

# CONSERVATION PLAN



**MAPLE GROVE  
WATER TREATMENT PLANT**



**LEAK SURVEY**



**ORION METER/MONITORING**

**THE CONSOLIDATED MUTUAL WATER COMPANY**

# **USE WATER WISELY**

## **A WATER CONSERVATION PLAN FOR THE CONSOLIDATED MUTUAL WATER COMPANY**

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# USE WATER WISELY

## A WATER CONSERVATION PLAN FOR THE CONSOLIDATED MUTUAL WATER COMPANY

### SECTION 1

**1.1 HISTORY:** The Consolidated Mutual Water Company (“Consolidated”) was incorporated in 1926 and has been serving its stockholders/users on the west side of the Denver metropolitan area ever since. Consolidated was originally created as, and still is, a mutually owned non-profit corporation. As such, it does not have the same powers as a local governmental entity to create and enforce ordinances, but it does have Articles of Incorporation and By-Laws to guide how it sets policies and how it does business. Consolidated, through its Board of Directors can establish rules, regulations and requirements as a condition of providing water service.

Consolidated holds an Annual Meeting open to all stockholders of record in May of each year and is governed by a 5 person Board of Directors.

**1.2 TWO WATER SYSTEMS:** Consolidated owns and operates two completely separate water systems; one being the “Denver System” and the other being the “Maple Grove System.” Consolidated has had a Master Meter Distributor’s contract with the Denver Board of Water Commissioners (Denver Water) since the 1930’s and the Maple Grove System has been in existence since 1958. Consolidated distributes about 12,500 acre feet of water annually to its stockholders/users with about 70% of this amount being treated water purchased from Denver Water and the balance coming from the Maple Grove System.

The Maple Grove System derives raw water primarily from water rights that Consolidated owns in Clear Creek. Consolidated has its own Water Treatment Plant and Distribution System that is completely independent of the Denver System.

**1.3 SOURCE OF SUPPLY:** Approximately 70% of the water distributed annually is treated water purchased from Denver Water under a Distributor’s Master Meter Contract.

The Maple Grove System is supplied from water rights represented by Consolidated’s ownership in The Agricultural Ditch and Reservoir Company, The Lee Stewart and Eskins Ditch, the Rocky Mountain Water Company and The Golden Canal and Reservoir Company, all of which divert water from headgates located on Clear Creek. These water rights represent an average annual yield of about 6,300 acre feet.

Below is a summary of Consolidated's annual diversions between 1995 and 2008:

<b>WATER RIGHTS</b>		
<b>DIVERSIONS ANNUALLY</b>		
<b>YEAR</b>	<b>A.F. DIVERTED</b>	<b>3/4" EQ'S</b>
1995	4012	6660
1996	4534	6764
1997	4017	6923
1998	4249	6980
1999	4115	7039
2000	4605	7052
2001	4053	7063
2002	2800	7225
2003	3255	7282
2004	3057	7392
2005	4027	7344
2006	4175	7352
2007	4094	7390
2008	4253	7491

Consolidated owns and operates five (5) raw water storage reservoirs. The Maple Grove Reservoir located at 12700 West 27<sup>th</sup> Avenue has a capacity of 1,070 acre feet. The Fairmount Reservoir is located at West 44<sup>th</sup> Avenue and McIntyre Street and has a capacity of 980 acre feet. The Welton Reservoir is located at 8801 Indiana Street and has a capacity of 9,804 acre feet. The Smart Reservoir is located northeast of the intersection of Highway 93 and Highway 72 and the Consolidated's ownership in this reservoir is about 623 acre feet.

Perry Pit East is Consolidated's only gravel pit storage reservoir located on the west side of the South Platte River just south of Fort Lupton, Colorado. Water stored in this reservoir can be used for augmentation requirements and current and future leases. The pit is currently being mined for aggregate by Asphalt Paving Company. About 500 acre feet of storage is currently available and after the mining is completed in the next 5 to 10 years, 1,200 acre feet of storage will be available.

Consolidated has an Aquifer Storage and Recovery Project in place around the Maple Grove Reservoir and injects treated water into the Lower Arapahoe Aquifer beginning April 1 to October 1 of each year. From October 1 through March 31, Consolidated pumps the water back out of the Aquifer into storage at our Maple Grove Reservoir, to help offset the winter demand. The underground storage is unique because as the water is stored there are no evaporative losses.



## **SERVICE AREA AND POPULATION**

Consolidated's service area is located west of the Denver Metro area and encompasses approximately 40 square miles, generally from the foothills near the city of Golden east to Sheridan Boulevard and from I-70 South to Ohio Avenue. Consolidated's boundaries lie mainly in the City of Lakewood, Pleasant View and Unincorporated Jefferson County with a small portion in the City of Wheat Ridge and including the new Soltera Development located south of Alameda Parkway and east of C-470.

The population for Consolidated is difficult to determine because it serves within many different governing entities. Census data can be obtained for counties and municipalities, even regions, but not for private companies. To determine population growth for Consolidated, the table below shows the number of  $\frac{3}{4}$ " equivalent taps active by year and it is estimated that three (3) people live in each household:

YEAR	3/4" EQUIVALENTS	ESTIMATED POPULATION
1995	24,843	74,529
1996	24,993	74,979
1997	25,273	75,819
1998	25,452	76,356
1999	25,576	76,728
2000	25,774	77,322
2001	25,942	77,826
2002	26,176	78,528
2003	26,275	78,825
2004	26,283	78,849
2005	26,330	78,990
2006	26,354	79,062
2007	26,302	78,906
2008	26,399	79,197

The above chart depicts a growth average of less than 6% between 1995 and 2008 or an increase of  $111 \frac{3}{4}$ " equivalents per year, which equates to 55 acre feet of demand per year using the .5 acre feet per year to serve one (1)  $\frac{3}{4}$ " equivalent. With the Denver portion of our system, which is almost built out and the Soltera Development on the Maple Grove system, we can anticipate a continued growth of less than 6% per year over the next 20 years, which could result in additional demand of 1,100 acre feet over the next 20 years, 10% of this estimated demand can be met, in past, through our aggressive leak detection program which has yielded a savings of 100 acre feet annually over the past five years. Please refer to Section 4.2.6.

**1.4 SYSTEM LIMITATIONS:** The limitations affecting the Denver System is set forth in the Distributor's Contract whereby Consolidated's service area is finite and defined by legal description. Denver Water is contractually obligated to provide water service within the defined area and Consolidated cannot expand the Denver System service area. Since the majority of this area is built out, the

future demand for water is about 300 acre feet. Much of the development in the Denver System has been urban renewal which does not result in significant additional demand.

All the raw water resources for the Maple Grove System have been allocated to various properties, causing the Board to adopt a "Water Supply Policy". To summarize, the Policy basically sets the limits of the area to be served by the Maple Grove System and any request to extend water service beyond those limits requires that an adequate water supply be provided to meet the demands of the proposed development.

Water treatment and distribution on the Denver System is in good condition and there are no capacity issues affecting that System.

Consolidated built a new 15 million gallon per day ultra filtration Water Treatment Plant on the Maple Grove System, which was completed in 2009 and is expandable to 18 million gallons per day as needed. This facility replaced an 11 million gallon per day conventional filter plant built in 1958. The new plant is more efficient and less than 1% of the water used in the treatment process is lost as opposed to a 20% loss from the old conventional plant, representing an annual savings of 190 acre feet assuming Consolidated's Maple Grove System consumption patterns resemble the past five (5) years.

**1.5 WATER RATES:** Consolidated currently uses a fixed block rate structure that is designed to meet operating and maintenance expenses and debt service requirements. As previously noted Consolidated is a mutually owned non-profit Colorado corporation and does not have different classes of stockholders. Since the 2002 drought, Consolidated's Board of Directors has determined that a tiered rate structure does not allow all of its stockholders the ability to use the water they need on a fair and equitable basis; however, Consolidated will consider a tiered rate structure for the purpose of water conservation at the time of its annual water rate study. Within this annual water rate study, the Board will determine whether or not such pricing structure generates a savings in water consumption and what effect a tiered rate structure may have on water demand which impacts revenue. Consolidated has already experienced a reduction in revenue required to meet its operational needs due in part to a reduction in demand since the 2002 drought and despite a steady growth of new tap sales.

Water use for every active account has been metered since the tap was installed and service was activated dating back 60 to 70 years. The rates are based on meter size, not the size of the tap, however practically speaking; the two are generally the same size. There are rare exceptions to this, but not enough to impact this discussion.

The Board reviews the water rate structure annually and makes adjustments as necessary to meet expenses. The cost of buying treated water from Denver Water is about 40% of the annual budget, so when Denver Water increases water rates, Consolidated's rates increase as well. For example, if Denver Water

increases their rate to Consolidated by 8%, Consolidated's rate increase is about 4% to its stockholders. For the last 10 to 15 years, Consolidated's rate increases, exclusive of Denver Water, have increased in the range of a modest 3% to 5%. The schedule below illustrates Consolidated's bi-monthly fixed customer service charge, assessment for all water delivered and stock ownership requirements based upon meter size for all billings on and after February 1, 2010:

Meter Size	Bi-Monthly Customer Fixed Service Charge		Minimum Shares Required
	Current	(Previous)	
5/8" Displacement	\$31.50	(\$31.30)	5
3/4" Displacement	39.00	(38.70)	5
1" Displacement	54.00	(53.50)	10
1-1/2" Displacement	91.50	(90.50)	15
2" Compound	136.50	(134.90)	25
2" Turbine	166.50	(164.50)	30
3" Compound	256.50	(253.30)	50
3" Turbine	354.00	(349.50)	65
4" Compound	391.50	(386.50)	75
4" Turbine	954.00	(941.50)	180
6" Compound	766.50	(756.50)	145
6" Turbine	1,891.50	(1,866.50)	360
8" Compound	1,216.50	(1,200.50)	230
8" Turbine	3,316.50	(3,272.50)	630

All water delivered is charged at the rate of \$4.20 per 1,000 gallons (previous rate was \$4.10).

For many years Consolidated's water rate structure provided for a gallonage allowance for each meter size. For example, a stockholder with a 3/4 inch meter would receive 4,500 gallons each month included in the minimum bill. In light of encouraging water conservation, the Board determined this was sending the wrong message and changed the billing process so that every gallon used is paid for directly.

Consolidated can only provide water service to its stockholders, so each user is required to purchase a certain amount of Capital Stock (shares) based on the size of the meter serving the property. The above schedule shows the current share requirements for each meter size. If the property to be served is a multifamily development, then the Capital Stock is based on the greater of the number of shares required for the meter size or the number of units being served by that meter.

Service within the Denver Water contract service area is subject to Denver Water's System Development Charge (SDC) in addition to the Consolidated's Capital Stock purchase requirements.

Service within the Maple Grove service area is subject to a Water Development Fee (WDF) in addition to the Capital Stock requirements. The WDF is based on the stock requirements and is designed to help offset the cost of obtaining, storing and transporting the raw water for the proposed development.

Consolidated's Board of Directors has defined the limits of the Maple Grove System service area and has determined that any proposed service outside of those limits will require that the owner/developer to provide Consolidated water rights of sufficient quality and quantity to meet the water supply needs of the development as described in the "Water Supply Policy".

**1.6 POLICIES AND PLANNING:** Every domestic tap on both systems is metered and detection meters are on all fire line connections. Meters are required for all construction water pulled from fire hydrants throughout the system and an annual water audit is conducted on both systems.

Consolidated's annual budget provides for on-going water conservation education and continues to fund the leak detection program. There is one full time employee dedicated to this program and the equipment is well maintained and upgraded as needed to assure that the best technology in the leak detection field is being utilized.

**1.7 WATER CONSERVATION PRACTICES IN PLACE:** Consolidated's current conservation practices include the following:

- a) **Education** – Denver Water has invested substantial resources to develop a water conservation section which is financed through its water rates. This section is dedicated to assisting all Customers, Distributors and anyone with internet access with water conservation ideas, methods and resources. By a direct link from Consolidated's website to Denver Water's Conservation page, these educational resources are available to all of Consolidated's customers. Customers who may not have access to the internet are welcome to call Consolidated's Consumer Services Department and request that a printed copy of any part of Denver Water's conservation section be downloaded, printed and mailed to them by Consolidated at no charge.
- b) **Metering and Meter Replacement Program** – Consolidated has had all of its customer accounts metered for the past 60 to 70 years. All of Consolidated's residential meters, 5/8" and 3/4" are replaced at least once every fifteen (15) years and all meters 1-inch and larger are tested annually to insure that all water consumed is being accounted for.
- c) **Leak detection** – Consolidated invests a minimum of \$120,000 annually into its leak detection program through its operation and maintenance budget. Consolidated's Denver and the Maple Grove Distribution Systems



are sounded in their entirety at least once every three (3) years. All discovered leaks are repaired as soon as is possible; the volume of water lost is estimated based upon an estimated duration of the leak and the leak losses are accounted for monthly between Consolidated's Denver and Maple Grove Systems.

- d) **Field monitoring** – Consolidated's Meter Department is very proactive in that whenever their meter readers detect what may appear as unusually high consumption, they advise their department's Manager and the Customer is immediately notified. Consolidated's Meter Department is currently working together with one of its largest commercial office park customers, the Denver West Office Park (Park) a 200 acre office complex located at the intersection of Interstate 70, West Colfax Avenue and West 6<sup>th</sup> Avenue on such a field monitoring program. This Park's ownership is making a significant investment in Consolidated's Orion equipment (described below) to help monitor and control their water consumption. At least 25% of each of the Park's thirty (30) office buildings and three (3) automobile dealership sites were required to be landscaped as part of the overall Master Plan developed in the early 1970's.
- e) **Orion Monitoring System** – National Meter and Automation, Inc. along with several water providers came up with what is referred to as the Orion System. This system includes a meter, transmitter and monitor which allows Consolidated's customers to monitor their water usage from inside their home or office. Each system has a leak detector built inside the monitor which indicates by a steady red light when water has run continuously through the meter consistently over a 24 hour period.

Usually Consolidated's customers learn about the Orion System after they have experienced a very high water bill. Upon receipt of such a complaint, Consolidated implements the following procedure with the customer:

- 1) Checks for a misread of the meter.
- 2) Tests for a leak on the customer's premise.
- 3) Test of the Meter.
- 4) Offers Orion System and installs at no cost to customer for a 30 day trial period.
- 5) Consolidated will then share the cost equally with Customers who desire to purchase the Orion System as follows:

	<u><b>Customer</b></u>	<u><b>Consolidated</b></u>	<u><b>Total</b></u>
a) 5/8" Meter System	\$124.00	\$124.00	\$248.00
b) 3/4" Meter System	\$129.00	\$129.00	\$258.00
c) 1" Meter System	\$164.00	\$164.00	\$328.00

The Orion Monitoring System is advertised on Consolidated's website and is available to all Consolidated's customers regardless of whether or not they are served by the Denver System or the Maple Grove System.

A rebate incentive program is available through Denver Water; however, this program is available only to those stockholders served with water purchased from Denver Water which is roughly 70% of Consolidated's stockholders. Consolidated is the only distributor of the Denver Water Board who is not 100% dependent upon Denver Water for the water it provides to its stockholders and because Consolidated is a mutually owned nonprofit Colorado corporation, whose revenue is derived primarily from the distribution of water to its stockholders. Unlike most of Denver Water's other twenty-one (21) distributors who are either a special district or a municipality, Consolidated does not receive any of its revenue from taxation and does not have any authority to impose taxes. Financing a rebate incentive program through its water rates for its Maple Grove System customers would impose an economic hardship for all of Consolidated's customers because such a program would cause Consolidated to have to raise its water rates for all customers served by its Denver System and the Maple Grove System.

## SECTION 2

**2.1 CURRENT WATER USE:** The chart below depicts the annual water use from 1994 through 2008.

### ANNUAL WATER USE SUMMARY\*

YEAR	CONSUMPTION (G)	# OF TAPS	# 3/4" EQ	ANNUAL USE/EQ (G)	GPCD (3.5/TAP)
	(000)				
1994	4,333,307	19,860	24,781	174,864	137
1995	3,628,765	19,929	24,843	146,067	114
1996	4,474,538	20,044	24,993	179,031	140
1997	4,186,109	20,205	25,273	165,635	130
1998	4,306,755	20,310	25,452	169,210	132
1999	4,188,264	20,421	25,576	163,757	128
2000	4,769,670	20,514	25,774	185,057	145
2001	4,503,503	20,601	25,942	173,598	136
2002	3,907,005	20,677	26,176	149,259	117
2003	3,439,122	20,731	26,275	130,889	102
2004	3,149,370	20,771	26,283	119,825	94
2005	3,708,485	20,834	26,330	140,846	110
2006	4,423,068	20,871	26,354	167,832	131
2007	4,246,506	20,929	26,302	161,451	126
2008	4,190,976	20,965	26,399	158,755	124
			AVERAGE:	157,844	124

\*(G= GALLONS; GPCD = GALLONS PER CAPITA PER DAY)

