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WATER SUPPLY CAPACITY CHARACTERISTICS OF WISCONSIN'S GROUNDWATER BASED MUNICIPAL WATER SYSTEMS

By

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ABSTRACT

Purpose of this study was to evaluate whether water system sizing guidelines would be useful for small to very small (population less than 3,300) municipal water systems in Wisconsin to assist these systems with implementation of Wisconsin's capacity development strategy. The Wisconsin Department of Natural Resources' capacity development strategy, which was developed in response to the 1996 Safe Drinking Water Act requirements for Capacity Development, in part requires utilities to be "adequately sized". Unfortunately, the strategy but does not define what adequately sized means. Adequate capacity has an assumed meaning that demand is less than capacity, or that surplus capacity exists after meeting various demand scenarios. This study developed a water system analysis guideline based on published engineering principles and recommendations in literature to analyze the spare capacity of 518 groundwater based municipal water systems in Wisconsin using year 2003 data. Water system operational and facility data used in this study was obtained from the Wisconsin Department of Natural Resources and Wisconsin Public Service Commission.

To perform spare capacity analysis, equations were developed based on engineering recommendations to characterize three operational scenarios which could be experienced by water systems: maximum day demand with largest well out of service; maximum day demand plus fire demand with largest well out of service utilizing entire effective storage volume over fire demand period; and maximum hour demand during maximum day demand over maximum hour demand period. Application of these equations in this study was limited to maximum day demands due to lack of available data on maximum hour demands. Analyses were performed using different combinations of recommended practice and analysis time periods to determine sensitivity of results to recommended practices and understanding of period of interest.

Results of this study indicate that a water system sizing guideline would be helpful to small and very small municipal water systems in Wisconsin. Development of a formal guideline could help these systems assess their ability to satisfy current demands, plan for facility

improvements to meet projected demands, assess feasibility of policy decisions such as water conservation requirements and/or fire protection, as well as help determine an optimal period to perform facility maintenance without adversely impacting system capacity. Based on analyses performed, 19.3% ± 1.5 of the Wisconsin's municipal water systems had deficit capacity in 2003 for design condition of maximum day demand with largest well out of service, while 43.1% ± 6.4 had a deficit capacity for design condition of maximum day demand plus fire demand with largest well out of service over the fire duration period. For a check condition of average day demand plus fire demand with largest well out of service, 34% of the systems had deficit capacity. Of these deficit systems, 96% ± 2 were considered small or very small water systems. For systems with deficit capacity by analyses performed, the cause for the maximum day demand was related to maintenance activities 70% of the time, which included water main breaks, leaks, equipment failures, system flushing or scheduled facility maintenance.

A water system which had a calculated deficit capacity for 2003 does not mean that the system did not serve its users, just that it may not have had enough water to satisfy demands had a major facility failure occurred within the system, or had a combination of facility failure with large fire demand occurred. Further study is needed to assess risk levels associated with engineering recommendations before a formal water system sizing guideline can be established. A risk assessment based guideline could help a community decide how to satisfy capacity needs, using a cost/benefit analysis approach, factoring in community policy on economic development, capital funding, water conservation and resource allocation.

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NOMENCLATURE

Analysis Basis: Time period over which spare capacity analysis occurs

Anticipated Demands: Usage of a water system including consumption, reserve capacity and recommended fire protection quantity

Community Water System: A water system which serves the same population on a year-round basis

Effective Storage: Amount of storage which represents the minimum normal level within storage

Firm Capacity: Capacity of a water system based on firm well or source capacity plus effective storage capacity

Firm Well Capacity: Well capacity of water system with largest well(s) out of service

Firm Source Capacity: Source capacity of water system with largest source, treatment process, or source pipeline connection out of service

Largest Available Well: Capacity of the largest operating well after considering largest well(s) out of service in firm well capacity analysis.

Large System: Size of water system serving a population of 10,001 to 100,000 (USEPA, 2005)

Maximum Day Demand: Largest 24-hour demand for previous three year period

Maximum Hour Demand: Largest 1-hour demand for previous three year period

Medium System: Size of water system serving a population of 3,301 to 10,000 (USEPA, 2005)

Municipal Water Systems: A community water system serving a city, village or sanitary district owned by a municipality

NFF: Needed fire flow. The fifth highest calculated fire flow rate as determined by Insurance Services Office (ISO).

Other Than Municipal (OTM): A privately owned community water system such as a mobile home park or condominium complex

pdf formt: Portable display format, the digital data format used by Adobe® Actobat®

Public Water System: Water system, public or private, regularly serving water to more than 25 persons or 15 service connections (USEPA, 2005)

Small System: Size of water system serving a population of 501 to 3,300 (USEPA, 2005)

Spare Capacity: Amount of water available for use in a water system (surplus or deficit) after subtracting system demands (current or future) from firm capacity.

