.1	0.0	0.0	27.3	0.0	25.9	20.6	46.5	89.7	43.1
Mountain Regional SSD	618.9	803.0	64.8	17.6	5.8	1,510.1	20.0	680.0	850.0	606.5	50.8	3.4	0.0	660.8	0.0	647.6	283.3	930.		

2003 WEBER RIVER BASIN MUNICIPAL AND INDUSTRIAL DEPLETION TABLE - cont.

(Acre-Feet/Year)

WATER SUPPLIER	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Deliveries	Total Depletions
Weber																				
Abbey of the Holy Trinity	0.0	0.0	7.2	5.2	0.0	12.4	500.0	6.8	505.6	0.0	5.7	1.0	0.0	6.7	0.0	6.3	168.5	174.9	512.4	337.5
Bona Vista Water District	839.4	1,184.1	374.7	56.8	1,085.1	3,540.0	2,350.0	2,235.6	3,654.4	822.6	293.7	11.1	0.0	1,127.5	0.0	1,104.9	1,218.1	2,323.1	5,890.0	3,566.9
Casey Acres Water Co.	3.0	0.0	0.0	0.0	0.0	3.0	25.0	3.0	25.0	2.9	0.0	0.0	0.0	2.9	0.0	2.8	8.3	11.1	28.0	16.9
Cole Canyon Water Co.	6.3	12.8	0.0	10.9	0.0	30.0	30.0	8.4	51.6	6.1	0.0	2.1	0.0	8.3	0.0	7.9	17.2	25.0	60.0	35.0
Durfee Creek Subdivision	3.1	5.9	0.0	0.0	0.0	9.0	0.0	3.1	5.9	3.1	0.0	0.0	0.0	3.1	0.0	2.9	2.0	4.9	9.0	4.1
Eden Waterworks System	82.2	72.7	16.2	7.9	0.0	179.0	150.0	96.7	232.3	80.5	12.7	1.6	0.0	94.8	0.0	90.0	77.4	167.5	329.0	161.5
Green Hills Country Estates	26.9	14.4	0.0	0.0	0.0	41.3	0.0	26.9	14.4	26.4	0.0	0.0	0.0	26.4	0.0	25.1	4.8	29.9	41.3	11.4
Hooper Water Improvement Dist.	837.3	382.1	40.7	94.9	0.0	1,355.0	2,620.0	888.8	3,086.1	820.6	31.9	18.6	0.0	871.0	0.0	845.8	1,028.7	1,874.5	3,975.0	2,100.5
Huntsville Municipal Water Sys.	54.4	97.7	5.2	7.5	1.1	166.0	700.0	61.2	804.8	53.4	4.1	1.5	0.0	58.9	0.0	56.0	268.3	324.2	866.0	541.8
Lake View Corporation	3.9	6.1	0.0	1.0	0.0	11.0	0.0	4.1	6.9	3.9	0.0	0.2	0.0	4.1	0.0	3.8	2.3	6.1	11.0	4.9
Liberty Pipeline Company	148.4	227.3	0.0	6.3	0.0	382.0	75.0	149.7	307.3	145.4	0.0	1.2	0.0	146.7	0.0	139.3	102.4	241.8	457.0	215.2
Nordic Mountain Water Co.	41.2	10.3	2.1	0.0	0.0	53.5	0.0	42.8	10.7	40.3	1.6	0.0	0.0	41.9	0.0	39.8	3.6	43.4	53.5	10.1
North Ogden Municipal Water	1,168.3	84.0	50.7	26.1	0.0	1,329.0	2,800.0	1,214.0	2,915.0	1,144.9	39.7	5.1	0.0	1,189.8	0.0	1,166.0	971.7	2,137.6	4,129.0	1,991.4
Ogden City Div. of Water Utilities	6,195.0	8,234.3	962.0	4,328.8	962.0	20,682.0	9,450.0	8,792.3	21,339.7	6,071.1	754.2	848.4	0.0	7,673.7	0.0	7,520.2	7,113.2	14,633.5	30,132.0	15,498.5
Pineview West Water Co.	4.0	6.0	0.0	0.0	0.0	10.0	35.0	4.0	41.0	3.9	0.0	0.0	0.0	3.9	0.0	3.7	13.7	17.4	45.0	27.6
Pleasant View Culinary Water	229.6	155.7	6.2	12.5	0.0	404.0	600.0	237.1	766.9	225.0	4.9	2.4	0.0	232.3	0.0	227.7	255.6	483.3	1,004.0	520.7
Pole Patch Water System	5.8	34.2	0.0	0.0	0.0	40.0	0.0	5.8	34.2	5.7	0.0	0.0	0.0	5.7	0.0	5.6	11.4	17.0	40.0	23.0
Riverdale City	609.0	1,132.0	412.4	154.4	15.1	2,323.0	170.0	984.9	1,508.1	596.9	323.3	30.3	0.0	950.5	0.0	931.5	502.7	1,434.2	2,493.0	1,058.8
Roy Municipal Water System	2,163.4	295.8	325.7	532.1	0.0	3,317.0	4,000.0	2,530.3	4,786.7	2,120.1	255.3	104.3	0.0	2,479.7	0.0	2,430.1	1,595.6	4,025.7	7,317.0	3,291.3
South Ogden City	1,260.8	201.7	172.3	85.1	0.0	1,720.0	2,500.0	1,415.7	2,804.3	1,235.6	135.1	16.7	0.0	1,387.4	0.0	1,359.7	934.8	2,294.4	4,220.0	1,925.6
Taylor-West Weber WID	373.9	499.8	2.2	29.2	96.8	1,002.0	1,550.0	478.4	2,073.6	366.4	1.8	5.7	0.0	373.9	0.0	363.1	691.2	1,054.3	2,552.0	1,497.7
Uintah Highlands Imp. Dist.	184.5	14.0	10.0	19.5	0.0	228.0	200.0	196.4	231.6	180.8	7.9	3.8	0.0	192.5	0.0	188.6	77.2	265.8	428.0	162.2
Uintah Municipal Water System	87.9	181.1	5.0	40.0	0.0	314.0	700.0	99.9	914.1	86.1	3.9	7.8	0.0	97.9	0.0	95.9	304.7	400.6	1,014.0	613.4
Washington Terrace Muni. Water	686.4	159.3	52.5	84.0	17.8	1,000.0	1,150.0	763.0	1,387.0	672.7	41.1	16.5	0.0	730.3	0.0	715.7	462.3	1,178.0	2,150.0	972.0
West Warren Improvement Dist.	61.7	101.0	20.1	10.1	20.1	213.0	700.0	100.0	813.0	60.5	15.8	2.0	0.0	78.2	0.0	74.3	271.0	345.3	913.0	567.7
Wolf Creek Water & Sewer Co.	43.6	49.2	27.9	9.3	0.0	130.0	50.0	67.8	112.2	42.8	21.8	1.8	0.0	66.4	0.0	63.1	37.4	100.5	180.0	79.5
TOTAL COMMUNITY SYSTEMS	15,120.1	13,161.4	2,493.1	5,521.5	2,198.0	38,494.2	30,355.0	20,416.9	48,432.2	14,817.7	1,954.6	1,082.2	0.0	17,854.5	0.0	17,469.9	16,144.1	33,614.0	68,849.2	35,235.1
Non-community Systems	33.0	67.0	42.2	35.1	0.0	177.3	217.0	73.8	320.5	32.3	33.1	6.9	0.0	72.3	0.0	68.7	106.8	175.5	394.3	218.8
Self-Supplied Industries	0.0	0.0	20.0	0.0	566.1	586.1	6,300.0	6,882.1	4.0	0.0	15.7	0.0	0.0	15.7	0.0	14.9	1.3	16.2	6,886.1	6,869.9
Private Domestic Systems	100.0	200.0	0.0	0.0	0.0	300.0	0.0	100.0	200.0	98.0	0.0	0.0	0.0	98.0	0.0	93.1	66.7	159.8	300.0	140.2
COUNTY TOTALS	15,253.1	13,428.4	2,555.3	5,556.6	2,764.1	39,557.6	36,872.0	27,472.8	48,956.8	14,948.0	2,003.4	1,089.1	0.0	18,040.5	0.0	17,646.6	16,318.9	33,965.5	76,429.6	42,464.0