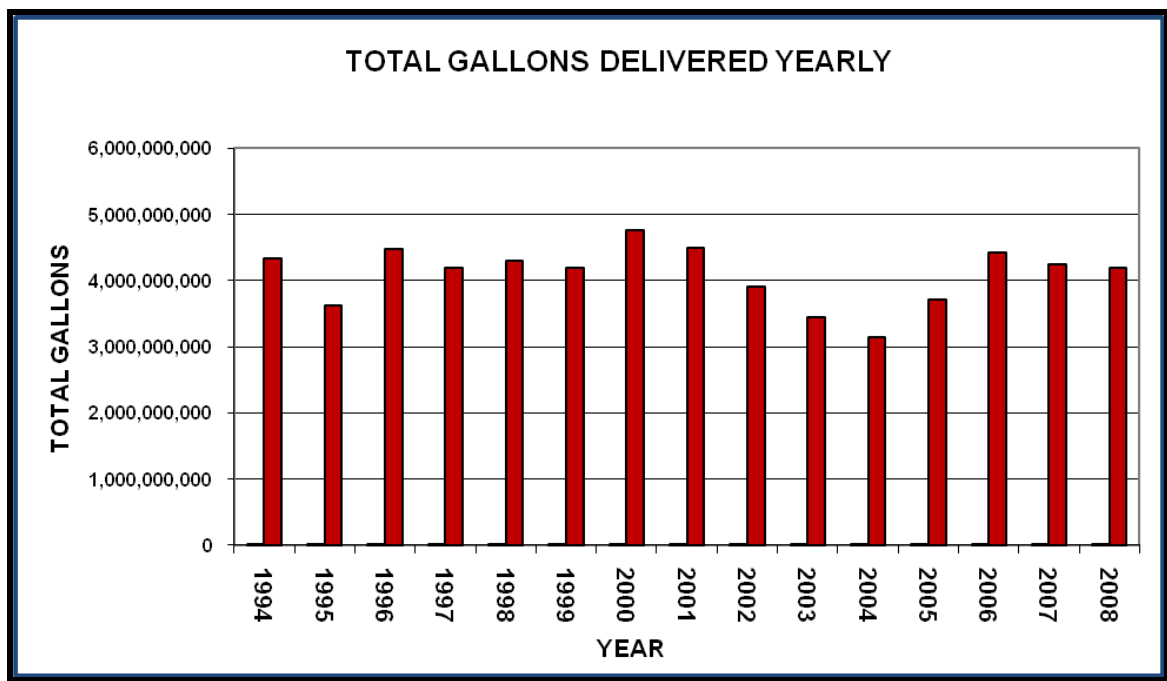
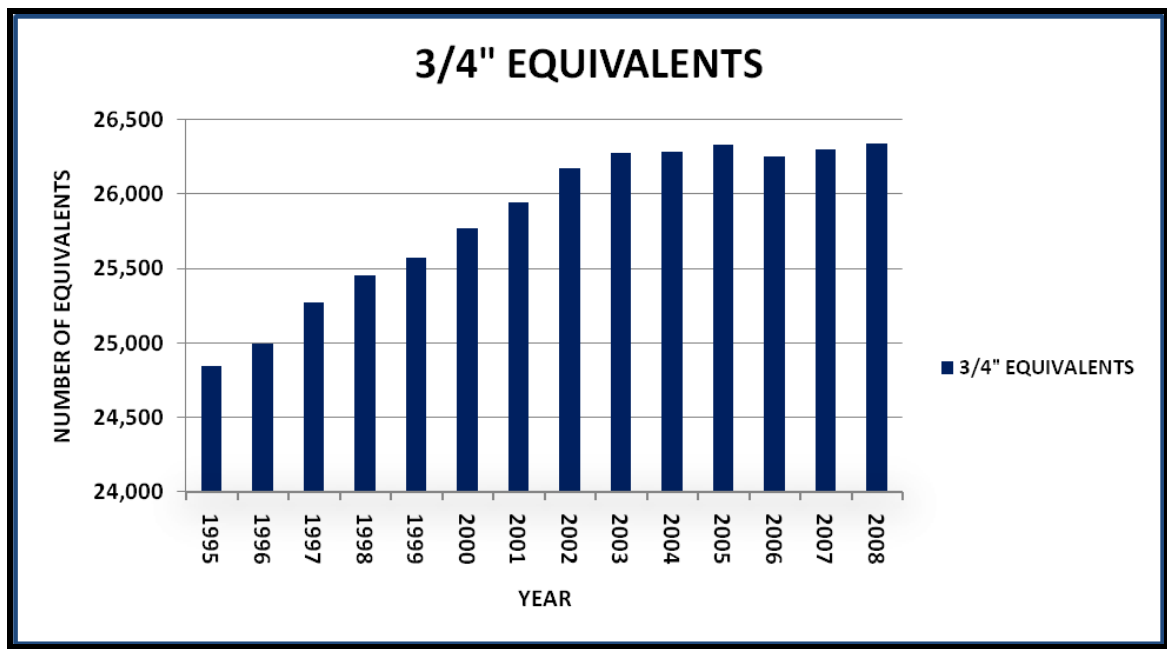
The chart shows that water use averaged about 4.27 billion gallons between 1994 and the drought year of 2002. Since 2002, usage dropped nearly 14% to an average of 3.67 billion gallons representing an annual savings of 1,840 acre feet of water for the Denver and Maple Grove systems combined. Given the unpredictability of weather patterns and human nature, it is unknown if this trend will continue and if so, how long it will last. It has been 7 years since the drought and a definite change in outside watering habits has been observed. Demand patterns have shifted from daylight hours to night time use indicating a greater reliance on automatic irrigation systems. There is greater efficiency by watering during the evening and hence less water is required. Considering that nearly 50% of all water use is for outside irrigation, this trend provides a considerable water savings. To assure this trend continues Consolidated will require an investment in educating the users on the benefits of irrigating at night. No watering is permitted between 10:00 a.m. and 6:00 p.m.

The gallons per capita calculation is based on the assumption of 3.5 persons per tap applied to the total number of  $\frac{3}{4}$ " equivalent taps rather than the total service connections. The 3.5 persons per equivalent tap number is conservative but was used to compensate for the office and commercial areas. There is minimal manufacturing within the service area that would impact demand to any extent. There are quite a few "empty nest" households in the service area as well which would also lower this number.

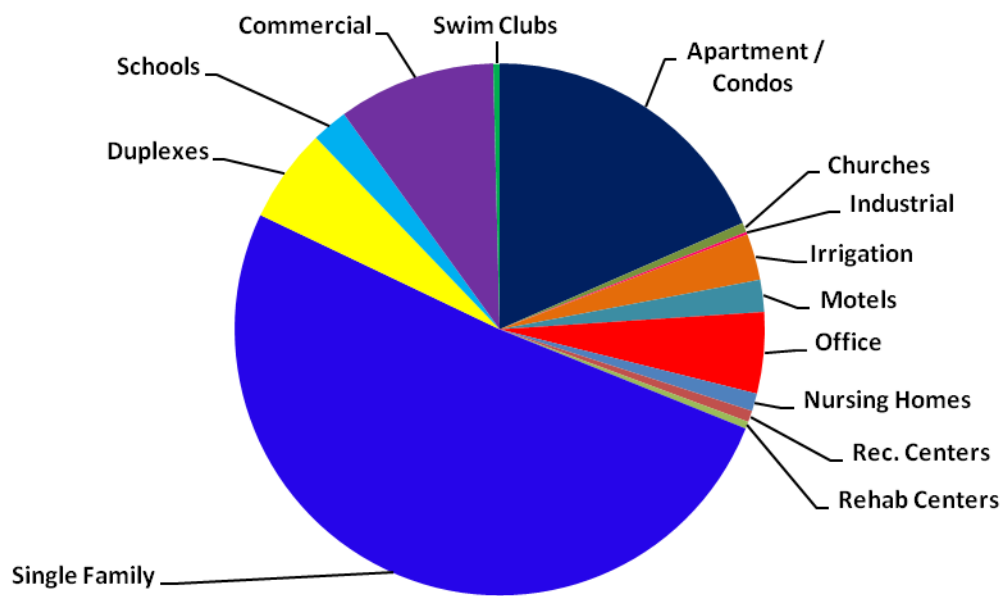
Another factor affecting the demand on per capita basis is the fact that much of Consolidated's service area has been built out and there are many older "large lot - higher end" subdivisions that tend to have extensive landscaping and have owners willing to make the monetary investment to keep the property looking nice.

Even by applying the more conservative per capita number, the average use per capita is 124 gallons per person per day (gpcd); still under the baseline target of 145 gpcd. For the purposes of this Plan, the goal is to continue educational efforts and, at the very least, try and keep the gpcd constant with the 124 gpcd average with the goal to never exceed the 145 gpcd. In the best case this number would decrease over time.

The following Statistical reports and charts depict the annual consumption and use by user type for the past fifteen (15) years:



### (1994-2008) 15 Year Average



## **1994 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	883	756,607,800	856,860	17.46
CHURCHES	64	22,668,100	354,189	0.54
INDUSTRIAL	5	9,931,400	1,986,280	0.22
IRRIGATION	149	118,860,300	797,720	2.74
MOTELS	27	88,658,000	3,283,630	2.04
OFFICE	321	218,096,400	679,428	5.05
NURSING HOMES	7	38,190,500	5,455,786	0.88
RECREATION CENTERS	26	32,824,600	1,262,485	0.75
REHAB CENTERS	4	17,854,700	4,463,675	0.43
SINGLE FAMILY	16,293	2,292,204,700	140,686	52.89
DUPLEXES	1,269	256,355,100	202,013	5.91
SCHOOLS	58	86,621,500	1,493,474	1.99
COMMERCIAL	742	373,629,400	503,544	8.62
SWIM CLUBS	12	20,805,100	1,733,758	0.48
	19,860	4,333,307,600	23,213,529	100



## **1995 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	881	705,870,800	801,215	19.48
CHURCHES	64	16,945,100	264,767	0.46
INDUSTRIAL	5	6,212,300	1,242,460	0.17
IRRIGATION	154	78,385,500	508,997	2.18
MOTELS	28	86,644,400	3,094,443	2.38
OFFICE	326	195,718,500	600,363	5.39
NURSING HOMES	7	37,117,100	5,302,443	1.04
RECREATION CENTERS	25	21,553,500	862,140	0.59
REHAB CENTERS	4	16,888,600	4,222,150	0.46
SINGLE FAMILY	16,360	1,808,964,200	110,572	49.84
DUPLEXES	1,279	215,525,400	168,511	5.93
SCHOOLS	58	69,533,700	1,198,857	1.91
COMMERCIAL	726	348,042,200	479,397	9.59
SWIM CLUBS	12	21,364,500	1,780,375	0.58
	19,929	3,628,765,800	20,636,691	100

## **1996 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	884	804,254,200	909,790	17.97
CHURCHES	63	26,007,300	412,814	0.58
INDUSTRIAL	5	4,125,100	825,020	0.09
IRRIGATION	164	120,560,400	735,124	2.69
MOTELS	28	92,661,100	3,309,325	2.07
OFFICE	327	231,395,700	707,632	5.17
NURSING HOMES	7	42,501,400	6,071,629	0.95
RECREATION CENTERS	25	29,604,900	1,184,196	0.68
REHAB CENTERS	4	20,493,500	5,123,375	0.46
SINGLE FAMILY	16,444	2,294,194,800	139,516	51.27
DUPLEXES	1,286	268,184,800	208,542	5.99
SCHOOLS	58	97,404,600	1,679,390	2.19
COMMERCIAL	737	419,918,600	569,767	9.38
SWIM CLUBS	12	23,231,700	1,935,975	0.51
	20,044	4,474,538,100	23,812,095	100

## **1997 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	911	795,098,200	872,775	18.99
CHURCHES	63	24,870,500	394,770	0.59
INDUSTRIAL	5	4,246,500	849,300	0.1
IRRIGATION	162	103,585,300	639,415	2.49
MOTELS	28	84,356,000	3,012,714	2.01
OFFICE	325	219,447,100	675,222	5.24
NURSING HOMES	8	49,387,000	6,173,375	1.18
RECREATION CENTERS	26	28,883,200	1,110,892	0.69
REHAB CENTERS	4	18,645,000	4,661,250	0.44
SINGLE FAMILY	16,576	2,096,060,800	126,452	50.09
DUPLEXES	1,281	246,335,700	192,300	5.88
SCHOOLS	57	94,220,400	1,652,989	2.25
COMMERCIAL	747	398,655,900	533,676	9.52
SWIM CLUBS	12	22,318,300	1,859,858	0.53
	20,205	4,186,109,900	22,754,989	100

## **1998 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	915	818,422,000	894,450	18.99
CHURCHES	65	22,439,400	345,222	0.52
INDUSTRIAL	5	3,655,900	731,180	0.08
IRRIGATION	169	131,532,100	778,296	3.09
MOTELS	28	84,676,200	3,024,150	1.96
OFFICE	324	211,977,000	654,250	4.92
NURSING HOMES	9	46,643,300	5,182,589	1.08
RECREATION CENTERS	29	32,314,100	1,114,279	0.75
REHAB CENTERS	3	17,901,000	5,967,000	0.41
SINGLE FAMILY	16,668	2,134,805,400	128,078	49.58
DUPLEXES	1,277	248,920,000	194,926	5.79
SCHOOLS	55	95,032,400	1,727,862	2.2
COMMERCIAL	751	437,267,400	582,247	10.14
SWIM CLUBS	12	21,169,200	1,764,100	0.49
	20,310	4,306,755,400	23,088,629	100

## 1999 STATISTICAL REPORT

### CUSTOMER TYPES AND USAGE

TYPE	TOTAL ACCOUNTS	TOTAL GALLONS	AVG. GAL. PER TAP	GAL. %
APARTMENTS/CONDOS	921	814,664,100	884,543	19.45
CHURCHES	65	22,739,300	349,835	0.54
INDUSTRIAL	5	8,419,500	1,683,900	0.2
IRRIGATION	165	117,722,500	713,470	2.84
MOTELS	29	81,034,600	2,794,297	1.93
OFFICE	322	209,211,700	649,726	4.99
NURSING HOMES	9	45,162,100	5,018,011	1.09
RECREATION CENTERS	26	28,576,900	1,099,112	0.68
REHAB CENTERS	3	16,137,400	5,379,133	0.38
SINGLE FAMILY	16,774	2,071,727,200	123,508	49.46
DUPLEXES	1,280	235,823,500	184,237	5.63
SCHOOLS	55	93,423,900	1,698,616	2.23
COMMERCIAL	755	425,446,700	563,506	10.15
SWIM CLUBS	12	18,175,300	1,514,608	0.43
	20,421	4,188,264,700	22,656,502	100

## **2000 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	948	870,522,200	918,272	18.27
CHURCHES	67	28,517,800	425,639	0.59
INDUSTRIAL	8	10,012,500	1,251,563	0.21
IRRIGATION	166	140,635,100	847,199	2.94
MOTELS	31	84,494,500	2,725,629	1.79
OFFICE	328	239,372,500	729,794	5.01
NURSING HOMES	9	49,417,800	5,490,867	1.03
RECREATION CENTERS	27	37,112,000	1,374,519	0.77
REHAB CENTERS	4	15,889,900	3,972,475	0.36
SINGLE FAMILY	16,820	2,425,322,100	144,193	50.84
DUPLEXES	1,277	272,134,100	213,104	5.7
SCHOOLS	56	110,235,100	1,968,484	2.31
COMMERCIAL	761	465,722,200	611,987	9.76
SWIM CLUBS	12	20,282,600	1,690,217	0.42
	20,514	4,769,670,400	22,363,941	100



## 2001 STATISTICAL REPORT

### CUSTOMER TYPES AND USAGE

TYPE	TOTAL ACCOUNTS	TOTAL GALLONS	AVG. GAL. PER TAP	GAL. %
APARTMENTS/CONDOS	960	847,385,900	882,694	18.81
CHURCHES	68	29,604,700	435,363	0.67
INDUSTRIAL	8	11,100,700	1,387,588	0.24
IRRIGATION	166	124,258,300	748,544	2.77
MOTELS	31	87,833,000	2,833,323	1.95
OFFICE	328	237,496,000	724,073	5.29
NURSING HOMES	9	47,688,100	5,298,678	1.06
RECREATION CENTERS	27	27,106,000	1,003,926	0.6
REHAB CENTERS	6	19,501,000	3,250,167	0.43
SINGLE FAMILY	16,883	2,243,918,700	132,910	49.82
DUPLEXES	1,282	254,026,600	198,149	5.64
SCHOOLS	56	108,736,200	1,941,718	2.41
COMMERCIAL	765	451,581,400	590,302	10.02
SWIM CLUBS	12	13,266,600	1,105,550	0.29
	20,601	4,503,503,200	20,532,983	100

## 2002 STATISTICAL REPORT

### CUSTOMER TYPES AND USAGE

TYPE	TOTAL ACCOUNTS	TOTAL GALLONS	AVG. GAL. PER TAP	GAL. %
APARTMENTS/CONDOS	977	763,047,200	781,010	19.53
CHURCHES	68	25,465,200	374,488	0.67
INDUSTRIAL	8	7,866,000	983,250	0.2
IRRIGATION	169	56,391,000	333,675	1.44
MOTELS	30	71,646,900	2,388,230	1.85
OFFICE	328	191,362,900	583,423	4.89
NURSING HOMES	9	41,846,200	4,649,578	1.08
RECREATION CENTERS	29	18,472,500	636,983	0.47
REHAB CENTERS	9	21,184,600	2,353,844	0.54
SINGLE FAMILY	16,926	2,004,965,700	118,455	51.31
DUPLEXES	1,282	243,440,300	189,891	6.23
SCHOOLS	58	80,966,000	1,395,966	2.07
COMMERCIAL	772	366,018,900	474,118	9.36
SWIM CLUBS	12	14,331,800	1,194,317	0.36
	20,677	3,907,005,200	16,457,227	100

## **2003 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	985	669,158,300	679,349	19.45
CHURCHES	68	18,939,100	278,516	0.55
INDUSTRIAL	9	5,200,600	577,844	0.15
IRRIGATION	174	76,318,800	438,614	2.25
MOTELS	30	65,313,900	2,177,130	1.89
OFFICE	329	155,853,500	473,719	4.53
NURSING HOMES	11	39,469,300	3,588,118	1.14
RECREATION CENTERS	32	22,214,200	694,194	0.66
REHAB CENTERS	9	17,246,200	1,916,244	0.5
SINGLE FAMILY	16,958	1,742,346,600	102,745	50.66
DUPLEXES	1,279	200,688,400	156,910	5.83
SCHOOLS	57	65,153,800	1,143,049	1.89
COMMERCIAL	778	348,821,200	448,356	10.14
SWIM CLUBS	12	12,398,900	1,033,242	0.36
	20,731	3,439,122,800	13,708,030	100

## **2004 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	985	622,657,100	632,139	19.77
CHURCHES	68	17,138,400	252,035	0.54
INDUSTRIAL	9	5,202,700	578,078	0.16
IRRIGATION	172	77,190,200	448,780	2.45
MOTELS	30	62,561,800	2,085,393	1.89
OFFICE	319	151,520,100	474,985	4.81
NURSING HOMES	11	42,775,200	3,888,655	1.35
RECREATION CENTERS	32	20,473,500	639,797	0.65
REHAB CENTERS	9	15,425,600	1,713,956	0.49
SINGLE FAMILY	17,005	1,549,469,900	91,118	49.29
DUPLEXES	1,276	183,751,300	144,006	5.82
SCHOOLS	58	66,664,100	1,149,381	2.11
COMMERCIAL	785	323,796,500	412,480	10.28
SWIM CLUBS	12	10,744,200	895,350	0.39
	20,771	3,149,370,600	13,406,152	100