Source: Water pumped from a well or treatment unit, or connected to system via pipeline

System Demand: Sum of demands on a water system, including consumption, reserve storage requirement and/or required fire capacity, depending upon analysis performed

Total Well Capacity: Well capacity of water system with all well in service

Total Source Capacity: Source capacity of water system with all sources, treatment processes, or source pipeline connections in service

Very Large System: Size of water system serving a population greater than 100,000 (USEPA, 2005)

Very Small System: Size of water system serving a population of 500 or less (USEPA, 2005)

Introduction

According to the United States Environmental Protection Agency (USEPA), in the year 2004 there were 52,838 community water systems (CWSs) in the United States serving a total population of approximately 272 million people. Of this total, 83.7% served a population of 3,300 or fewer (small and very-small systems). While these systems were in the majority based on sheer number, they served only 9.2% of the total CWS based population (USEPA, 2005). For Wisconsin, in the year 2003, there were 574 CWSs. Of this total, 70% served a population of 3,300 or fewer, which constituted 11% of the CWS population (WPSC, 2005; WDNR, 2005). Generally speaking, a vast majority of community water systems in the United States serve a population of 3,300 or fewer; however these systems serve a small percentage of the total population served by community water systems.

Classification of water systems is based on the type and size of population served. The most general classification is that of public water system (PWS), which is a system that consistently serves at least 25 people or 15 connections. Community water systems are a subset of the public water system classification, and are systems which serve the same population on a year-round basis. The CWS classification is further divided into municipal and other than municipal (OTM) water systems. Examples of CWSs include water systems serving cities and villages (municipal), and mobile home parks and rural private residential developments (OTM). In addition to CWS examples, a PWS could also include resorts, camp grounds and casinos. Size classifications for PWSs are shown in **Table 1**.

TABLE 1. Classification of public water systems

Classification	**Population Served**
Very Small	Less than 500
Small	501 to 3,300
Medium	3,301 to 10,000
Large	10,001 to 100,000
Very Large	Larger than 100,000

Each public water system, from very large to very small, must possess the necessary managerial, financial and technical capacity to provide safe drinking water to its customers.

These three capacity requirements, officially known as capacity development, were part of the 1996 Safe Drinking Water Act (SDWA, 1996). Requirements for capacity development were born from historical noncompliance with national primary drinking water regulations. In the year 1993, only 79% of the population served by public water systems received drinking water that met all of the national primary drinking water regulations. Compliance with these regulations improved to 92% in the year 2002, but dropped to 90% in the year 2004. For the period from year 2002 through 2004, 81.9% of reported maximum contaminant level (MCL) violations were from small and very small systems, affecting 9.7% of the population served by public water systems (USEPA, 2005). These statistics illustrate the difficulties small and very small systems have in meeting regulations. Based on the general makeup of the water supply industry (majority of systems serving a population of 3,300 or less), and historical violation of drinking water regulations by system size, it appears that capacity development regulations were created for small and very small water systems.

The Wisconsin Department of Natural Resources (WDNR), the primacy agency for implementation of the SDWA in Wisconsin, formulated a strategy for capacity development as required by the 1996 SDWA. Wisconsin's three part strategy includes the following provisions for technical capacity (underline emphasis added): "Technical capacity is the physical and operational ability of a water system to meet SDWA requirements. Is the source of the water reliable? Is the water system appropriately sized, constructed and operated? Does the system comply with minimum state operator standards?" (WDNR, 2000). Unfortunately, this strategy does not define what an appropriately sized water system is, which makes compliance difficult to assess.

Appropriate sizing of public water systems is extremely important from many different perspectives. An oversized system is inefficient, wasting valuable resources on the construction and maintenance of unneeded facilities. In addition, excess capacity could promote wasteful use of the system; no worries about running out of water. An undersized system could result in loss of system pressure, which could be detrimental to public health, safety and welfare of a community. Unfortunately, regulations specific to water system sizing are nonexistent, leaving

the sizing of water systems to engineering practice. To further complicate matters, engineering recommendations regarding water system sizing vary considerably.

The purpose of this study was to evaluate whether water system sizing guidelines would be helpful for small to very small municipal water systems in Wisconsin, to assist these systems with implementation of Wisconsin's technical capacity strategy. To investigate this purpose, an objective analytical guideline was developed based on recommended engineering practices. This guideline was then used to analyze the spare capacity of 518 very small to very large water systems in Wisconsin based on year 2003 data.

The impetus for this study was born out of many years of applied engineering experiences, which revealed the difficulties faced by small and very small water systems in meeting regulations. SDWA capacity development requirements are no different for these systems, which could be a result of lack of cohesive presentation of water system sizing and analysis in literature.