	Potable Residential Indoor Use	Potable Residential Outdoor Use	Potable Commercial Use	Potable Institutional Use	Potable Industrial/ Stockwater Use	Total Potable Use	Total Secondary Water Use	Total Indoor Use	Total Outdoor Use	Residential Indoor Return Flow	Commercial Indoor Return Flow	Institutional Indoor Return Flow	Industrial/ Stockwater Indoor Return Flow	Total Indoor Return Flow To Treatment Facility	Pond Evaporation	Treatment Facility Outflow (Indoor Return Flow)	Outdoor Return Flow	Total Return Flow	Total Deliveries	Total Depletions
BASIN COMMUNITY SYSTEMS	35,468.2	26,987.3	10,464.4	11,697.5	5,778.7	90,396.0	71,088.0	51,957.9	109,526.1	34,758.9	8,204.1	2,292.7	0.0	45,255.6	89.0	44,225.8	36,508.7	80,734.5	161,484.0	80,749.5
Total Non-Community Systems	45.2	91.3	468.9	103.9	1,403.2	2,112.5	933.9	1,844.3	1,202.1	44.3	367.6	20.4	0.0	432.3	0.0	410.7	400.7	811.4	3,046.4	2,235.0
Self-Supplied Industries	0.0	0.0	20.0	0.0	2,142.3	2,162.3	6,540.0	8,698.3	4.0	0.0	15.7	0.0	0.0	15.7	0.0	14.9	1.3	16.2	8,702.3	8,686.1
Private Domestic Systems	309.7	620.3	0.0	0.0	0.0	930.0	0.0	309.7	620.3	303.5	0.0	0.0	0.0	303.5	0.0	288.3	206.8	495.1	930.0	434.9
WEBER RIVER BASIN TOTALS	35,823.1	27,698.9	10,953.3	11,801.4	9,324.2	95,600.8	78,561.9	62,810.2	111,352.5	35,106.7	8,587.4	2,313.1	0.0	46,007.1	89.0	44,939.7	37,117.5	82,057.2	174,162.7	92,105.5

Color Code:

- Potable Use Data
- Secondary Use Data
- Indoor/Outdoor Use Data
- Return Flow Data
- Diversion Data
- Depletion Data

Treatment Facility Key: Regular = Sewage Treatment Plant
Bold = Facultative Ponds/ Lagoons
Bold/Italics = Septic System/Tanks