## **2005 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	977	674,992,000	690,882	18.2
CHURCHES	68	21,849,000	321,309	0.69
INDUSTRIAL	9	4,940,200	548,911	0.15
IRRIGATION	179	135,012,200	754,258	3.75
MOTELS	30	70,856,800	2,361,893	1.97
OFFICE	318	187,556,900	589,802	4.46
NURSING HOMES	11	47,103,400	4,282,127	1.34
RECREATION CENTERS	33	28,926,700	876,567	0.79
REHAB CENTERS	9	15,065,000	1,673,889	0.4
SINGLE FAMILY	17,078	1,842,921,600	107,912	49.69
DUPLEXES	1,274	210,328,000	165,093	5.69
SCHOOLS	58	86,375,000	1,489,224	2.57
COMMERCIAL	778	368,573,500	473,745	9.93
SWIM CLUBS	12	13,985,500	1,165,458	0.37
	20,834	3,708,485,800	15,501,070	100

## **2006 STATISTICAL REPORT**

### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	977	734,787,500	752,085	16.61
CHURCHES	69	24,963,800	361,794	0.56
INDUSTRIAL	8	7,041,000	880,125	0.16
IRRIGATION	182	157,620,400	866,046	3.56
MOTELS	30	77,459,600	2,581,987	1.75
OFFICE	323	214,080,400	662,788	4.84
NURSING HOMES	11	47,406,300	4,309,664	1.07
RECREATION CENTERS	33	35,779,900	1,084,239	0.82
REHAB CENTERS	9	19,746,200	2,194,022	0.45
SINGLE FAMILY	17,112	2,360,984,400	137,972	53.38
DUPLEXES	1,275	237,079,700	185,945	5.36
SCHOOLS	59	102,533,400	1,737,854	2.32
COMMERCIAL	772	390,698,300	506,086	8.83
SWIM CLUBS	11	12,887,900	1,171,627	0.29
	20,871	4,423,068,800	17,432,235	100



## **2007 STATISTICAL REPORT**

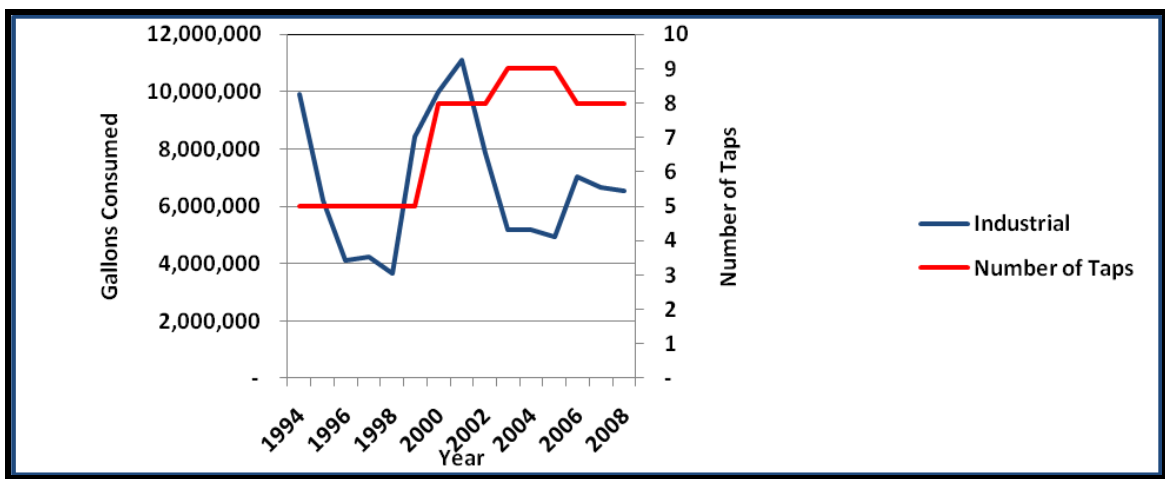
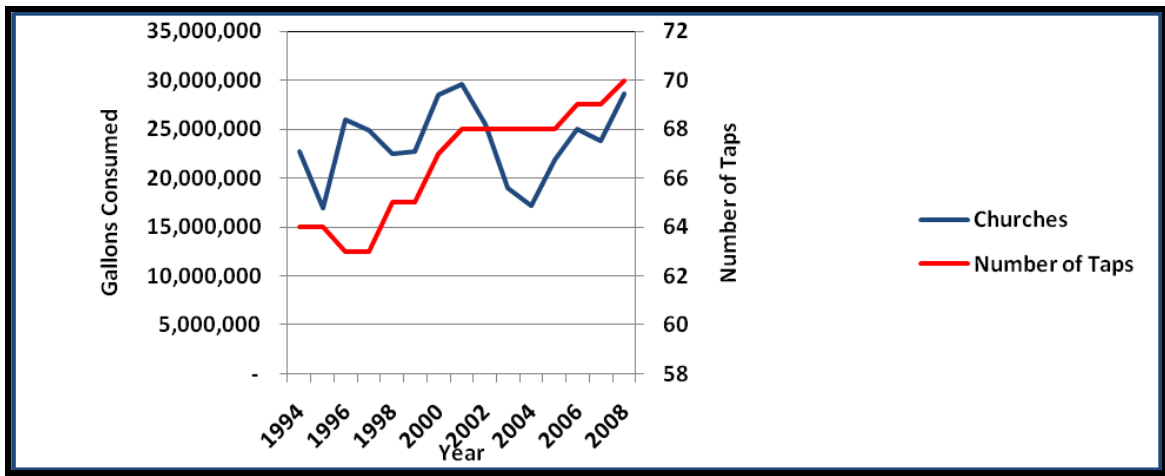
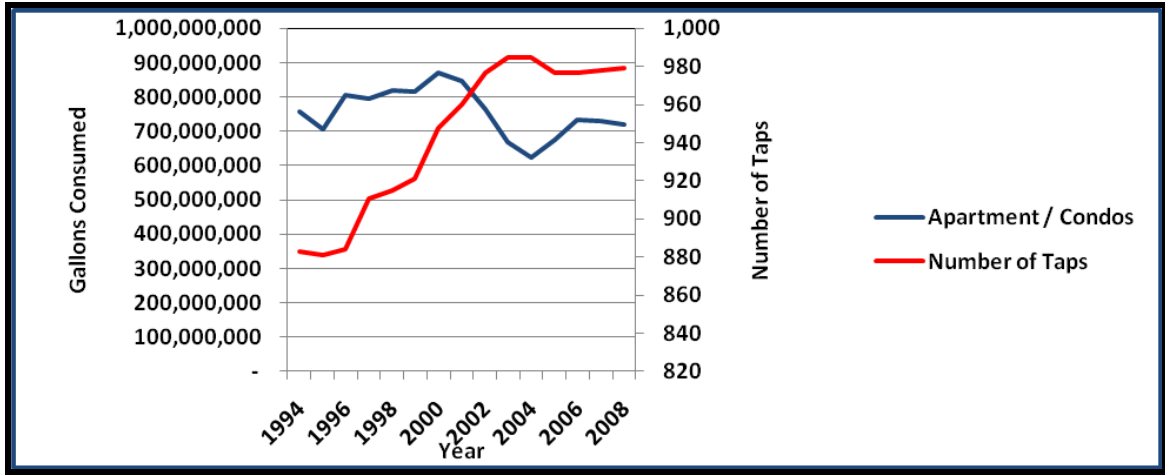
### **CUSTOMER TYPES AND USAGE**

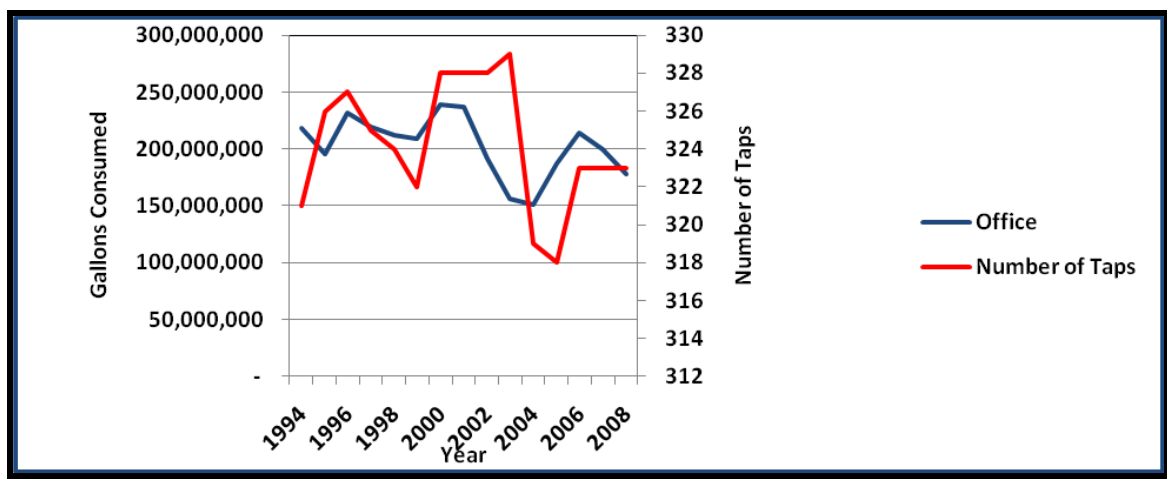
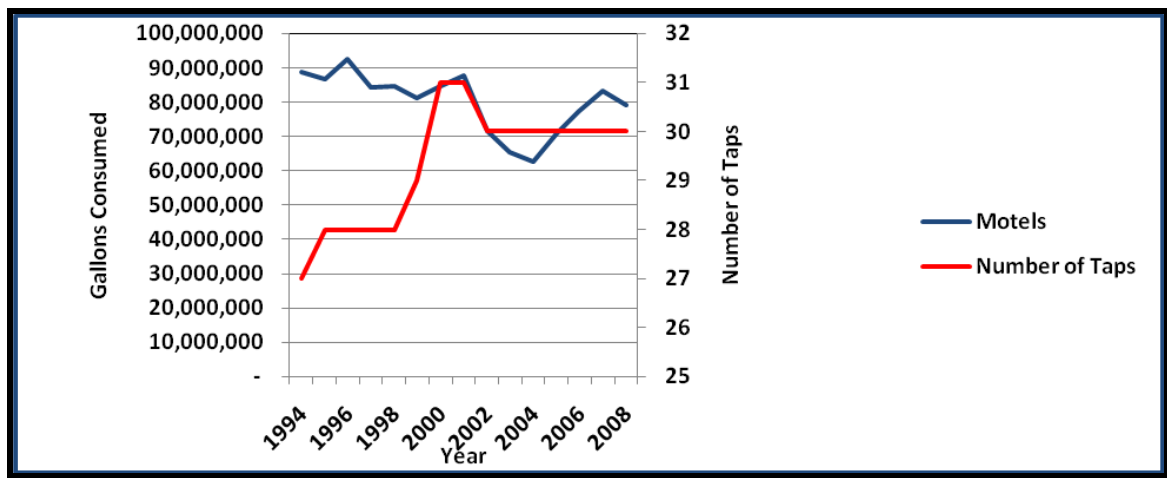
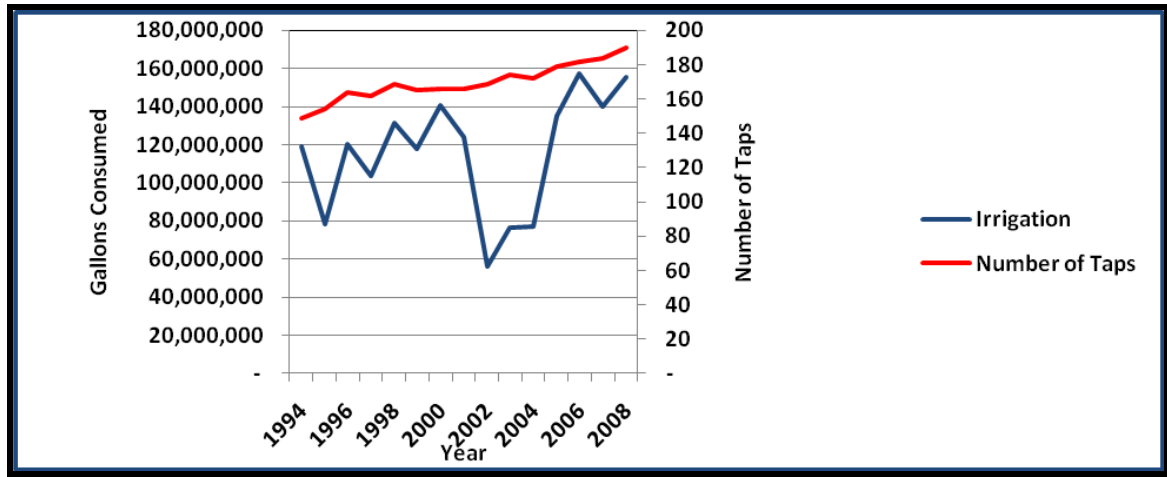
<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	978	731,617,300	748,075	17.23
CHURCHES	69	23,835,700	345,445	0.56
INDUSTRIAL	8	6,669,100	833,638	0.16
IRRIGATION	184	139,786,500	759,709	3.29
MOTELS	30	83,302,200	2,776,740	1.96
OFFICE	323	199,583,500	617,906	4.7
NURSING HOMES	11	44,090,500	4,008,227	1.04
RECREATION CENTERS	35	27,696,700	791,334	0.65
REHAB CENTERS	9	16,180,900	1,797,878	0.38
SINGLE FAMILY	17,166	2,248,355,900	130,977	52.95
DUPLEXES	1,272	233,992,900	183,957	5.51
SCHOOLS	60	97,002,300	1,616,705	2.28
COMMERCIAL	774	387,376,200	500,486	9.12
SWIM CLUBS	10	7,016,700	701,670	0.17
	20,929	4,246,506,400	15,812,747	100

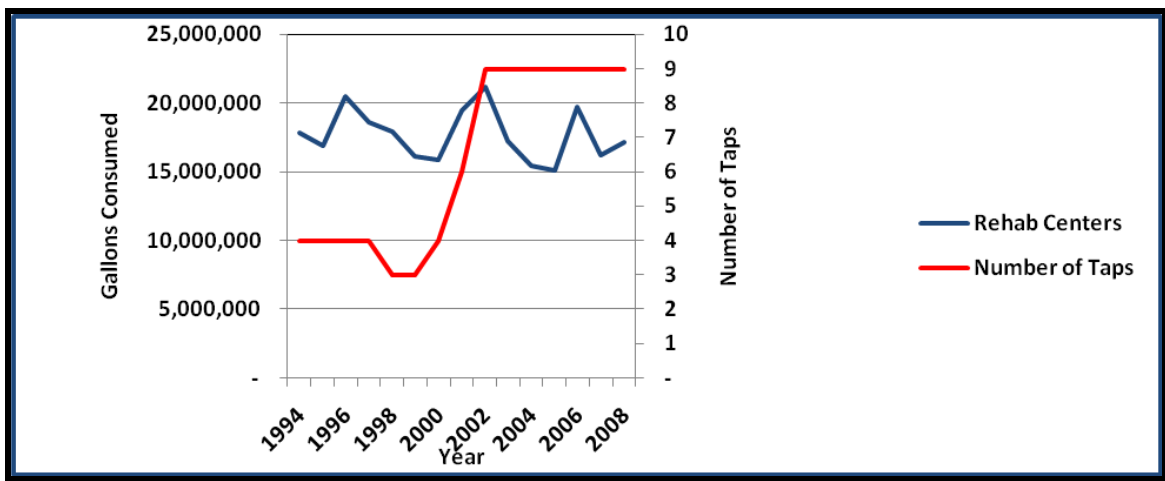
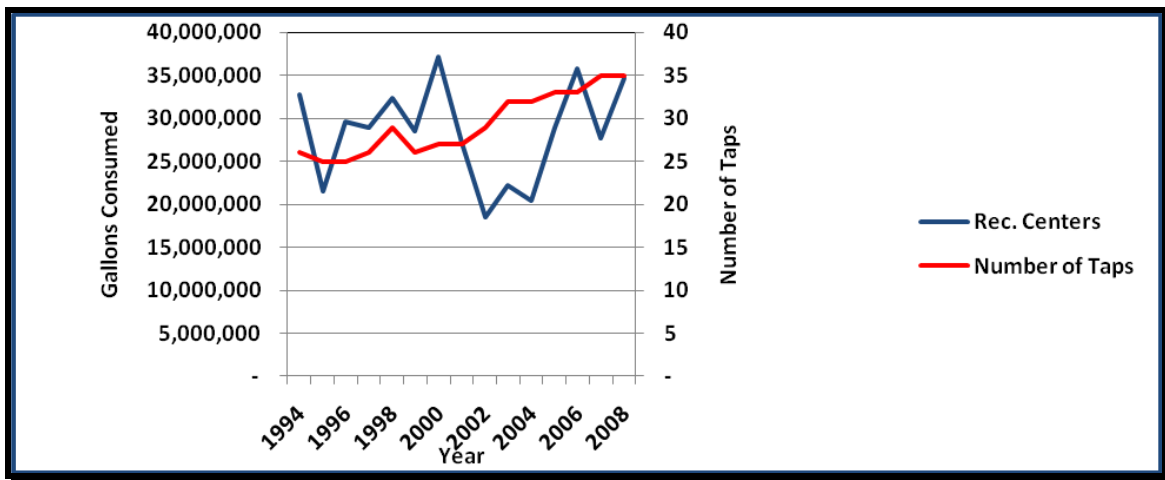
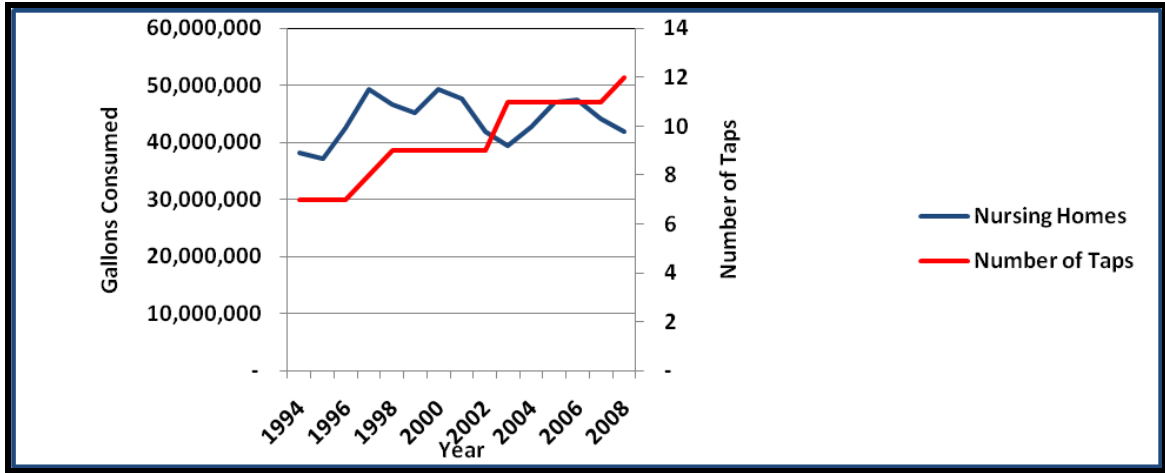
## **2008 STATISTICAL REPORT**