Background

Regulatory Codes

The state of Wisconsin and United States Environmental Protection Agency do not directly regulate the sizing of community water systems, delegating the specifics of sizing and analysis to engineering practice (USEPA, 1985; WAC, 2003). Generalized sizing regulations were created for Wisconsin's water systems, which are detailed in various sections of the Wisconsin Administrative Code (summarized in **Table 2**). A cursory review of regulations in other Midwestern states, including Minnesota, Iowa, Illinois, Indiana, Michigan and Ohio show a similar trend of reliance upon engineering practice.

TABLE 2. Wisconsin Administrative Code requirements for water system sizing

Wisconsin Administrative Code Section	**Requirement**
NR 811.04 General Requirements	The supplier of water shall be responsible for insuring that the public water system is operated to provide an adequate quantity of safe drinking water to consumers.
NR 811.31 Auxiliary power	Provide a power supply from at least 2 independent electrical substations or from a standby, auxiliary power source dedicated to water supply use unless the department determines that there is sufficient pumping capacity with existing auxiliary power.
NR 811.33 (1) Pumping capacity requirements	More detailed engineering studies are necessary for determining pump capacities in systems providing water for multiple uses, including domestic, commercial and industrial usage and fire protection.
NR 811.56 (1) Volume and pressure	A sufficient quantity of water, as determined from engineering studies, shall be maintained in elevated storage when only one pumping unit to the distribution system is available to serve the water system. This shall be at least an average–day supply under normal operating conditions. When more than one distribution pump is available, the storage shall be in accordance with standard engineering practice. Standard engineering practice is based upon an engineering review of existing and future water supply needs including, but not limited to: type of service and population served; average day, maximum day, peak hour and fire flow demands; water source quality, availability and treatment, pump capacities, auxiliary power, storage capacity, water distribution and costs.
NR 108.05 Design requirements	Final plans and specifications shall incorporate accepted engineering practices.

Wisconsin's drinking water regulations indicate a CWS should be sized to reliably supply the demands of the water system using available sources of supply. Supply sources constitute water available for use, including water pumped from a well and drawn from storage. Demands can include daily usage for residential, commercial and industrial purposes, as well as intermittent usages such as fire protection, swimming pool filling, water system flushing, water storage maintenance, and watermain breaks/leakage. Design flows should be based on the maximum hour demand or the maximum day demand plus fire flow requirement, whichever is greater.

Water System Reliability

A reliable CWS will use a risk assessment approach to quantify anticipated demands and size sources of supply with reserve capacities and/or redundancies to account for unanticipated demands and system failures. Unfortunately, a universally acceptable definition of water system reliability does not exist. Reliability can be as simple as providing redundant system components, or can be determined by complex modeling with system specific parameters. Reliability models can include probability functions such as "time to failure" analysis of components, and severity indices for failure types (Goulter et al, 2000). Advanced reliability modeling methods, which require specific water system information, appear to be best suited for medium to large water systems where multiple components, each with the potential to fail, contribute to the overall reliability of the system.

For small systems, redundant supply appears to be the most appropriate reliability method based on the limited number of vulnerable components present in these systems. For example, small and very small CWSs in Wisconsin contained an average of 2.1 wells in year 2003, with 23% of these systems only having one well. For these systems, on average, if one well failed the system would be left with one operational well. The redundant supply approach simply indicates that the remaining well(s) must satisfy the peak demand without the need for advanced modeling.

There is general consensus in literature and engineering reference manuals with the redundant supply approach to system reliability. A number of sources indicate that a CWS should be

sized to satisfy the maximum day demand plus fire demand with the largest pumping unit out of service (Al-Layla et al, 1977; AWWA, 1998; AWWA, 2002; Wetzel, 1990; Ysusi, 2000). AWWA (1998) extends this definition to include maximum hour demands (no fire demand) with the largest pumping unit out of service. For planning and analysis purposes, the maximum day or maximum hour demand is generally deemed to be the largest recorded demand for the preceding three year period (AWWA, 1998; Lindburg, 1992). These sources do not describe the analysis period or demonstrate how to analyze water system capacity.

Fire Protection Capacity

There is considerable variation among engineering recommendations, regulations and approaches for determining fire protection requirements of a CWS. American Insurance Association (AIA) developed a population based approach (**Equation 1** and **Equation 2**) to estimate the minimum recommended fire protection rate for a community. According to the AIA approach, fire protection duration should not exceed 10 hours (Lindburg, 1992). Fredrick County, Maryland established a fire protection rate based on AIA's approach (FC, 1994), but recommends longer durations for each fire protection rate. This approach results in a much larger quantity requirement, depending upon the population being served. Subsequently, the state of Maryland has referenced Fredrick County's guidance in a draft guidance document titled *Performance of Water Supply Capacity Management* (MDOE, 2005). A comparison of AIA recommendations and Fredrick County's recommended fire protection capacity (fire protection rate times duration) is illustrated in **Figure 1**. This comparison shows that for smaller populations, Fredrick County's approach would require a significantly larger quantity of water for fire protection. For example, a community of about 3,000 people would have a recommended fire protection capacity of about 100,000 gallons according to AIA, or 735,000 gallons according to Frederick County.