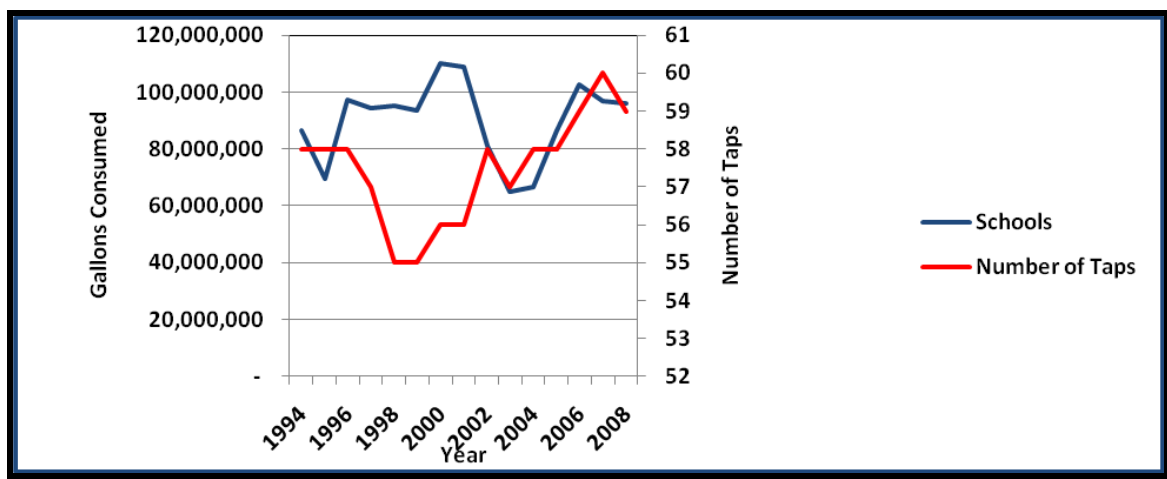
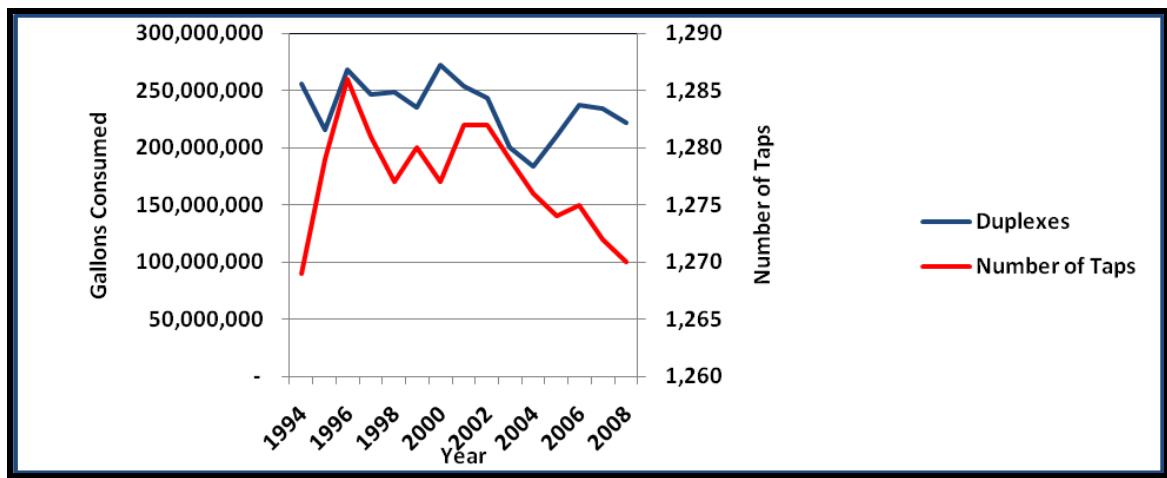
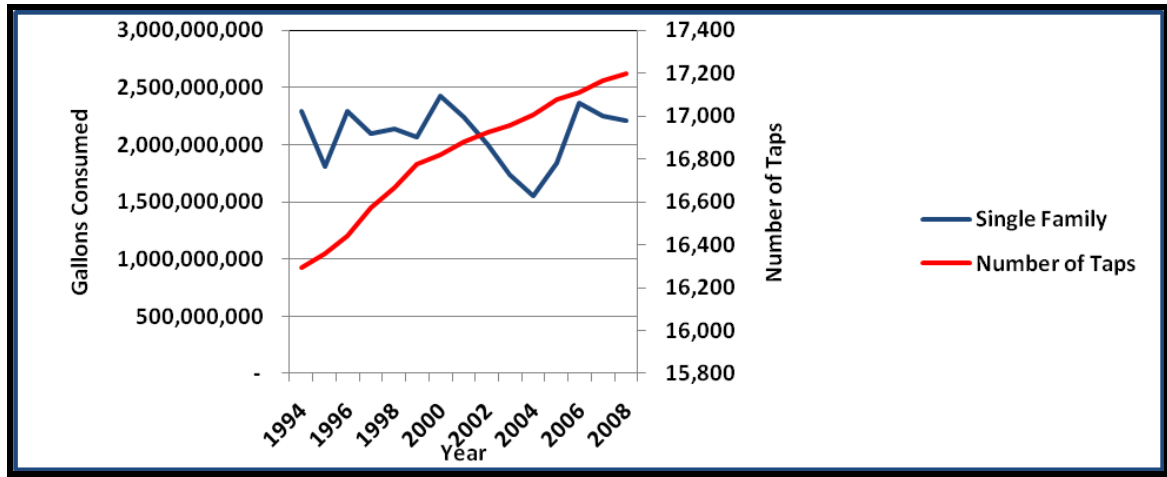
### **CUSTOMER TYPES AND USAGE**

<b>TYPE</b>	<b>TOTAL ACCOUNTS</b>	<b>TOTAL GALLONS</b>	<b>AVG. GAL. PER TAP</b>	<b>GAL. %</b>
APARTMENTS/CONDOS	979	721,103,900	736,572	17.21
CHURCHES	70	28,649,100	409,273	0.68
INDUSTRIAL	8	6,535,100	816,888	0.16
IRRIGATION	190	155,724,200	819,601	3.72
MOTELS	30	79,301,900	2,643,397	1.89
OFFICE	323	177,463,100	549,421	4.23
NURSING HOMES	12	41,816,900	3,484,742	1
RECREATION CENTERS	35	34,663,500	990,386	0.83
REHAB CENTERS	9	17,153,500	1,905,944	0.41
SINGLE FAMILY	17,196	2,215,350,200	128,829	52.85
DUPLEXES	1,270	221,590,800	174,481	5.29
SCHOOLS	59	95,884,500	1,625,161	2.29
COMMERCIAL	773	386,127,700	499,518	9.21
SWIM CLUBS	11	9,611,800	873,800	0.23
	20,965	4,190,976,200	15,658,013	100

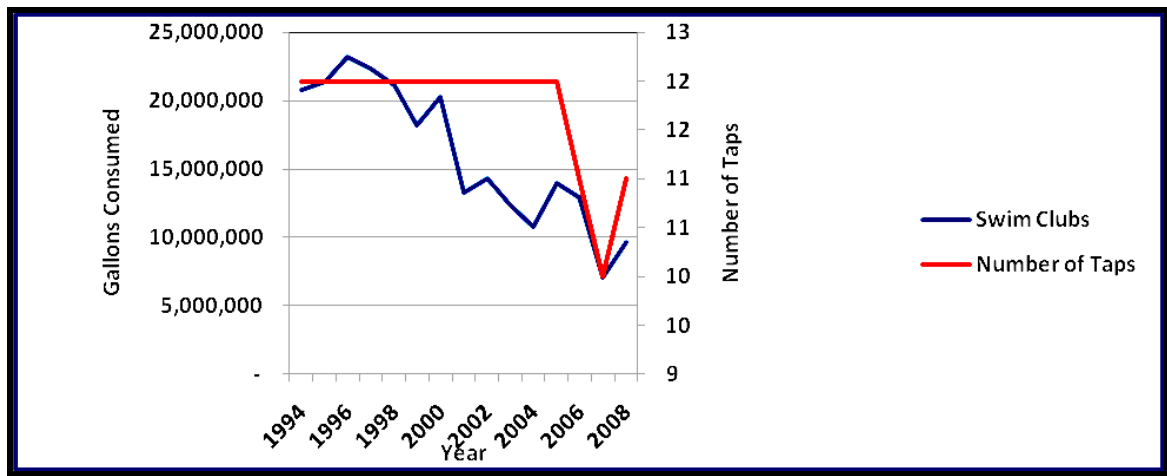
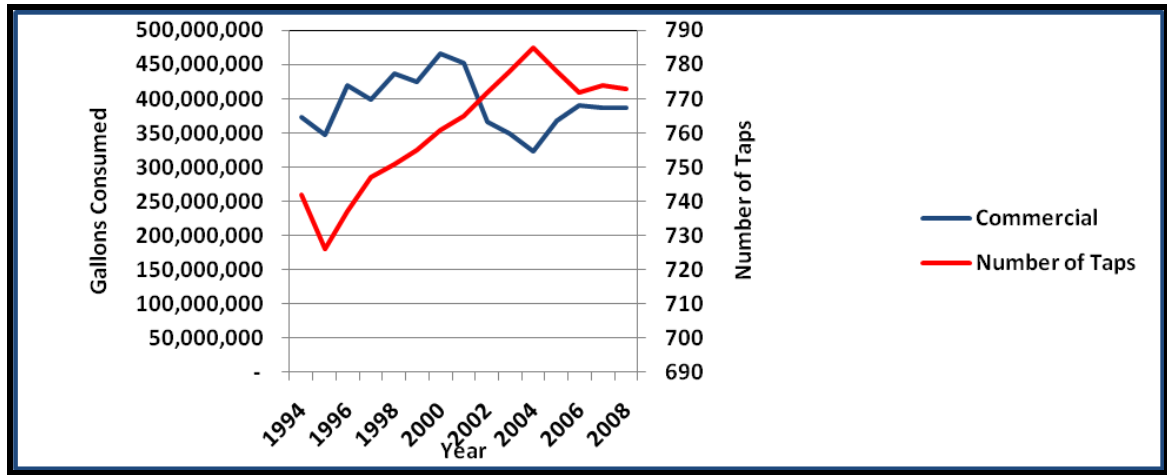












**2.2 FORECASTING METHODOLOGY:** The current approach to determining future demand is to determine the buildable land area within the two service areas and apply an estimate of the type of development that might occur. A reasonable estimate has been about 4 units per acre which translates to 4 residential  $\frac{3}{4}$  inch taps per acre. This approach is conservative but provides adequate water to cover the needs of potential multi-family, commercial or office uses.

**2.3 FUTURE DEMAND:** Determining future demand was done simply by identifying how much land was available in each service area that could be realistically developed. For the Denver Service Area, that area was determined to be about 300 acres resulting in an additional 1,200 taps or about 600 additional acre feet annually. Based on Consolidated's Master Meter Contract with Denver Water, Denver will provide that amount of water subject to the various requirements contained in its Operating Rules and that water supply will be subject to Denver's Conservation Plan.

The same approach was applied to the Maple Grove Service Area and a total future demand of about 5,000 acre feet would be needed at build-out of the system. The current annual demand is about 3,800 acre feet. The result net needed for future development on the Maple Grove System is 1,200 acre feet.

The land use in both service areas is primarily residential, commercial and office and that same mix was assumed in determining future demand.

## SECTION 3

**3.1 PROPOSED FACILITIES:** The Company started a long term Capital Improvement program in 1991 that focused on Water Rights, Storage, Treatment and Distribution. The focus of this program was on the Maple Grove System to address its growth potential. The water supply for the Denver System was secured by contract and aside from routine maintenance and pipeline replacements, did not require much in the way of major System Improvements.

**3.1.1** The first effort was to obtain change of use decrees for all of Consolidated's Water Rights which was accomplished by 1996. As of the date of this plan all the Company's water rights have been changed and based on the decrees the Company can legally divert 6,300 acre feet of water in an average year. The cost of this effort was in excess of \$1,500,000.

**3.1.2** In 1958 the Maple Grove Reservoir was built with a capacity of about 470 acre feet. In 1985 the Company's total water storage on the Maple Grove System still totaled about 470 acre feet which was supporting about 5,000  $\frac{3}{4}$  - inch taps. Water storage was identified as the most critical system limitation Consolidated faced and several projects were undertaken beginning in 1985. Using the criteria that 3 acre feet of storage was equal to 1 acre foot of firm annual yield, the goal was to have about 1.5 acre foot of storage per tap at build-out. The projects and capacities listed below.

YEAR COMPLETED	PROJECT	ADDITIONAL STORAGE	COST
1953	MAPLE GROVE RESERVOIR CONST.	471 AF	\$ 709,200
1985	MAPLE GROVE ENLARGEMENT	600 AF	3,000,000
1993	FAIRMOUNT RESERVOIR	978 AF	2,500,000
2002	WELTON RESERVOIR	9803 AF	30,000,000
2004	*SMART RESERVOIR	713 AF	2,500,000
2006	**AQUIFER STORAGE & RECOVERY	620 AF	1,500,000

(\*Consolidated purchased a majority interest in Smart Reservoir, an existing structure located northeasterly of the intersection of Colorado Highways 72 and 93; \*\*Located around Maple Grove Reservoir, Aquifer Storage changes on a daily basis)

With the completion of Welton Reservoir in 2002 and subsequent filling in 2003, raw water storage was no longer a system limitation.

**3.1.3** The existing Maple Grove Water Treatment Plant was a conventional treatment plant rated at 11 million gallons per day (mgd); however, the maximum capacity was about 10.5 mgd. Two key factors influenced Consolidated's decision to construct a New Treatment Plant: 1) more stringent water quality regulations and 2) increasing demand on the Maple Grove System. In 2003,

preliminary studies were undertaken and it was determined to move forward with a membrane based design. The design was completed and approved by the various agencies in 2006 and construction started in August of that year. The facility was commissioned in October of 2008. The addition of this facility to the Company's infrastructure will address treatment capacity and water quality concerns for many years to come and resolve that particular system limitation.

**3.1.4** Consolidated's distribution system consists of 338 miles of pipeline, 1,780 fire hydrants, 17 pump stations and 9 treated water storage tanks. The age of this infrastructure ranges from 71 years to new, however, Consolidated does not have any limitation in service due to the distribution system in either the Maple Grove or Denver service areas. About \$2,000,000 is allocated annually for capital replacements and upgrades to the distribution system with an emphasis on replacing the older unlined cast iron pipelines over the next 7 to 10 years.

## **SECTION 4**

**4.1 APPROACH:** The following Section tracks the basic elements of the water conservation plan as outlined in CRS 37-60-126. Consolidated's approach to water conservation will be influenced to a large extent by the nature of its non-profit structure and its relationships with Denver Water and various local governments functioning within its Denver and Maple Grove service areas.

**4.2 THE PLAN – AN OVERVIEW:** CRS 37-60-126 requires that any entity providing 2,000 acre feet or more of domestic water for retail shall “develop, adopt, make publicly available and implement a plan.” The intent of this Plan is to comply with that requirement following the guidelines set forth in the state statutes.

**4.2.1 Current Building Codes:** Consolidated's service area overlaps three (3) general governmental jurisdictions: City of Lakewood, City of Wheat Ridge and unincorporated Jefferson County. Consolidated does not have the power to create and enforce ordinances and must rely on the building code requirements of the various building departments; however, wherever possible Consolidated will encourage the use of low flow fixtures in new construction which generally takes place when Consolidated conducts or attends early development meetings when the builder or developer meets with Consolidated about water availability and when preliminary initial costs of providing water to their future projects is determined. Without exception, developers and/or builders have been very receptive to Consolidated's recommendations.

The local governments all subscribe to the International Plumbing Code (IPC) which under Section 604.4 requires the use of water efficient fixtures specifically the use of 1.6 gpf toilets. All new construction falls under these code requirements, meeting the intent of using water efficient fixtures.

Consolidated has completed a comprehensive Raw Water Study for its Maple Grove System and along with a review of its Denver Water Distributor's Contract

has concluded that Consolidated has the capacity to meet all current and future demands of both systems over the next 25 years. As a result, Consolidated's corporate structure and its ample Maple Grove System water supply does not allow it to offer water efficient fixture incentives or rebates. Instead Consolidated will rely on the natural replacement of these fixtures over time.

**4.2.2** Consolidated encourages the use of drought resistant plantings and grasses and as described in 1.7 d) Consolidated has a field monitoring program to help its customers monitor their irrigation systems and water waste. This educational program relies on a variety of resources from Denver Water and information offered on their web site and Consolidated's web site. Literature is available at both Denver Water's and Consolidated's main offices whereby advice is offered on what types of plantings are recommended to be planted and the water requirements of these plantings including various grasses, trees and shrubs.

In addition to the Orion Monitoring System described in detail at 1.7 e), upon receipt of a high water consumption complaint, Consolidated also meets with its customers and performs toilet tank tests showing the customers how such a test can detect significant leaks over time through the customer's toilets. Consolidated will also meet with its customers to illustrate for them how a defective solenoid valve on their irrigation system can cause a significant leak. Further, on Consolidated's website is a two (2) page document downloadable in a pdf file entitled "*Water Conservation Tips*" which illustrates just how much water our customers can conserve by paying attention to the water used inside and outside of their homes on a daily basis. These tips are condensed and printed as messages, from time to time, on Consolidated's billing statements emphasizing that every drop of water counts and every person can make a difference!

In the event of observed water waste, the customer is contacted and asked to correct the deficiency within 7 days. After 7 days the property may be inspected and if the customer has corrected the water waste, no further action is required. If the condition causing the water waste has not been corrected, another warning is issued. The next step is a progressive series of fines until the situation has been corrected. The final step is suspension of water service.

**4.2.3** Consolidated owns a number of water rights in the Agricultural Ditch, the Welch Ditch, the Lee, Stewart and Eskins Ditch and the Rocky Mountain Ditch together with several raw water reservoirs. All of Consolidated's raw water facilities are well maintained and kept free of phreatophytes, assuring that ditch reservoir loss is kept as low as possible. Consolidated's Raw Water Specialist makes a ditch run daily and if they observe any phreatophytes, they report them to the maintenance department and they get removed immediately. Consolidated continually monitors all of the ditches and makes every effort to avoid water loss. The annual cost of this effort is approximately \$75,000.

**4.2.4** Consolidated does not serve any large industrial users within its service area. The largest users include the Denver West Office Park and several

shopping centers, most notably the Colorado Mills. Colorado Mills planted their landscaping during the 2002 planting season which was also one of the driest years on record. Xeriscape landscaping and drought resistant plants were extensively used and very little blue grass was planted during and after 2002. Consolidated works closely with the larger users to assure that good conservation practices are followed, which results in saving water and dollars.

As evidence of the awareness for the need to conserve water, any water waste such as over spraying onto hard surfaces in any of the larger complexes is reported to the management of that property and usually the condition is promptly corrected. Consolidated has invested over \$30,000 installing the Orion electronic meter monitoring devices on several of the large users throughout both systems. These devices are monitored on regular basis using a lap top computer and if any anomaly is observed, Consolidated notifies the customer and profiles their usage for a 7 day period to help assist the customer in locating their leaks. As described in 1.7 e), Consolidated will share the cost equally with its customers who desire to the purchase the Orion System and those costs are provided below again for ease of reference:

	<u><b>Customer</b></u>	<u><b>Consolidated</b></u>	<u><b>Total</b></u>
a) 5/8" Meter System	\$124.00	\$124.00	\$248.00
b) 3/4" Meter System	\$129.00	\$129.00	\$258.00
c) 1" Meter System	\$164.00	\$164.00	\$328.00

**4.2.5** Consolidated has obtained change decrees on all its water rights that are used within the Maple Grove System. Those change decrees allow a percentage of the water to be used and reused, so there is water that is treated at Metro Waste Water and returned to the South Platte River that Consolidated still owns and has the right to reuse, called "consumptive use water".

Consolidated has entered into two permanent leases to utilize its consumptive use water that is discharged from Metro which can be used for exchange, augmentation and raw water irrigation. Specifically, Consolidated leases 500

acre feet of reuse water annually to Todd Creek Farms in Adams County for irrigation of individual lots and a golf course. The second lease for reuse water is with the City and County of Broomfield. This water is used for exchange and augmentation allowing the City and County to take water from Big Dry Creek by exchange, upstream of the South Platte River, for direct raw water irrigation.

The reuse of Consolidated's consumptive use water helps relieve the water demand in the South Platte Basin and allows for landscaping and recreational uses that might not otherwise be possible.

**4.2.6** Consolidated has had a leak detection program in place since January 26, 1990 and has expended approximately \$1.8 million dollars since inception of the program. The current annual expenditure is about \$120,000. In 1990 Consolidated purchased several leak sounders and a leak correlator device. This

equipment was the state of the art for its time, however in 2003 Consolidated purchased a new and very technical, series of leak detection equipment.

Consolidated insures that the leak detection equipment is kept up to date and in good repair and spends about \$50,000 to \$75,000 every five years on updating the equipment. Once the entire water distribution system has been inspected, which takes about two years, the entire process is started over, so the entire system is rechecked every two to three years.

Suspected leaks are investigated as soon as they are discovered, and if a leak is verified, it is repaired. Within the first two years of the program, Consolidated's water loss was reduced from about 8% overall to about 4%. This represents a savings of about 100 acre feet of water annually. Considering the cost of purchasing treated water from Denver Water and the cost of treatment and distribution of the Maple Grove water, this equates to an average annual savings of over \$300,000.

The following chart depicts the location of leaks between 2003 & 2009 that were found using the leak detection equipment purchased in 2003. The actual water loss can only be estimated because we have no way of knowing how long the actual leak was flowing.

<b>LEAK SURVEY RESULTS</b>			
<b>DATE</b>	<b>AMOUNT</b>	<b>WATER LOSS IN ESTIMATED GALLONS</b>	<b>LOCATION</b>
7/23/2003	3 GPM	1,576,800	785 Reed St.
7/30/2003	4 GPM	2,102,400	885 Teller St.
9/11/2003	5 GPM	2,628,000	680 Garland St.
9/15/2003	1 GPM	525,600	9332 W. 10th Ave.
10/8/2003	2 GPM	1,051,200	Colfax & Miller
10/13/2003	4 GPM	2,102,400	9775 W. 36th Ave.
10/21/2003	1 GPM	525,600	6th Ave. & Kipling
12/2/2003	25 GPM	13,140,000	Crabapple & Heather
5/6/2004	5 GPM	2,628,000	14 <sup>th</sup> & Garrison St.
6/4/2004	7 GPM	3,679,200	14 <sup>th</sup> & Holland St.
8/31/2004	1/2 GPM	262,800	1169 VanGordan
9/16/2004	1/2 GPM	262,800	1295 Urban St.
11/5/2004	3 GPM	1,576,800	1790 Glen Ayr Dr.
12/22/2004	2 GPM	1,051,200	1690 Routt St.
12/22/2004	1 GPM	525,600	17 <sup>th</sup> & Routt St.
1/19/2005	2 GPM	1,051,200	2222 Reed Dr.
1/25/2005	5 GPM	2,628,000	22nd & Wadsworth
8/24/2005	7 GPM	3,679,200	3200 Moore St.
9/6/2005	1/2 GPM	262,800	38 <sup>th</sup> & Nelson St.
10/21/2005	1 GPM	525,600	3358 Swadley St.
10/21/2005	1 GPM	525,600	3378 Swadley St.
9/8/2006	4 GPM	6,307,200	5300 W. 6th Ave.
5/5/2009	100 GPM	52,562,000	Alameda & Benton
8/21/2009	30 GPM	63,072,000	775 Kendall Ct.
	<b>TOTAL</b>	<b>164,252,000</b>	<b>504 Acre Feet</b>

Another element of Consolidated's leak detection program incorporates a comprehensive meter replacement and testing program. Over 70% of Consolidated's meters are single family residential which accounts for about 50% of water used by Consolidated Customers. Therefore, 5/8-inch, ¾-inch and 1-inch meters are replaced every 15 years on a rotating basis to insure that all water used is accounted for properly. All 1 ½ - inch and above sized meters are tested annually and repaired or replaced as needed.

Due to the leak detection program, Consolidated's annual water loss is less than 4% for both the Denver Water and Maple Grove systems, which we believe is one of the lowest in the industry.

Consolidated prepares a complete water audit of both the Maple Grove and Denver Systems. This determines our overall system loss. During the water audit Consolidated takes into consideration all flushing, leaks, and fire hydrant usage throughout the entire system.



**4.2.7** Consolidated is a contract distributor of Denver Water and as such has access to Denver Water's vast resources. Consolidated provides the same information to its stockholders/users that is available to all Denver Water customers through its web site, [www.cmwc.net](http://www.cmwc.net) which provides current information on a variety of conservation related topics and contains a direct link to Denver Water's web site.

Consolidated holds its Annual Stockholders' Meeting in the spring of each year and a portion of that meeting is dedicated to water conservation topics, including the dissemination of information and materials about xeriscaping, water saving appliances and fixtures and current water to use guidelines. Consolidated's Board of Directors sets the watering guidelines each spring and typically follows those established by Denver Water, unless there is a need to be more stringent. The same guidelines are applied to both the Denver Water and Maple Grove service areas. It is noteworthy to mention that in the spring of 2002, the driest year in over 300 years Consolidated's Board approved significant water restrictions in mid-April a full month before Denver Water took any action.

**4.2.8** This Section pertains to technical assistance provided by the department of local affairs to local governments to assist in setting up billing systems. Consolidated is a private corporation and would not be eligible for this service.

**4.2.9** This Section pertains to regulatory measures and Consolidated's By-Laws and Articles of Incorporation do not provide the necessary vehicle to implement regulatory measures. Consolidated relies on the provisions of the Articles of Incorporation and the By-Laws which provide that the Board of Directors may set policy from time to time. Consolidated is also contractually obligated to comply with the Operating and Engineering Standards and Operating Rules and Regulations established by the Denver Board of Water Commissioners. Consolidated's Operating Rules and Regulations contains Chapter 10 entitled "Water Conservation" which is included as a matter of reference following Section 4.2.10 of this plan. Referenced within Chapter 10 at Paragraph 10.02.4 is the Soil Amendment Rule for Irrigation of Turf at Newly Constructed Premises which Consolidated enforces strictly with all new customers within both of its Denver and Maple Grove service areas.

**4.2.10** The rebate program established by Denver Water is applied within the Denver Contract Service Area only; however, it is not available within Consolidated's Maple Grove Service Area because financing such a rebate program through Consolidated's rates for its Maple Grove System would impose an economic hardship for all of Consolidated's customers because a rebate program would cause Consolidated to have to raise its rates for all Customers served by its Denver and Maple Grove Systems. Consolidated's Board of Directors has focused Consolidated's conservation efforts on leak testing, repairing discovered leaks and its Orion System which benefit all customers of Consolidated. Sharing equally in the cost of the Orion System components is in effect a rebate available to all of Consolidated customers. The following exhibit

outlines the present incentives and rebates available to Consolidated's customers.

### **CONSERVATION ELEMENTS\***

ELEMENT	SFR	MFR	COM	GOV	DW	MG	NEW
<b>EDUCATIONAL:</b>							
XERISCAPE	X	X	X	X	X	X	X
CAR WASH CERT.			X	X	X	X	X
CONS ED - SCH				X	X	X	
CONS ED - PUBLIC	X	X	X	X	X	X	
MF AUDIT		X					
<b>FINANCIAL:</b>							
ET CONT REBATE	X	X	X	X	X		
1.6 GPF REBATE	X	X	X	X	X		
HET REBATE	X	X	X	X	X		
CLOTHES WASHER	X	X	X	X	X		
RAINFALL SENSOR	X	X	X	X	X		
<b>REGULATORY:</b>							
0.5 GPF URINALS							
TIME OF SALE RETROFIT							
NEW CONST.							
<b>NEW CUSTOMERS:</b>							
5 ACRE RULE	X	X	X	X	X		X
IRR. EFFICIENCY	X	X	X	X	X	X	X
SOIL AMENDMENT	X	X	X	X	X	X	X

\*(SFR = SINGLE FAMILY RESIDENTIAL; MFR = MULTIFAMILY RESIDENTIAL; COM = COMMERCIAL;  
GOV = GOVERNMENT; DW = DENVER WATER SERVICE AREA; MG = MAPLE GROVE SERVICE AREA;  
NEW = NEW CONSTRUCTION; EXIST. = EXISTING STRUCTURES)

### **ORION WATER METER/MONITOR SYSTEM:**

Consolidated's Board approved sharing the cost of the Orion Water Meter/Monitoring System; a system that is available to all stockholders of Consolidated and allows the stockholder to monitor their water use on a real time basis; helps them to determine how much water is used in any given time period or for any particular function such as lawn watering or laundry. A sending unit is placed on the water meter in the meter pit and that unit sends the data to a

receiver placed in the house or the business. The device also has a warning light feature which will come on in the event that water runs continuously for a 24-hour period indicating a leak somewhere beyond the meter to the structure. The current cost of the system for a 5/8" or 3/4" meter is \$258 and Consolidated will share 50% of that cost with the stockholder.

In addition to the above, Consolidated has the following policy in place regarding customer service and implementing the Orion Water Meter/Monitoring System:

- 1) On a daily basis our Meter Operations Department meets with the Billing Department to review the daily high/low consumptions from that day's readings.
- 2) After this review, accounts which show water consumption outside of the normal usage pattern of a particular customer are then turned over to the Meter Department who installs a new Orion Meter Device for immediate monitoring.
- 3) As described earlier in this plan, this device will identify any unusual usage, even as small as 1/4 of a gallon every 5 minutes.
- 4) The Meter Department will then leave the Orion meter in place for seven (7) consecutive days to develop a water consumption pattern and profile. They will then take and test the old meter at Consolidated's meter shop to insure it is operating correctly within its parameters.
- 5) Once the Meter Department profiles the Orion meter on the seventh day, they will then contact with the customer, share the results and offer their recommendations.
- 6) In some cases the Meter Department will need to leave the Orion on for an additional seven days and re-profile the meter if the customer's problem is not resolved.
- 7) Once a leak is detected, Consolidated will assist the customer in trying to find the source of the leak. After 14 days, 99% of all problems are recognized and or solved.

In addition, Consolidated has worked with and continues to work with large apartment complexes, office parks and homeowner associations using the Orion Water Meter/ Monitoring system regarding summer irrigation. This allows those larger customers to put together a water budget and eliminate or minimize water loss on their large irrigation systems. This effort was successfully implemented and tested on the Villa Townhomes, located in Lakewood in April 2009.

Pursuant to Resolution No. 2009-05 dated April 27, 2009, the Board adopted Operating Rules (Rules) for the purpose of defining and clarifying responsibilities of Consolidated and its Stockholders (Customers) effective May 1, 2009. Included within these Rules is Chapter 10 – Water Conservation which is presented in its entirety as follows:

## **CHAPTER 10 - WATER CONSERVATION**

10.01 **Water Waste Prohibited.** Water shall be used only for beneficial purposes and shall not be wasted.

10.01.1 **Water Waste Defined.** Prohibited water waste includes, but is not limited to:

a. Applying more water than is reasonably necessary to establish and maintain a healthy landscape. Routine watering of turf shall be limited to three days per week, except for watering for up to 21 days to establish new turf from sod or seed; and except for syringing golf course greens when necessitated by weather conditions.

b. Watering with spray irrigation between the hours of 10.00 a.m. and 6.00 p.m. during the period from May 1 to October 1, except for the following uses:

(1) Watering for up to 21 days to establish turf from seed or sod.

(2) Watering new plant material such as flowers, trees and shrubs on the day of planting.

(3) Watering essential to preserve turf subject to heavy public use.

(4) Operating an irrigation system for installation, repair or reasonable maintenance, so long as the system is attended throughout the period of operation.

c. Watering landscaped areas during rain or high wind.

d. Applying water intended for irrigation to an impervious surface, such as a street, parking lot, alley, sidewalk or driveway.

e. Using water instead of a broom or mop to clean outdoor impervious surfaces such as sidewalks, driveways and patios, except when cleaning with water is necessary for public health or safety reasons or when other cleaning methods are impractical.

f. Allowing water to pool or flow across the ground or into any drainage way, such as gutters, streets, alleys or storm drains.

g. Failing to repair, for a period of more than five (5) business days after notice, leaking or damaged irrigation components, service lines or other plumbing fixtures.

h. Washing vehicles with a hose that lacks an automatic shut-off valve.

10.01.2 **“Water Use Restriction” Distinguished.** These prohibitions on water waste are not related to drought response, insufficient water supply or system emergency and therefore do not constitute water use restrictions.

## 10.02 **Irrigation Uses.**

### 10.02.1 **Xeriscape.**

a. Definition. Xeriscape is a set of seven horticultural principles that combine climate-compatible vegetation and other techniques to conserve irrigation water.

b. Policy. It is the Company’s policy to encourage Xeriscape landscapes throughout the service area. Prohibitions on the use of Xeriscape are contrary to public policy.

10.02.2 **Irrigation of More Than One Acre.** In order to extend the yield of the Company’s water supply and to encourage the efficient use of water, the irrigation of landscape of more than one acre may be subject to special review.

a. Contiguity Not Required. "Open space of more than one acre" may include contiguous parcels or, in the discretion of the Company, several non-contiguous parcels located in close proximity to one another.

b. Raw Water. The Company may require water service from raw water sources for irrigation of open space of more than one acre if the Company determines, in its sole discretion that. (1) alternative raw water service can be made available by the Company, and (2) the cost of raw water service is competitive with the cost of additional potable or recycled water supply and is financially practical.

c. Potable or Recycled Water. Irrigation of open space of more than one acre with potable water will be permitted only after plan review and upon a finding by the Company that the proposed landscape and irrigation design will use water efficiently in view of the intended uses of the open space.

10.02.3 **Irrigation of Narrow Strips of Land.** Spray irrigation of narrow strips of land almost inevitably results in water waste. Therefore, the following

irrigation system and design requirements apply to irrigation of any strip of land less than 25 feet in width, including medians, parkways, traffic islands, parking lot islands and perimeters, rights-of-way along streets and other public or private areas along roadways.

a. For strips of land less than 6 feet in width - Spray irrigation shall be prohibited. Low-flow irrigation systems are required.

b. For strips of land between 6 feet and 15 feet in width - Only low-flow irrigation, or spray irrigation using low-angle spray nozzles designed for the specific width to be irrigated shall be permitted. All spray heads must be pressure reducing and designed to prevent low head drainage.

c. For strips of land between 15 feet and 25 feet in width - Only gear-driven rotors with low angle nozzles may be used to irrigate turf areas. Planting beds may be irrigated with low-flow or spray irrigation. All spray heads must be pressure reducing and designed to prevent low head drainage.

10.02.4 **Soil Amendment for Irrigation of Turf at Newly Constructed Premises.** *The setting and inspection of the meter, as required by Rule 2.02(d) to activate a domestic water tap at premises where turf will be irrigated,* is contingent upon proof of proper soil preparation before installation of turf. Proper soil amendment is the equivalent of adding compost at a rate of four (4) cubic yards per one thousand (1,000) square feet of planted area, incorporated (rototilled) to a depth of six (6) inches.

### 10.03 **Industrial, Commercial and Public Use.**

10.03.1 **Best Management Practices.** The Company encourages all industrial, commercial and public use stockholders to implement Best Management Practices (BMPs) for efficient use of water. A list of BMPs is available from the Company or Denver Water.

10.03.2 **Heating or Process Water.** A water conservation device conforming to such specifications as may be required by the Company or Denver Water, shall be installed on heating, processing or other industrial or commercial uses of water whenever the Company or Denver Water determines in its discretion that recycling of the water without treatment is practical.

a. **Water Conservation Device.** For purposes of this section, a water conservation device is any equipment, process or procedure whereby all water used for heating or processing is either consumed in the intended use, or is recycled for the same purpose until it is unusable.