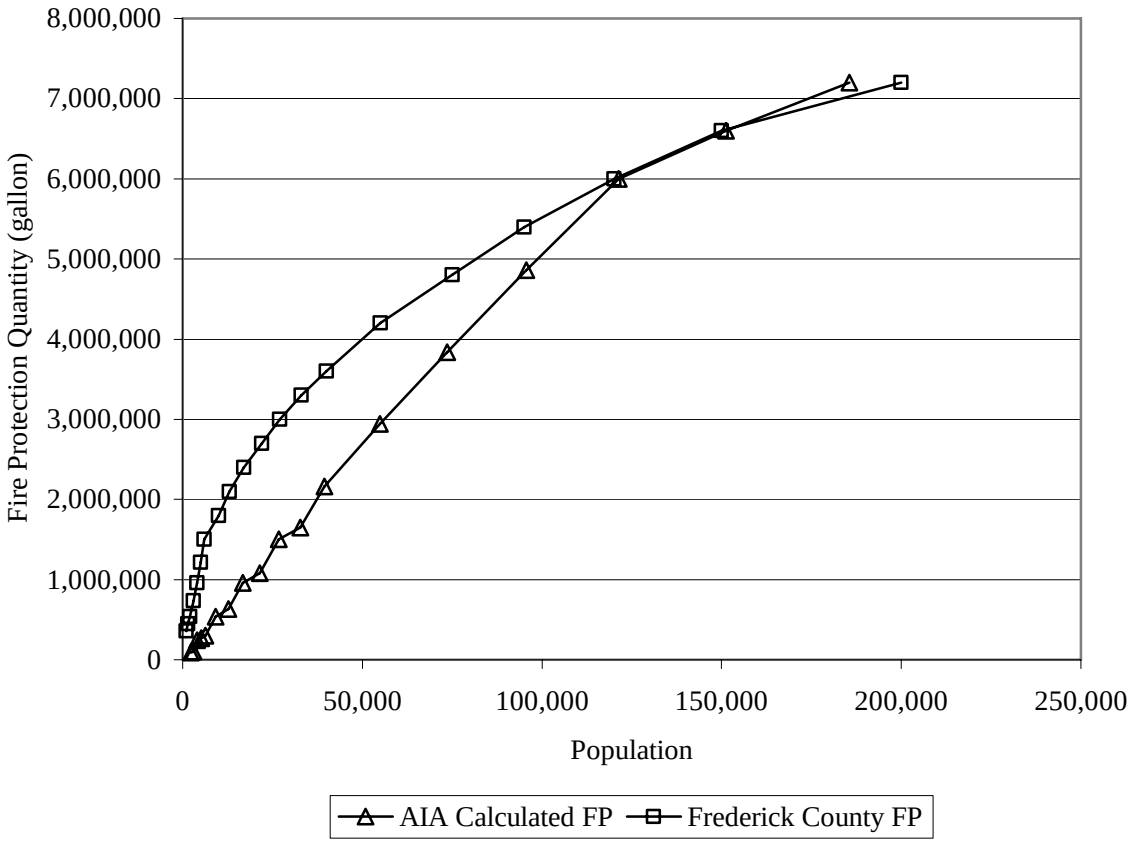
$$Q = 1020\sqrt{P}(1 - 0.01\sqrt{P}) \quad (1)$$

$$T = Q/1000 \quad (2)$$

Q = fire protection rate (gpm)
P = population (1,000's)
T = duration (hours), rounded to nearest hour

Insurance Services Office (ISO), an independent insurance industry advisory agency, calculates recommended fire protection rates for communities based on physical survey of actual buildings within communities. Physical surveys document items such as building construction materials, square footage, occupancy type and distance to fire suppression apparatus. Physical surveys will be performed throughout a community based on an assessment of at-risk structures, with the information gathered being maintained and updated by ISO on an as needed basis. Based on these physical surveys, ISO will calculate a recommended fire protection rate for each building they visited, which they term as needed fire flow (NFF). ISO then uses the fifth highest NFF as the recommended fire protection rate for a community. This fire protection rate makes up about 40% of a community's ISO's Public Protection Classification (PPC), which includes other factors such as personnel training, hydrant maintenance, equipment, and historic response time. The PPC is used by insurance companies in setting property insurance rates for communities (Gage, 2004).