10.03.3 Cooling. All evaporative or refrigerated cooling uses and air conditioning facilities that deliver water to a drain or other discharge facility without recycling or further use are prohibited. This includes any equipment, process or procedure which relies upon the temperature of the water supply for cooling purposes.

10.03.4 Car Washing.

- a. Fleet Vehicles. Vehicles contained in commercial operations or fleets may be washed only by means of car wash or washing equipment certified by the Company or Denver Water.

10.03.5 Commercial Power Washing. Commercial enterprises for which cleaning with water is an essential element of their business shall use only high efficiency equipment that uses 1.6 gallons per minute or less and is certified by Denver Water.

10.04 Decorative Water Features. Decorative water features or similar water operating devices using potable or recycled water shall recirculate water within the device. Each device connected to the Water System must have an approved back-flow prevention assembly as required by the Engineering Standards.

10.05 **Emergency Water Use Restrictions**. If conditions of supply or quality so limit the water supply of the water system that unrestricted water use may endanger the adequacy of that supply or quality, the Company may, by resolution, adopt emergency water use restrictions. Emergency water use restrictions shall remain in force and effect until the Company determines that the conditions requiring their imposition no longer exist. The Company may also adopt such regulations and restrictions as are reasonably calculated under all conditions to conserve and protect its supply and to insure a regular flow of water through its system. Water use restrictions that may be imposed during drought conditions are contained in Chapter 11 of these Rules.

10.06 **Enforcement**. The stockholder of record of the premises shall be responsible for complying with the Company's regulations and restrictions. Those who violate these regulations or restrictions will be subject to the penalties in force at the time of the violation. Penalties may include:

- a. In the event of a first violation, the owner or occupant will be advised in writing and informed that a monetary charge will be added to the water bill for subsequent violations.
- b. In the event of a second violation at the same premises, the owner or occupant will be advised in writing and a \$50 charge may be added to the water bill.
- c. In the event of a third or any subsequent violation at the same premises, the owner or occupant will be advised in writing and a \$100 charge may be added to the water bill.

d. Continuing waste of water or willful violation of the Company's regulations or restrictions is cause for temporary suspension of service.

10.06.1 Enforcement During Drought Conditions. During a drought response program water waste may be deemed a drought violation and penalized as provided in that chapter.

Prior to the Board's adoption of the above Rules, on July 8, 2008 The Board adopted the following a soil amendment policy which became effective on August 1, 2008 and is included in the above Rules at Paragraph 10.02.4:

## USE WATER WISELY – CONSERVE!

### THE CONSOLIDATED MUTUAL WATER COMPANY

#### SOIL PREPARATION INFORMATION FOR ALL METER SETS REQUESTED AS OF AUGUST 1, 2008

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##### **Importance of Soil Amendment:**

Amending your soil with compost has multiple benefits. Organic matter (compost) particles can hold moisture in the soil for extended periods, allowing water to be available to plants over a longer period of time. Compost can provide small amounts of the key nutrients nitrogen, phosphorus, and potassium (N-P-K) and also increases microbial activity, which improves plant root growth. Compost also “opens” clay soils allowing better drainage and “closes” sandy soils preventing water from leaching away too quick.

For all meter sets requested as of August 1, 2008, The Consolidated Mutual Water Company, (Consolidated) requires soil amendment before an appointment for meter set will be scheduled. **If the property fails soil amendment inspection, the appointment for meter inspection/set will not be accepted, which may affect whether the property may be landscaped or occupied. Failure to have the meter set or to pass meter inspection and complete the Capital Stock process may also result in cancellation of the Water Tap Application.**

Limits on Use. Use of water for construction is permitted only through a fire hydrant permit from Consolidated until the water service is activated. **Landscape irrigation and occupancy of the premises prior to the installation of a meter are prohibited and shall constitute unauthorized use of water.**

At the time of application for the water tap, a soil amendment fee (\$80) will be collected in addition to all other applicable fees. In the case of re-inspections, a \$60 trip charge will be assessed for



each additional visit to the property and will be billed to the property once the meter has been set/inspected.

### **To Pass Soil Amendment Inspection:**

1. Prior to the installation of any plant material, including sod, apply a minimum of four (4) cubic yards of soil amendment product per one thousand (1,000) square feet of permeable area. This soil amendment product must be incorporated or rototilled to a depth of four to six inches. Site shall be raked smooth and finish grades established. Rocks and debris over 1-inch diameter that may interfere with planting and maintenance operations shall be removed.
- The soil amendment product applied to the premises must be on the Approved Soil Amendment product list available at cmwc.net.
- Tilled soil amendment product is required for all permeable area of the property, including tree lawn and right-of-way adjacent to the property for which the property owner is responsible for planting and maintaining.

### THE CONSOLIDATED MUTUAL WATER COMPANY · SOIL PREPARATION INFORMATION PAGE 2

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2. Schedule an Inspection for Soil Amendment::
- Provide documentation of soil amendment product, quantity of product and address(es) it will be applied to – invoice or load ticket – to Consolidated prior to inspection appointment. Inspection will be arranged once documentation has been received and product approved. Documentation may be:
  - E-mailed – soilamendment@cmwc.net
  - Faxed – 303-237-5560 (Lisa Welton or Karen Bayley)
  - Mailed – Consolidated Mutual Water Co, 12700 W. 27<sup>th</sup> Avenue, Lakewood CO 80215
- Schedule an inspection with The Consolidated Mutual Water Co by calling 303-274-7406 or 303-274-7429. The inspection will take place within 2 business days of request. Business days are Monday – Friday, 7:00 a.m. – 4:00 p.m. except holidays.
- Inspection status (pass or fail) will be communicated to the party who requested the inspection. Both hardcopy notice (left at the property) and phone call will be provided, day of inspection. The representative will be provided the same information via e-mail within the next business day.
- Once the property passes soil amendment inspection, the meter set/inspection appointment may be made the following business day.

**If the property fails soil amendment inspection:** The appointment for meter inspection/set will not be accepted if the property fails the soil amendment inspection. Consolidated will notify the party who made the appointment. For re-inspection, the same process applies along with a \$60 trip charge. **The property may not be occupied or landscaped.**

### **Winter Conditions:**

**Soil amendment inspection when the ground is frozen:** If, in the opinion of Consolidated, weather and ground conditions prevent the soil amendment inspection required for a meter-set, the applicant for the meter-set may deposit with Consolidated 25 percent of the Capital Stock and Water Development Fee for the property, at which time Consolidated will schedule the meter inspection even though the soil amendment inspection has not occurred. The soil amendment inspection will then take place when conditions permit and no later than June 1 each year.

Once the property has passed the soil amendment inspection, the soil amendment deposit will be refunded to the originator of deposit, regardless of ownership of the property. NO INTEREST WILL BE PAID ON THE DEPOSIT.

Contact Lisa Welton at 303-274-7406 or Karen Bayley at 303-274-7429 for the winter deposit amount for your property.

Note: Consolidated cannot perform the soil amendment inspection if the premise is landscaped. Therefore, any landscaping that occurs prior to the inspection is done at the risk of the party obtaining the landscaping. Consolidated is not responsible for any monetary or property loss arising from removal of landscaping in order to perform the inspection.

**For phased projects:**

A complete site irrigation plan must be submitted for review as a pre-requisite to applying for a tap.

**4.2.11** Consolidated has historically encouraged water conservation and has spent significant dollars in maintaining a very aggressive leak detection program. Wherever possible, the raw water acquisition, storage and delivery systems have been designed to minimize water loss. Much of the raw water delivery system is now through pipelines rather than unlined irrigation ditches resulting in much less water loss.

Consolidated has completed a comprehensive Raw Water Study, including a severe four (4) year drought study, along with a review of its Denver Water Distributor's Contract and has concluded that Consolidated has the capacity to meet all current and future demands, therefore, water conservation does not affect its overall water supply planning.

Consolidated's Board of Directors and Staff recognize and acknowledge that water resources are finite and that water conservation is an important element in meeting the present and future demand. The Board, as evidenced by past action, has been and is willing to support and fund reasonable efforts that result in conserving Consolidated's water resources. The Board is more than willing to adjust water rates as needed to meet expenses if water use continues to decrease and a revenue shortfall occurs.

## **SECTION 5**

**5.1 FUTURE CONSIDERATIONS** of water supply planning will require careful management of water resources and facilities described as follows:

**5.1.1** Raw water resource management involves careful monitoring of Consolidated's water rights decrees, stream flow conditions and water accounting to assure that the appropriate amount of water can be diverted reused and put to beneficial use or stored. Consolidated has a full time Water Resource Specialist overseeing the day to day operations and keeps the water accounting records up to date. Now, only Consolidated's water rights that have been recently purchased are not included in any of the various decrees. An application to change these rights has been filed with the Division Water Court on July 31, 2009.

**5.1.2** Consolidated will continue to maintain and make improvements to its raw water collection system and, in particular, improve unlined ditches and/or install additional pipelines to carry the water.

**5.1.3** Consolidated will continue to follow the lead of Denver Water and provide educational materials to its stockholders/users. A portion of Consolidated's web site is devoted to conservation and it links to Denver Water's web site.

**5.1.4** Field personnel, Meter Readers in particular, will monitor the neighborhoods they are working in to assure that outdoor use conforms to the Consolidated's policies and water waste is kept to a minimum.

**5.1.5** Opportunities to acquire new water supplies and storage locations are becoming very scarce requiring that alternate solutions be investigated. One of Consolidated's alternatives has been to develop an Aquifer Storage and Recovery (ASR) project near its office at 12700 West 27<sup>th</sup> Avenue.

**5.1.6** Work closely with the local governments to assure that the requirements for low flow fixtures are followed in all new construction and remodels.

**5.1.7** Working with the City of Lakewood, Wheat Ridge and Jefferson County, for the requirement for soil amendment on all new construction within both the Maple Grove and Denver systems is being enforced by the City's and County's building department.

**5.2** This Water Conservation Plan is the product of several years of the various common sense efforts described above that have been initiated by Consolidated to better manage its resources. The development of the Plan required the compilation of these various efforts into a coordinated outline. Clearly Consolidated has a significant investment in its conservation efforts and is willing to consider other concepts that fit within its corporate structure and philosophy.

**5.3** The cost of the Plan is incorporated in Consolidated's annual operating budget and will be reviewed during the budget preparation every year. Consolidated's fiscal year is February 1 through January 31. Consolidated's operation and maintenance budget begins in early October and is submitted annually for the Board's approval in a Special Meeting of the Board during the first week of December providing ample time for Consolidated to notify its customers of rate changes effective February 1. Consolidated's Conservation Plan is a critical part of this annual budget process and will be monitored and updated yearly by February 1<sup>st</sup> of every year. Consolidated's website will also be updated with changes resulting from this monitoring for the customer's benefit.

**5.4** The amount of water saved annually through Consolidated's water conservation efforts is estimated to be about 4% annually, translating to a savings of nearly 500 acre feet. The most significant factor in this savings is the on-going leak detection program.

## **SECTION 6**

**6.1 FUTURE OF THE PLAN:** Conservation efforts have effected Consolidated's customers water use patterns between 1996 and 2008 which has resulted in a savings of about 6% or a decrease of about 870 acre-feet of the total water usage by the Denver and Maple Grove Systems combined despite an increase of 4% or 921 additional taps during the same time period. While the 2002 drought certainly impacted water use patterns decreasing water usage by a margin of 13% since 1996, it is believed that the 2002 drought forced changes in outdoor irrigation patterns which have accelerated a reduction in overall water usage over the past thirteen (13) years.

Consolidated will continue to monitor water usage and conservation annually through a review of its Annual Statistical reports (see Exhibit 5) and by reviewing all of the other conservation efforts in place throughout the Plan.

Between 1996 and 2008, Consolidated's annual average consumption decreased by 14% in its Denver System and 3% in its Maple Grove System as shown on Consolidated's Annual Statistical Reports (see Exhibit 5).

As consumption continues to decrease and taps increase, we believe this will be a direct result of our ongoing conservation efforts and the implementation of our Water Conservation Plan. It may be impossible to determine how much water is being saved through each element of our water conservation plan; however, monitoring water usage on both the raw water side and through our daily efforts such as the billing process, which is the data for our Annual Statistical Report, will continue to prove this process is working.

Water use and its relationship to this Plan will continue to be tracked and updated annually. Any modifications to the Plan will be implemented by February 1<sup>st</sup> of every year. Consolidated will continue to monitor and update the

Plan annually and will submit this Plan to the CWCB every seven (7) years. This resubmit will include, but not be limited to, the following updates:

- a) Water right acquisitions and diversions annually.
- b)  $\frac{3}{4}$ " equivalents and estimated population served.
- c) Water rate changes as authorized by the Board.
- d) Policy changes as authorized by the Board.
- e) Changes and improvements to water conservation practices.
- f) Water use by both the Denver and Maple Grove Systems.
- g) Charts and statistical reports showing annual consumption by user type.
- h) Changes to the plant facilities.
- i) Leak survey results; repairs and estimated water losses and savings.
- j) Changes in the available conservation elements.

The entire suite of current conservation programs are regularly evaluated and judged against annual, seasonal, per customer, and per capita demands. For each program, Consolidated will evaluate and monitor the program's progress towards the stated 4 percent water savings goal. Additionally, net and gross water savings will be evaluated.

Every five years, Consolidated will create a new 10-year gpcd average that will be used to project future water demands. The new gpcd average will include the last five years worth of conservation measures and ensure that any savings through conservation are part of Consolidated's long term planning. Because of the issues (fluctuating weather data) with measuring only by gpcd on a yearly basis, this will not be the only way that savings is quantified. The monitoring and savings will be reported annually on all programs when there is at least a year's consumption data.

Objective and actual conservation results achieved by each component of the plan will be quantitatively monitored and reported at least once a year. For example, consumption for those who have received a conservation incentive from the previous year(s) will be monitored.

## SECTION 7

**7.1 COMPANY APPROVAL:** On June 9, 2008 Consolidated's Board of Director's approved the Water Conservation Plan.

**7.2 PUBLIC NOTIFICATION:** The Plan was made available for public review and comment for a period of 60 days from the date of Notice of Publication supported by "Proof of Publication" obtained from the daily news publication that the Notice is published in. Proof of Publication is Exhibit 1. The dates of publication began October 23, 2008 and ended December 21, 2008. No comments were received during the publication process.

EXHIBIT 1: Proof of publication in the Sentinel Newspaper and the Rocky Mountain News.

**The Consolidated Mutual Water Company** has completed a Water Conservation Plan (the Plan) with the goal being to outline and formally document Consolidated's current and proposed water conservation programs.

The Plan shall be posted on Consolidated's web site at: [www.cmwc.net](http://www.cmwc.net) and a complete copy shall be available at Consolidated's office located 12700 West 27<sup>th</sup> Avenue, Lakewood, CO 80215.

## **SECTION 8**

### **Compliance with State Planning Requirements**

Colorado Revised Statute 37-60-126 requires a covered entity to develop, adopt, make publicly available and implement a water conservation plan that will encourage its domestic, commercial, industrial and public facility customers to use water more efficiently. Consolidated developed this conservation plan to comply with C.R.S. 37-60-126. Each element of compliance is documented below:

#### **8.1.1 Consideration of specific conservation measures.**

- (I) *Fixtures and Appliances* – Consolidated continues to promote the installation of high efficiency fixtures and appliances through conservation efforts as described within our Conservation Plan. As a result of our company structure with two (2) separate systems and supply Consolidated cannot adopt a rebate program for fixtures and appliances on the Maple grove portion of our system; however Consolidated will rely on the natural aging replacement of the old fixtures along with our significant raw water supply for the Maple Grove System.
- (II) *Water wise landscape* – Consolidated continues to promote water wise landscape through our conservation program and through education as stated on our billing statements. In addition Consolidated has a Soil Amendment Policy for all landscape associated with new construction and redevelopment.
- (III) *Commercial, Industrial and Institutional (CII) measures* – Consolidated continues to promote conservation and encourage water saving measures to all of our stockholders.
- (IV) *Water reuse systems* – Consolidated has entered into two permanent leases to utilize consumptive use water that is discharged from Metro into the South Platte river which can be

used for exchange, augmentation and raw water irrigation. The reuse of Consolidated's consumptive use water helps relieve the water demand in the South Platte Basin.

- (V) *Water loss and system leakage reduction* – Our programs include a very aggressive leak detection program, a yearly water audit, the installation of Orion meters along with a strong customer service program to help our stockholders detect leaks on their property. Consolidated has a very aggressive main replacement program for the replacement of the aging distribution system, spending over \$2 million dollars annually.
- (VI) *Information and public education* – Consolidated encourages water conservation with all of our stockholders through billing notices, flyers and with our very active customer service department.
- (VII) *Water rate structure* – Consolidated has a block rate structure that is set to encourage water conservation to all of our stockholders. Annually we review the rate structure and consider both tiered rates and the block rate structure.
- (VIII) *Technical assistance* – None
- (IX) *Regulatory measures* – Consolidated's service area overlaps three (3) governmental jurisdictions and does not have the power to create or enforce ordinances. Consolidated does encourage the use of water saving fixtures and appliances during all pre construction meeting with developers. Consolidated does have a sufficient water supply for now and into the future through build out and will rely on the aging replacement of old fixtures and appliances.
- (X) *Incentives* – Consolidated encourages the replacement of aging inefficient fixtures and appliances through pre construction meetings; however, we do not promote a rebate program due to our water supply status.

**8.1.2 Role of conservation in Consolidated's supply planning.** Our current water conservation plan represents Consolidated's most effective efforts to incorporate water conservation into water supply planning. Consolidated has completed a comprehensive raw water study along with our Distributors contract with Denver Water and it is clear that Consolidated has a sufficient supply to meet all present and future needs.

- 8.1.3 Plan implementation, monitoring, review, and revision.** Consolidated monitors water use on a daily, monthly, bi-monthly and annually through our statistical reports and through our billing system and will continue to do so. Consolidated will review and update our Conservation Plan annually and will submit to the CWCB every seven (7) years.
- 8.1.4 Estimated savings from previous conservation efforts and current plan.** From 1996 to 2008 the annual average consumption has reduced by 14% on our Denver system and 3% on our Maple Grove System while taps have increased by 4% on the Denver System and 7% on the Maple Grove System. The effect of past water conservation efforts may not have been completely evaluated, however such evaluation is insignificant due to the sufficient water supply available to Consolidated.
- 8.1.5 Public comment period.** Consolidated's plan was made available for public review and comment for a period of sixty (60) days from the date of Notice of Publication supported by "Proof of Publication" obtained from the daily news publication that the notice is published in. On June 9, 2008 Consolidated's Board of Directors approved the Conservation Plan.



**The Denver Newspaper Agency  
DENVER, CO**

**PUBLISHER'S AFFIDAVIT**

**City and County of Denver,  
STATE OF COLORADO, SS.**

..... **Jean Birch** ..... being of lawful  
age and being first duly sworn upon oath, deposes and says:

That he/she is the Legal Advertising Reviewer  
Of The Denver Newspaper Agency, publisher of the Denver Post and  
Rocky Mountain News, daily newspapers of general Circulation published  
and printed in whole or in part in Denver, in the County of Denver and  
State of Colorado, and that said newspaper was Prior to and during  
all the time hereinafter mentioned duly qualified For the publication of  
legal notices and advertisements within the Meaning of an Act of the  
General Assembly of the State of Colorado,  
Approved April 7, 1921, as amended and approved March 30, 1923;  
And as amended and approved March 5, 1935, entitled "An Act  
Concerning Legal Notices, Advertisements and Publications and the  
Fees of printers and publishers thereof, and to repeal all acts and parts  
Of acts in conflict with the provision of this Act" and amendments  
Thereof;

That the notice, of which the annexed is a true copy, was published in  
The said newspaper to wit: (dates of publication)

Oct. 23 thru Nov. 21, 2008

Signature

*Jean Birch*

Subscribed and sworn to before me this .... 21 .... day

Of ... November ... A.D. 2008.

*Cheryl L. Schmid*

Notary Public.

My commission expires .... September 9, 2009 .....



**Water Conservation Plan**  
The Consolidated Mutual Water Company has  
completed a draft Water Conservation Plan (the  
Plan) with the goal being to outline and formally  
document the Company's current and proposed  
conservation programs. Prior to finalizing the  
plan and obtaining final approval from the Com-  
pany's Board of Directors, the Company is solicit-  
ing public input. A sixty (60) day review period,  
beginning as of the date of publication of this no-  
tice, shall be set aside for public review of the plan  
and receipt of comments.  
The Plan shall be posted on the Company's web site  
at: [www.cmwc.net](http://www.cmwc.net) and a complete draft shall be  
available for review at the Company's office lo-  
cated 12700 West 27th Avenue, Lakewood, CO  
80215.  
Written comments should be addressed to: The  
President of The Consolidated Mutual Water  
Company, P.O. Box 150068, Lakewood, CO 80215

**The Denver Newspaper Agency  
DENVER, CO**

**PUBLISHER'S AFFIDAVIT**

**City and County of Denver,  
STATE OF COLORADO, SS.**

..... **Robin Mitchell** ..... being of lawful  
age and being first duly sworn upon oath, deposes and says:

That he/she is the Legal Advertising Reviewer  
Of The Denver Newspaper Agency, publisher of the Denver Post and  
Rocky Mountain News, daily newspapers of general circulation published  
and printed in whole or in part in Denver, in the County of Denver and  
State of Colorado, and that said newspaper was prior to and during  
all the time hereinafter mentioned duly qualified for the publication of  
legal notices and advertisements within the meaning of an Act of the  
General Assembly of the State of Colorado,  
Approved April 7, 1921, as amended and approved March 30, 1923;  
And as amended and approved March 5, 1935, entitled "An Act  
Concerning Legal Notices, Advertisements and Publications and the  
Fees of printers and publishers thereof, and to repeal all acts and parts  
Of acts in conflict with the provision of this Act" and amendments  
Thereof;

That the notice, of which the annexed is a true copy, was published in  
The said newspaper to wit: (date of publication)

*Nov 22, Thurs. Dec. 21, 2008*

Signature

Subscribed and sworn to before me this .... 22 .... day

Of ... December ... A.D. 2008.

*Cheryl L. Schmid*  
.....  
Notary Public.

My commission expires .... September 9, 2009 .....



**Water Conservation Plan**  
The Consolidated Mutual Water Company has completed a draft Water Conservation Plan (the Plan) with the goal being to outline and formally document the Company's current and proposed conservation programs. Prior to finalizing the plan and obtaining final approval from the Company's Board of Directors, the Company is soliciting public input. A sixty (60) day review period, beginning as of the date of publication of this notice, shall be set aside for public review of the plan and receipt of comments.  
The Plan shall be posted on the Company's web site at: [www.cmwc.net](http://www.cmwc.net) and a complete draft shall be available for review at the Company's office located 12700 West 27th Avenue, Lakewood, CO 80215.  
Written comments should be addressed to: The President of The Consolidated Mutual Water Company, P.O. Box 150068, Lakewood, CO 80215



Proof of Publication  
**THE GOLDEN TRANSCRIPT**

110 N. Rubey Dr. Suite 120 Golden, Co 80403

1. I, C. Stauffer am the agent of **The Golden Transcript**, newspaper printed and published in the city of Golden, County of Jefferson and State of Colorado, and has personal knowledge of all the facts set forth in this affidavit;
2. That the said newspaper is printed and published once each week on Thursday, and that it has a general circulation in the City of Golden and in the County of Jefferson and elsewhere, delivered by carriers or transmitted by mail to each of the subscribers of said paper, according to the accustomed mode of business in this office;
3. That the said newspaper was established and has been printed and published in the said City of Golden and the County of Jefferson uninterrupted and continuously during a period of at least 52 consecutive weeks next prior to the first issue there-of containing said publication, a copy of which is hereto attached;
4. That the said newspaper is a weekly newspaper of general circulation, and is printed and published in whole or in part in the City of Golden and the said County of Jefferson in which said publication is required by law to be published, a copy of which is hereunto attached;
5. That the said newspaper is a weekly newspaper qualified to publish legal notices, as defined by the Statutes of the State of Colorado;
6. That said newspaper had, prior to January 1, 1936, and has ever since that date, been admitted to the United States mail as second class matter under the provisions of the Act of March 3, 1979, or any amendments thereto;
7. That the said annexed publication was published in the regular and entire edition of the **Golden Transcript**, a duly qualified weekly newspaper for that purpose, within the terms and means of the Statutes of the State of Colorado;
8. That the said annexed publication is a full, true, and correct copy of the original which was regularly published in each of the regular and entire issues of the **Golden Transcript**, a legally qualified paper for that purpose, once each week on the same day of each week, for 8 successive weeks, by 8 insertions and that the first publication thereof was on the 30th of October 2008, the last publication was in the issue dated December 18, 2008. Subscribed and sworn to before me this 18th day of December 2008.

By: C. Stauffer

STATE OF COLORADO      SS  
 Witness my hand and official seal  
 County of Jefferson

Karen Anne Moline  
 Notary Public

**KAREN ANNE MOLINE**  
 NOTARY PUBLIC  
 STATE OF COLORADO

My Commission Expires April 9, 2009

**Water Conservation Plan**  
 The Consolidated Mutual Water Company has completed a draft Water Conservation Plan (the Plan) with the goal being to outline and formally document the Company's current and proposed conservation programs. Prior to finalizing the plan and obtaining final approval from the Company's Board of Directors, the Company is soliciting public input. A sixty (60) day review period, beginning as of the date of publication of this notice, shall be set aside for public review of the plan and receipt of comments.  
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 Written comments should be addressed to: The President of The Consolidated Mutual Water Company, P.O. Box 150068, Lakewood, CO 80215  
 First Publication October 30, 2008  
 Last Publication December 18, 2008  
 Golden Transcript 06519466



Proof of Publication  
**THE GOLDEN TRANSCRIPT**

110 N. Rubey Dr. Suite 120 Golden, Co 80403

1. I, C. Stauffer am the agent of **The Golden Transcript**, newspaper printed and published in the city of Golden, County of Jefferson and State of Colorado, and has personal knowledge of all the facts set forth in this affidavit;
2. That the said newspaper is printed and published once each week on Thursday, and that it has a general circulation in the City of Golden and in the County of Jefferson and elsewhere, delivered by carriers or transmitted by mail to each of the subscribers of said paper, according to the accustomed mode of business in this office;
3. That the said newspaper was established and has been printed and published in the said City of Golden and the County of Jefferson uninterrupted and continuously during a period of at least 52 consecutive weeks next prior to the first issue there-of containing said publication, a copy of which is hereto attached;
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7. That the said annexed publication was published in the regular and entire edition of the **Golden Transcript**, a duly qualified weekly newspaper for that purpose, within the terms and means of the Statutes of the State of Colorado;
8. That the said annexed publication is a full, true, and correct copy of the original which was regularly published in each of the regular and entire issues of the **Golden Transcript**, a legally qualified paper for that purpose, once each week on the same day of each week, for 8 successive weeks, by 8 insertions and that the first publication thereof was on the 30th of October 2008, the last publication was in the issue dated December 18, 2008. Subscribed and sworn to before me this 18th day of December 2008.

By: C. Stauffer

STATE OF COLORADO      SS  
 Witness my hand and official seal  
 County of Jefferson

Karen Anne Moline  
 Notary Public

**KAREN ANNE MOLINE**  
 NOTARY PUBLIC  
 STATE OF COLORADO  
 My Commission Expires April 9, 2009

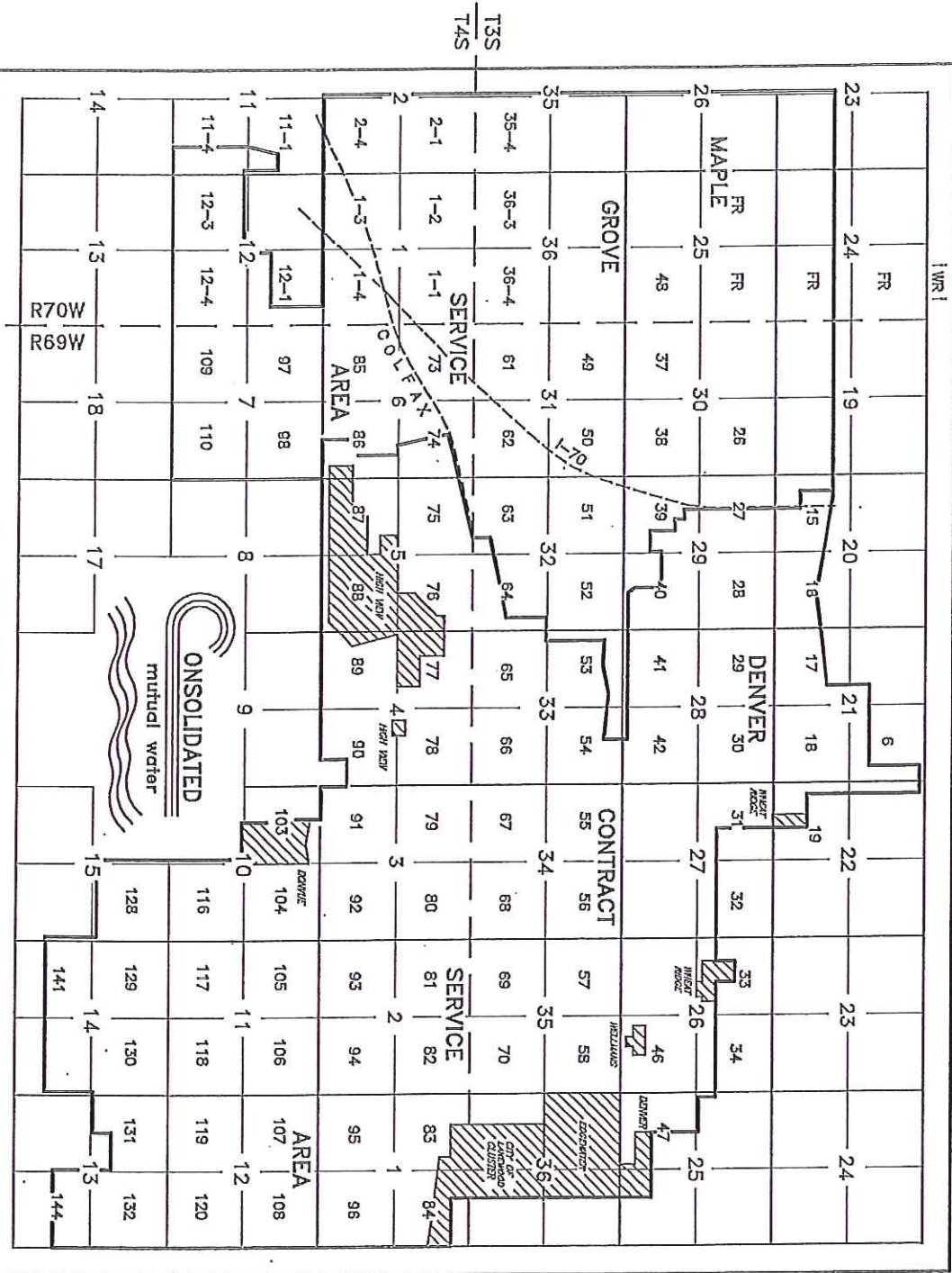
**Water Conservation Plan**  
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 Written comments should be addressed to: The President of The Consolidated Mutual Water Company, P.O. Box 150068, Lakewood, CO 80215  
 First Publication October 30, 2008  
 Last Publication December 18, 2008  
 Golden Transcript 06519468

# EXHIBIT "2"

## THE CONSOLIDATED MUTUAL WATER COMPANY

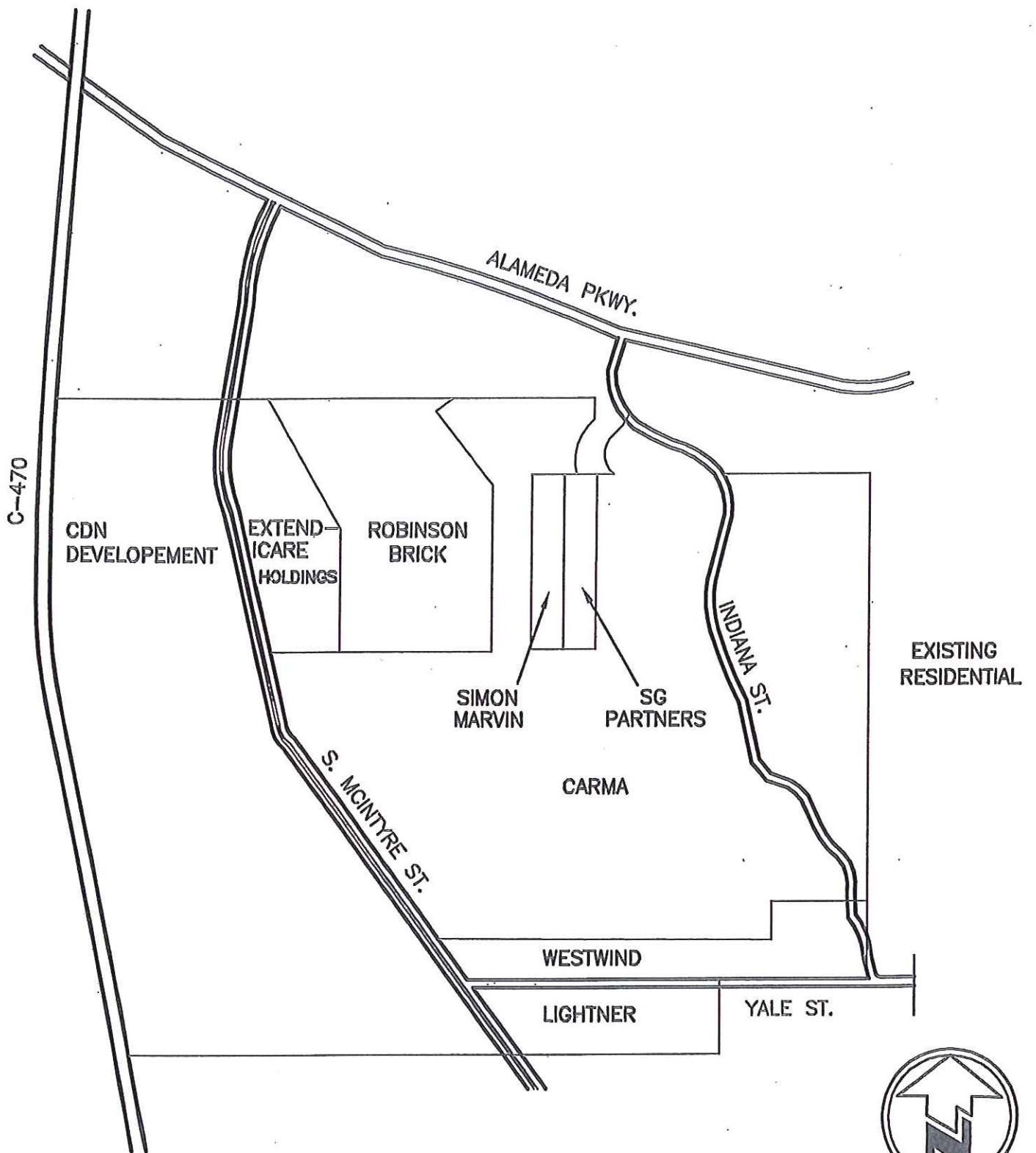
### SYSTEM MAPPING

Ulysses St.  
Quaker St.  
McIntyre St.  
Indiana St.  
Eldridge St.  
Alkire St.  
Ward Rd.  
Simms St.  
Oak St.  
Kipling St.  
Garrison St.  
Carr St.  
Wadsworth Blvd.  
Pierce St.  
Harlan St.  
Sheridan Blvd.



W. 48th Ave.  
W. 44th Ave.  
W. 38th Ave.  
W. 32nd Ave.  
W. 26th Ave.  
W. 20th Ave.  
W. Colfax Ave.  
W. 10th Ave.  
W. 6th Ave.  
W. 1st Ave.  
W. Alameda Ave.  
W. Exposition Ave.  
W. Mississippi Ave.