FIGURE 1. Comparison of recommended fire protection capacity calculations



The three fire protection approaches discussed here result in a considerable difference in the recommended amount of fire protection capacity needed by a community, as well as variation in recommended fire protection rate. The natural question then is which recommendation should be used? All three approaches are minimum recommendations, giving guidance to local governments for use in setting fire protection capacity. However, ISO's approach uses physical data to support their recommendations. In addition, ISO's calculations and approach are tied to property insurance rates, meaning insufficient capacity could result in higher property insurance rates, not to mention increased risk of loss. Use of a fire protection rate greater than ISO's recommendation would reduce risk but not necessarily insurance rates, and could result in more costly facilities to construct and maintain.

The risk of a large fire is relatively small, with 95% of all fires in a year extinguished by the use of a single fire hose. In addition, large communities may experience three large fires in a year whereas small communities might only experience one every few years (AWWA, 1998). According to the Wisconsin Department of Commerce (WDOC, 2005), 53% of Wisconsin fire departments reported having a fire incident in 2003 in their community, for a total of 11,100 fire incidents. Of this total, 33% were structure fires. Residential fires accounted for 37% of the incidents, while commercial related activities accounted for 15% of the incidents. Approximately 9% (943 incidents) required mutual aid, indicating a large fire incident had occurred.

Wisconsin, like most states, does not require that fire protection be provided through water system capacity. However, it appears to be common practice in Wisconsin based on the fact that approximately 98% of municipal water systems contained hydrants listed for the purpose of fire protection in annual reports filed by these communities with the WPSC.

Reserve Storage Capacity

A number of literature sources recommend adding reserve storage capacity for use during emergency events, however these recommendations vary considerably. One recommendation uses a blanket approach, indicating reserve storage capacity should be equal to the average day demand (Mandl, 2003). This is consistent with WDNR regulations under NR811 (**Table 2)** and recommendations in Ten State Standards if a groundwater based system has only one well.

Reserve storage capacity could also be considered as the amount of water needed to satisfy demands during failures, power outages and/or natural disasters (Ysusi, 2000; Chin, 1999). This reserve recommendation could be satisfied in other ways, such as redundant supply. In addition, power outages could be addressed through the use of alternate power sources, as required by Wisconsin Administrative Code NR811.31, using auxiliary power at pumping stations (**Table 2).**

Walski (2000) recommends providing emergency storage based on the vulnerability of a system to supply shortages. This recommendation is geared towards surface water or impoundment sources which rely heavily upon seasonal precipitation (rain or snow) for

replenishing source supply. An example here is Denver, Colorado which relies heavily upon mountain snow melt to fill source reservoirs.

A practical approach was developed by Detroit, Michigan, based on the major 2003 power outage they experienced. For Detroit, reserve storage capacity requirement is now set at 50 to 60% of the average day demand (Murat et al, 2005).

Recommendations for reserve storage capacity are another way of looking at system reliability, and can be satisfied through means such as reserve storage capacity, redundant supply, auxiliary power or a combination of these means. A community needs to evaluate which reserve capacity method is most beneficial to their community when deciding how to allocate capacity for unknown situations such as failures, power outages, loss of source, and natural disasters.

Rules of Thumb

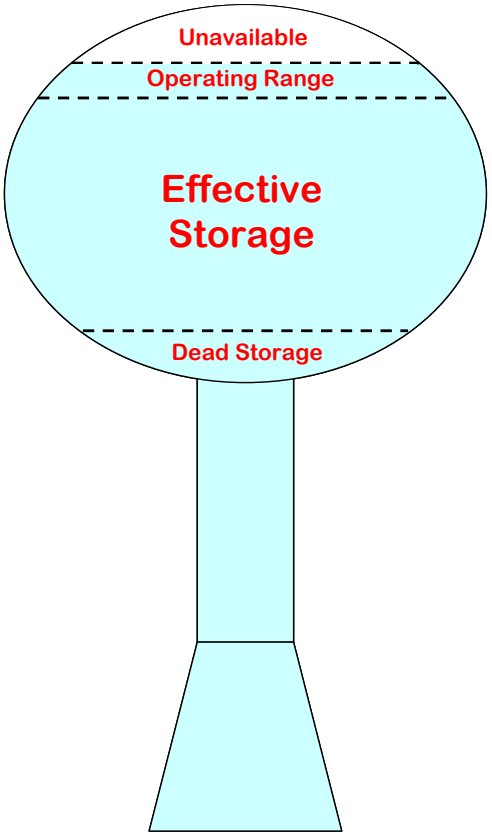
A number of "rules of thumb" design guidelines are cited in literature to indicate adequacy of system capacity. On a maximum day basis, the average pump run time using all wells should be less than 22 hours according to Al-Layla (1977), 20 hours according to Ten State Standards (GL-UMRB, 2003), or 18 hours according to unofficial recommendations of the WDNR . On an average day basis, the average pump run time using all wells should be less than 12 hours according to Ten State Standards (GL-UMRB, 2003) and unofficial recommendations of the WDNR. If a community has only one source of supply, the storage amount should be at least the average day demand (GL-UMRB, 2003; WAC, 2003). These rules of thumb do not consider specific operation parameters, and may not be appropriate for determining adequacy of water system capacity.

Water System Capacity

Firm source capacity is a term used to describe the source capacity of a CWS when the largest pumping unit, treatment process or source pipeline connection is out of service. The term firm well capacity has the same meaning, but is specific to a groundwater based system. Storage facilities, while sized for a certain capacity, are rarely completely filled. Effective storage capacity is the minimum amount of storage normally available for usage (AWWA, 1998),

reflecting the capacity left in storage at the low end of the operational range. The portion of storage which fluctuates under normal usage is defined as operational storage, and may not be present if needed, thus it is excluded from effective capacity. The term dead storage describes the minimum amount of water that should be kept in storage to prevent emptying under demand conditions. Unavailable storage represents the volume above the operating storage that needs to be excluded to allow for proper control and alarming functions. Calculation of effective storage capacity is illustrated in **Figure 2**. Firm capacity then is the combination of firm well or firm source capacity plus effective storage as shown in **Figure 3**.

FIGURE 2. Effective storage capacity

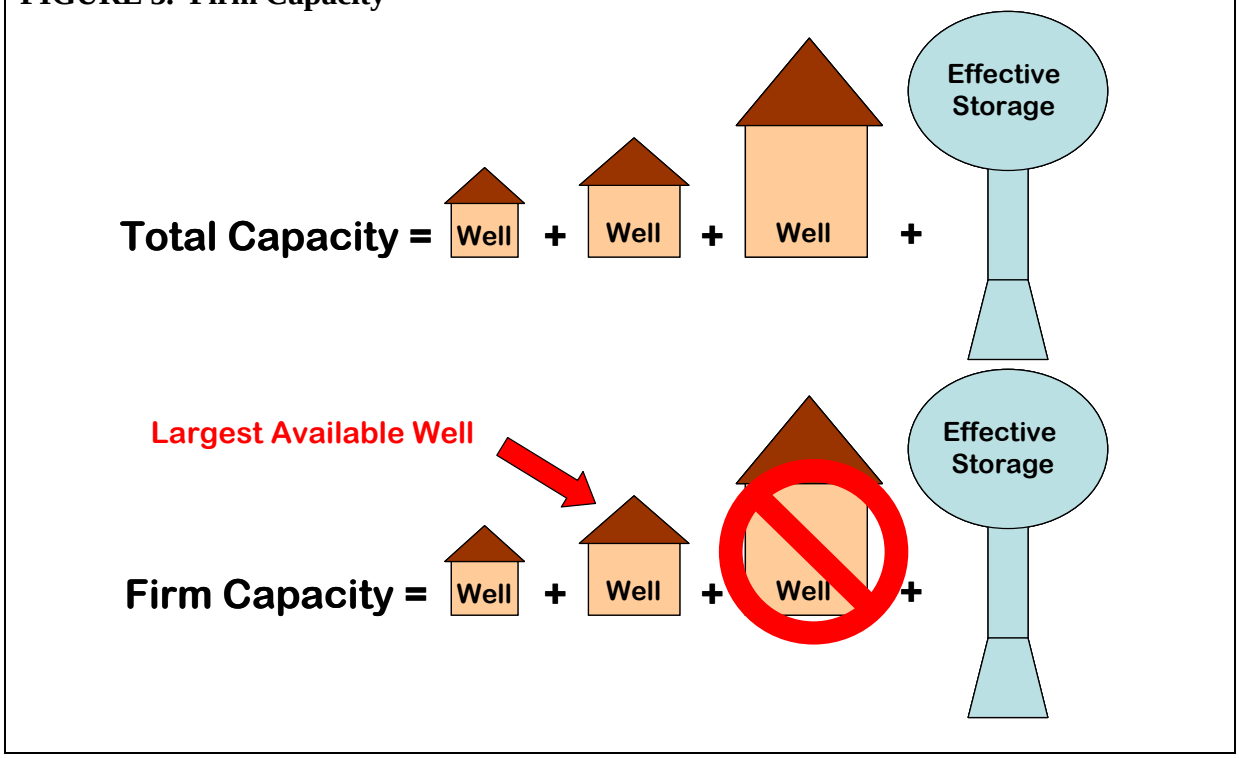


Total storage capacity is rarely available

- Unavailable
- Operating Range
- Dead storage

Effective storage is the minimum amount normally available, approximately 90% ± 5% of total