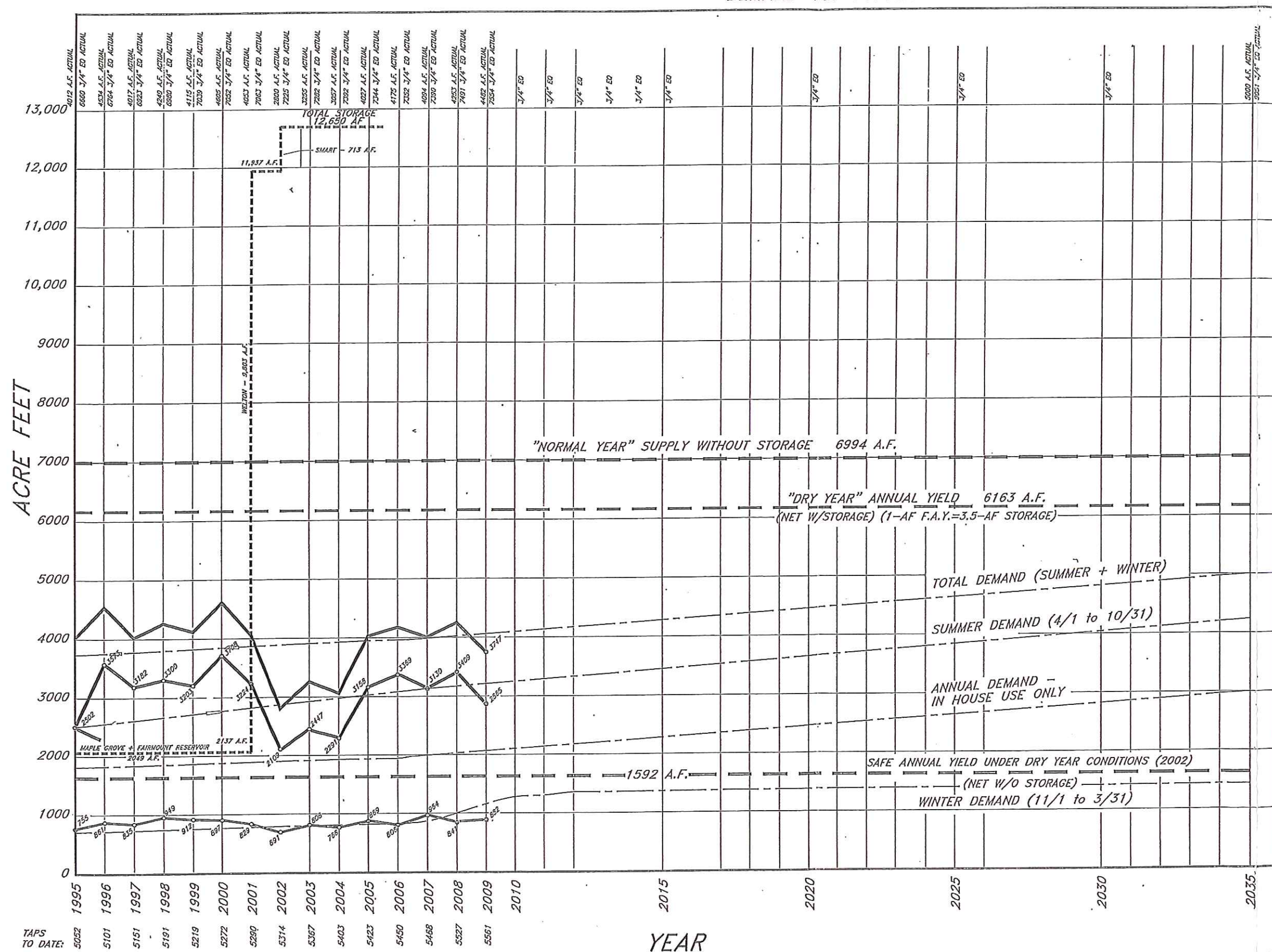


SCALE: NONE

EXHIBIT "3"  
ROONEY VALLEY

*THE CONSOLIDATED MUTUAL WATER COMPANY*  
*MAPLE GROVE RAW WATER SUPPLY STUDY*

## DEMAND VS. SUPPLY



ANNUAL WATER SUPPLY YIELDS  
(DELIVERED AT MAPLE GROVE)

ALL QUANTITIES ARE IN ACRE FEET

**CLEAR CREEK DITCHES:**

LEE, STEWART & ESKINS	750	A.F.	190	A.F.
AGRICULTURAL	2700		1052	
ROCKY MOUNTAIN			161	
LENA GULCH	450		0	
WELCH DITCH **	1600		220	
EXCHANGE	300		0	
LAKE ERIE	40		12	
KELLY LAKE	75		15	
SUB TOTAL: CLEAR CREEK SUPPLY	6285		1650	

JUNIOR STORAGE RIGHTS / FREE RIVER 1500 0

DENVER WATER RAW WATER  
LEASE AGREEMENT: \*

FRASER WATER	143	72
PERMANENT WATER	300	150
SUB TOTAL: DENVER CONTRACT	443	222

TOTAL SUPPLY:	<u>8228</u>	<u>1872</u>
---------------	-------------	-------------

TRANSPORTATION AND SYSTEM LOSS AT 15% (1234) (280)

NET WATER SUPPLY:	6994	1592
DEMAND AT BUILDOUT	(6854)	(6020)

EXCESS WATER 140 AF (4428)

\* ASSUMES A 50% REDUCTION IN DELIVERIES PER THE "LEASE AGREEMENT"

\*\* INCLUDES WELCH DITCH PURCHASES (STEVINSON/GOLDEN)

VERTICAL SCALE: 1"=800 AF

SEPTEMBER, 2010



CONSOLIDATED MUTUAL WATER COMPANY  
ANNUAL STATISTICAL SUMMARY  
FISCAL YEAR ENDED JANUARY 31, 1997

[illegible]



## EXHIBIT 5

CONSOLIDATED MUTUAL WATER COMPANY  
ANNUAL STATISTICAL SUMMARY  
FISCAL YEAR ENDING JANUARY 31, 2009  
PAGE 1/2

## TOTALS BY MONTH

	USAGE	BILLING	USAGE	BILLING	AAU	AAB	AUG	AAU	AAB
FEB	175,992,400	1,002,348.54	532,425,800	2,064,504.04	8,400	47.79	AUG	25,400	98.44
MAR	273,061,200	1,219,808.67	749,771,700	3,074,889.77	13,000	58.16	SEP	35,800	146.62
APR	157,576,300	963,917.43	393,094,500	1,830,150.40	7,500	45.96	OCT	18,700	87.27
MAY	287,750,100	1,217,635.88	391,423,900	1,920,384.85	13,700	58.06	NOV	18,700	91.57
JUN	246,387,400	1,562,241.08	199,637,600	1,126,764.62	11,700	74.49	DEC	9,500	53.73
JUL	586,565,400	2,552,744.45	200,988,500	1,155,135.07	28,000	121.72	JAN	9,600	55.08
ANNUAL USAGE	4,194,674,800	19,690,524.80	938.90	# ACCTS	AMU	AMB			
				20,972	16,700	78.24			

## STATISTICS BY BILLING GROUPS

BILLING GROUPS	# ACCTS	PCT	USAGE	PCT	BILLING	PCT	BILLING GROUPS	# ACCTS	PCT	USAGE	PCT	BILLING	PCT
A1	409	1.95	44,820,000	1.07	252,002.54	1.28	LB	374	1.78	77,503,100	1.85	384,492.01	1.95
A2	400	1.91	49,551,400	1.18	267,863.44	1.36	N1	435	2.07	85,430,500	2.04	426,186.41	2.16
B1	586	2.79	123,563,300	2.95	603,908.32	3.07	N2	472	2.25	106,943,000	2.55	406,959.89	2.07
B2	531	2.53	98,868,700	2.36	487,557.14	2.48	P	704	3.36	123,400,600	2.94	616,812.43	3.13
B3	676	3.22	116,368,200	2.77	556,784.18	2.83	R	759	3.62	118,136,000	2.82	617,233.47	3.13
CA1	416	1.98	57,450,100	1.37	299,117.23	1.52	S1	486	2.32	199,952,500	4.77	757,812.34	3.85
CA2	417	1.99	61,189,400	1.46	314,423.67	1.60	S2	481	2.29	66,713,600	1.59	362,094.00	1.84
CB1	416	1.98	74,162,800	1.77	372,272.49	1.89	TD	380	1.81	150,017,200	3.58	693,636.07	3.52
CB2	437	2.08	59,507,200	1.42	320,149.92	1.63	TM	619	2.95	114,709,300	2.73	489,017.85	2.48
D	712	3.40	82,835,300	1.97	464,214.83	2.36	W1	583	2.78	148,742,900	3.55	551,298.21	2.80
E1	380	1.81	55,544,500	1.32	254,414.17	1.29	W2	571	2.72	160,120,900	3.82	412,192.69	2.09
E2	393	1.87	51,098,700	1.22	276,315.21	1.40	X1	482	2.30	123,882,200	2.95	502,991.74	2.55
F	644	3.07	161,185,500	3.84	772,286.86	3.92	X2	526	2.51	85,018,800	2.03	434,554.78	2.21
GA	676	3.22	118,610,500	2.83	568,738.71	2.89	X3	553	2.64	306,107,800	7.30	1,391,578.08	7.07
GB1	524	2.50	77,784,000	1.85	406,968.89	2.07	X4	452	2.16	89,808,700	2.14	450,610.33	2.29
GB2	518	2.47	110,902,300	2.64	554,932.13	2.82	X5	403	1.92	77,925,500	1.86	396,056.40	2.01
H	636	3.03	169,978,000	4.05	815,487.21	4.14	Y	1295	6.17	221,041,100	5.27	1,125,402.26	5.72
I	457	2.18	70,256,500	1.67	332,174.69	1.69	YY	42	0.20	12,065,800	0.29	53,860.74	0.27
J	748	3.57	121,437,600	2.90	630,314.48	3.20							
K1	391	1.86	65,872,900	1.57	263,991.83	1.34	MPLGV	5,526	26.35	1,339,423,000	31.93	5,807,563.08	29.49
K2	374	1.78	82,772,400	1.97	403,705.21	2.05	DENVR	15,446	73.65	2,885,251,800	68.07	13,882,961.72	70.51
IA	614	2.93	73,396,000	1.75	400,111.95	2.03	TOTAL	20,972	100.00	4,194,674,800	100.00	19,690,524.80	100.00

CONSOLIDATED MUTUAL WATER COMPANY  
ANNUAL STATISTICAL SUMMARY  
FISCAL YEAR ENDING JANUARY 31, 2009  
PAGE 2/2

STATISTICS BY CUSTOMER TYPE  
ALL ACCOUNTS

Customer Type	# ACCTS	PCT	USAGE	PCT	BILLING	PCT	AAU	AAB	Service Area#	ACCTS	PCT	USAGE	PCT	BILLING	PCT	AAU	AAB
Apartment/Condos	979	4.67	721,103.900	17.19	3,116,984.91	15.83	736,600	3,183.85	A	1933	9.22	293,872.000	7.01	1,496,030.05	7.60	152,000	773.94
Churches	70	0.33	28,649.100	0.68	132,877.93	0.67	409,300	1,838.26	B	2554	12.18	492,254.700	11.74	2,334,838.90	11.86	192,700	914.19
Exceptions	3	0.01	3,698.600	0.09	15,611.68	0.08	1,232,900	5,203.89	C	1203	5.74	207,598.900	4.95	1,001,177.94	5.08	172,600	832.23
Industrial	8	0.04	6,535.100	0.16	28,272.11	0.14	816,900	3,534.01	D	1774	8.46	372,667.700	8.88	1,823,961.94	9.26	210,100	1,028.16
Irrigation Only	190	0.91	155,724.200	3.71	660,208.94	3.35	819,600	3,474.78	E	2607	12.43	622,247.700	14.83	2,320,233.03	11.78	238,700	890.00
Master Meter Conn.	4	0.02	0	0.00	219.60	0.00	0	54.90	F	190	0.91	33,051.500	0.79	165,234.23	0.84	238,700	890.00
Motels	30	0.14	79,301.900	1.89	328,036.09	1.67	2,643,400	10,934.54	G	6225	29.68	1,174,152.600	27.99	5,645,879.23	28.67	178,000	869.67
Multiple Occupancy	323	1.54	177,463.100	4.23	802,588.22	4.08	549,400	2,484.79	H	1297	6.18	236,129.200	5.63	1,182,747.93	6.01	182,100	911.91
Nursing Homes	12	0.06	44,816.900	1.00	168,067.12	0.85	3,484,700	14,005.59	I	461	2.20	78,693.000	1.88	398,886.46	2.03	170,700	863.26
Recreation	35	0.17	34,653.500	0.83	150,407.45	0.76	990,400	4,297.36	J	1517	7.23	280,605.100	6.93	1,465,899.10	7.47	191,600	968.55
Rehabilitation Centers	9	0.04	17,153.500	0.41	71,417.90	0.36	1,905,900	7,935.32	K	254	1.21	65,452.500	1.56	323,427.96	1.74	257,700	1,273.34
Residential 1 Unit	17196	82.00	2,215,350.200	52.81	10,843,156.78	55.07	128,800	892.45	L	696	3.32	149,518.400	3.56	740,634.85	3.76	214,800	1,064.13
Residential 2 Units	1270	6.06	221,590.800	5.28	1,133,412.40	5.76	174,500	892.45	M	37	0.18	66,156.300	1.58	281,044.53	1.53	1,788,000	7,595.80
Schools	59	0.28	95,884.500	2.29	414,895.44	2.11	1,625,200	7,032.13	N	46	0.22	68,222.800	1.63	300,043.59	1.52	1,483,100	6,522.69
Single Occupancy	773	3.69	386,127.700	9.21	1,782,675.54	9.05	499,500	2,306.18	O	136	0.65	31,986.600	0.76	152,624.32	0.78	235,200	1,122.24
Swimming Clubs	11	0.05	5,611.800	0.23	41,692.69	0.21	873,800	3,769.24	P	42	0.20	12,065.800	0.29	53,860.74	0.27	287,300	1,282.40
TOTAL	20,972	100.00	4,194,674,800	100.00	19,690,524.80	100.00	200,000	938.90	TOTAL	20,972	100.00	4,194,674,800	100.00	19,690,524.80	100.00	200,000	938.90

STATISTICS BY CUSTOMER TYPE  
DENVER ACCOUNTS

Customer Type	# ACCTS	PCT	USAGE	PCT	BILLING	PCT	AAU	AAB
Apartment/Condos	847	5.48	594,822.500	20.83	2,594,499.61	18.69	702,300	3,063.16
Churches	54	0.35	23,825.700	0.83	109,348.21	0.79	441,200	2,024.97
Exceptions	3	0.02	3,698.600	0.13	15,611.68	0.11	1,232,900	5,203.89
Industrial	6	0.04	6,388.700	0.22	26,993.39	0.19	1,064,800	4,498.90
Irrigation Only	126	0.82	95,565.200	3.35	403,786.04	2.91	758,500	3,204.65
Motels	22	0.14	27,216.400	0.95	114,061.79	0.82	1,237,100	5,184.63
Multiple Occupancy	277	1.79	134,404.600	4.71	610,075.52	4.39	485,200	2,202.44
Nursing Homes	10	0.06	38,754.800	1.36	155,596.84	1.12	3,875,500	15,559.68
Recreation	18	0.12	18,309.200	0.64	80,154.76	0.58	1,017,200	4,433.04
Rehabilitation Centers	7	0.05	1,313.500	0.05	6,980.30	0.05	187,600	997.19
Residential 1 Unit	12296	79.61	1,407,643.600	49.30	7,335,984.97	52.84	114,500	596.62
Residential 2 Units	1111	7.19	200,950.200	7.04	1,020,781.26	7.35	180,900	918.80
Schools	40	0.26	63,174.800	2.21	267,868.18	1.93	1,579,400	6,696.70
Single Occupancy	623	4.03	234,335.900	8.21	1,130,110.14	8.07	376,100	1,797.93
Swimming Clubs	6	0.04	4,848.100	0.17	21,109.03	0.15	808,000	3,518.17
TOTAL	15,446	100.00	2,855,251,800	100.00	13,882,961.72	100.00	184,900	898.81

STATISTICS BY METER SIZE

METER SIZE	# ACCTS	PCT	USAGE	PCT	BILLING	PCT	AAU	AAB
5/8 Displacement	12859	61.32	1,649,733.800	39.33	7,671,513.22	38.96	128,300	596.59
3/4 Displacement	6297	30.03	928,991.000	22.15	4,967,552.80	25.23	147,500	788.88
1 Displacement	729	3.48	307,621.500	7.33	1,405,785.47	7.14	422,000	1,928.38
1-1/2 Displacement	506	2.41	436,465.900	10.41	1,942,540.01	9.87	862,600	3,839.01
2 Compound	190	0.90	430,505.900	9.68	1,801,219.36	9.15	4,944,100	20,546.04
2 Turbine	12	0.06	52,833.000	1.26	212,979.00	1.08	4,402,800	17,748.25
TOTAL	15,446	100.00	2,855,251,800	100.00	13,882,961.72	100.00	184,900	898.81

STATISTICS BY CUSTOMER TYPE  
MAPLE GROVE ACCOUNTS

Customer Type	# ACCTS	PCT	USAGE	PCT	BILLING	PCT	AAU	AAB
Apartment/Condos	132	2.39	126,281.400	9.43	522,485.30	9.00	956,700	3,958.22
Churches	16	0.29	4,823.400	0.36	23,529.72	0.41	301,500	1,470.61
Industrial	2	0.04	146.400	0.01	1,278.72	0.02	73,200	639.36
Irrigation Only	64	1.16	60,159.000	4.49	256,422.90	4.42	940,000	4,006.61
Master Meter Conn.	4	0.07	0	0.00	219.60	0.00	0	54.90
Motels	8	0.14	52,085.500	3.89	213,974.30	3.68	6,510,700	26,746.79
Multiple Occupancy	46	0.83	43,058.500	3.21	182,512.70	3.31	936,100	4,185.06
Nursing Homes	2	0.04	3,062.100	0.23	12,470.28	0.21	1,533,100	6,235.14
Recreation	17	0.31	16,354.300	1.22	70,252.69	1.21	962,000	4,132.51
Rehabilitation Centers	2	0.04	15,840.000	1.18	64,437.60	1.11	7,920,000	32,218.80
Residential 1 Unit	4900	88.67	807,706.600	60.30	3,507,171.81	60.39	164,800	715.75
Residential 2 Units	159	2.88	20,640.600	1.54	112,631.14	1.94	129,800	708.37
Schools	19	0.34	32,709.700	2.44	147,027.26	2.53	1,721,600	7,738.28
Single Occupancy	150	2.71	151,791.800	11.33	662,565.40	11.41	1,011,900	4,417.10
Swimming Clubs	5	0.09	4,763.700	0.36	20,583.66	0.35	952,700	4,116.73
TOTAL	5,526	100.00	1,339,423,000	100.00	5,807,563.08	100.00	242,400	1,050.95