FIGURE 3. Firm Capacity



The portion of firm capacity that is made up of effective storage is typically based on engineering analysis. Generally though, it makes sense to size firm source capacity to satisfy maximum day demands, with effective storage used for fire protection and maximum hour demands. This approach allocates normal demands and maximum day demands, which are smaller in magnitude, to source capacity, and larger demands of short duration to storage capacity, which can be input into the system at faster rates via gravity flow (elevated storage) or large booster pumps (ground reservoir). However, when sizing storage capacity, it is important to consider operation issues such as water quality, aging and thermo clines (Grayman et al, 2000), in addition to satisfying regulatory requirements. For Wisconsin, water quality issues are usually limited to warm weather periods. If water is in storage for an excessive period during warm weather periods, loss of disinfectant residual could result which may lead to bacterial growth or biofilms. An equally important concern for Wisconsin is freezing or damage of storage facilities by ice sheets, which could occur with excessive storage detention times.

Spare Capacity

Putting all these engineering recommendations together, determining demands, source capacity and ensuring reliability, spare capacity of a community water system is the lesser of **Equation 3** through **Equation 5,** which represent firm capacity minus system demand for various time periods. Breaking these equations down, firm capacity is the sum of firm well or firm source capacity plus effective storage divided by analysis basis. Analysis basis is 1,440 minutes (24 hours) for **Equation 3**, fire demand duration (system specific) for **Equation 4** and 60 minutes for **Equation 5**. These calculations represent the amount of water which would be considered available for use in a water system if the largest well or source were out of service due to failure or scheduled maintenance. System demand calculation also depends upon which equation is used. For **Equation 3**, the averaged maximum day based analysis, system demand is the sum of reserve requirement plus fire protection quantity (F * T * 60) plus maximum day demand (highest 3 year value) divided by analysis basis. This equation can be used for a basic spare capacity for maximum day demand only by setting fire demand and reserve capacity to zero. For **Equation 4**, the fire duration during maximum day demand analysis, system demand is the sum of fire demand plus sum of reserve requirement plus maximum day demand (highest 3 year value) divided by analysis basis. For **Equation 5**, the maximum hour demand based analysis, system demand is the sum of reserve requirement plus maximum hour demand (highest 3 year MH value * 60) divided by analysis basis. For all equations, using firm well capacity and reserve may be overly conservative, so one could use firm well capacity with no reserve, or reserve with total well capacity substituted for firm well capacity. Spare capacity then is the result obtained by subtracting system demand from firm capacity.

$$SC = FWC + \frac{ES}{24*60} - \frac{(R + F*T*60 + MD)}{24*60} \quad (3)$$

$$SC = FWC + \frac{ES}{T*60} - F - \frac{(R + MD)}{24*60} \quad (4)$$

$$SC = FWC + \frac{ES}{60} - \frac{(R + MH*60)}{60} \quad (5)$$

SC = spare capacity (gpm)
FWC = firm well (or source) capacity (gpm)
ES = effective storage (gallons)
R = reserve (gallons)
F = fire demand rate (gpm)
T = fire demand duration (hours)
MD = maximum day demand (gallons)
MH = maximum hour demand (gpm)

Figure 4 and **Figure 5** are graphical illustrations of spare capacity for a theoretical water system. Demands are shown on the left while firm capacity is shown on the right. **Figure 4**, for surplus capacity, shows maximum day demand being supplied by firm well capacity, and storage capacity utilized to satisfy fire demand during a maximum day event. **Figure 5** shows deficit firm capacity. This illustration shows that effective storage is needed to satisfy the maximum day demand and that if reserve storage were needed there would be a deficit in firm capacity. However, **Figure 5** indicates that the system has surplus capacity if reserve capacity is not necessary. These figures hold for each analysis basis (maximum day demand, fire duration, or maximum hour demand) to quantify spare capacity.

In addition to assessing current capacity, spare capacity equations can be modified for planning purposes, to determine when capacity improvements are needed to satisfy growth predictions for maximum day and/or maximum hour demands based on current growth patterns in a community. By inputting predicted maximum day demand, maximum hour demand and current capacities (well and storage) into these equations for the design year, say 20 years from now, if calculated spare capacity is negative, the absolute value of calculated spare capacity is the minimum amount of additional capacity needed. Further analysis would determine what

type of capacity to add, whether it should be source capacity, storage capacity, demand reductions or some of each.

FIGURE 4. Graphic illustration of excess system capacity

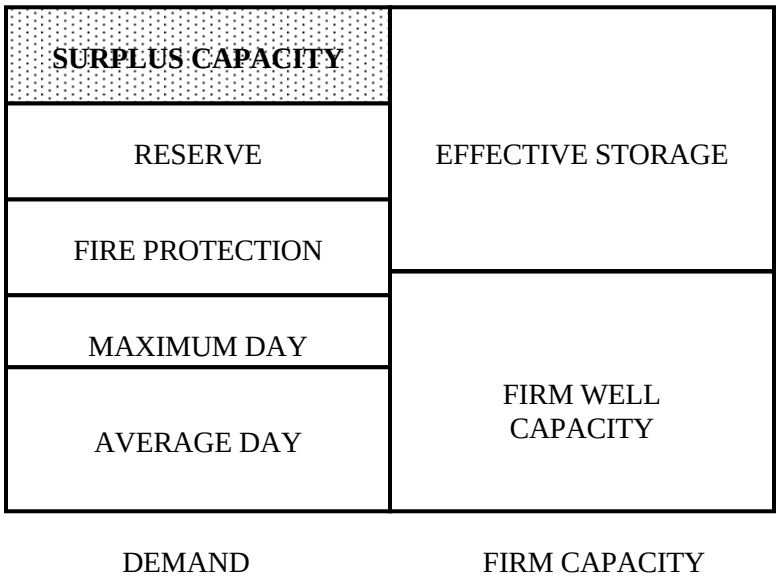
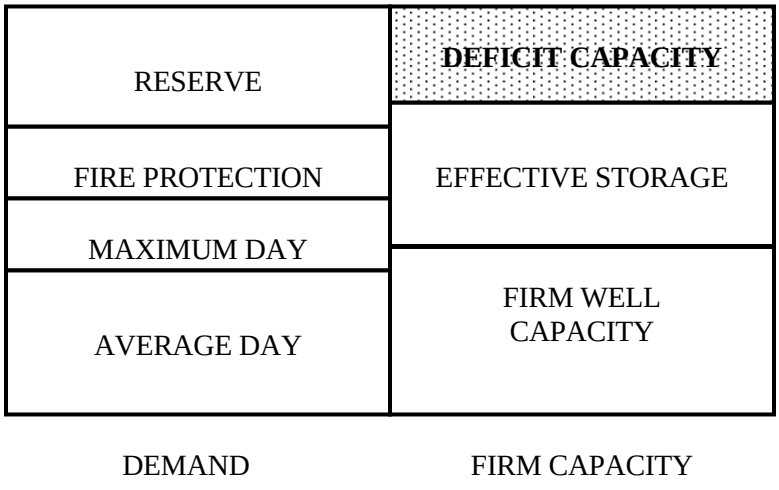


FIGURE 5. Graphic illustration of deficit system capacity



Methods

Data Sources

Facility and operational data for spare capacity analysis of Wisconsin's municipal water systems was obtained from the Wisconsin Public Service Commission (WPSC). The WPSC data set was a digital compilation (Microsoft Excel format) of annual reports filed by each municipal water system in Wisconsin for the year 2003. Additional maximum day demand data were obtained from WPSC for the years 2001 and 2002. Population data and high capacity well data were obtained from the Wisconsin Department of Natural Resources (WDNR). The WDNR data set was a digital compilation (Microsoft Excel format) of public water system (PWS) data managed by the agency. Data was not available regarding the ability of a community to use alternate sources for fire protection capacity.

Data Analysis

Data analysis was performed using Microsoft Excel to determine the spare capacity of each municipal CWS based on **Equation 3** and **Equation 4**. Since the WPSC and WDNR data sets did not include maximum hour demand data, **Equation 5** could not used to analyze capacity. Readily available maximum hour demand data is limited to those CWSs which have implemented calculation of this parameter as part of a Supervisory Control and Data Acquisition system (SCADA). Maximum hour demand data can be manually calculated provided proper information exists, including recorded historic storage levels, pump run time(s) and pumping rate charts. However, since this data is not readily available, and must be requested from each community, analysis for capacity based on maximum hour demand is beyond the scope of this project.

In 2003, a total of 574 CWSs were in existence in Wisconsin. In order to analyze spare capacity of these systems, the following pieces of data were required: well pumping capacity, storage capacity, average day demand, maximum day demand (3 year period), cause of maximum day demand, sales by use (residential, commercial, industrial, public authority, resale, and irrigation), demand by month and population served. Certain CWSs had to be excluded from analysis due to lack of data. In general, surface water based systems were excluded for lack of reported pumping capacities and daily usage, and systems purchasing

wholesale water were excluded for lack of maximum day demand data. Other systems were excluded for lack of sales data, lack of monthly demand data or because they contained a split source (groundwater and purchased water). By default, water systems without fire hydrants were excluded by one of the methods indicated above. After exclusion of CWSs with incomplete data sets, the number of systems eligible for analysis was reduced to 518 (approximately 90% of data set). Of the Wisconsin systems analyzed, 376 systems (73%) were considered small or very small water systems, serving a population of 3,300 or less.

Data Verification

To verify accuracy of the data, statistical measures and operational calculations were performed on the data set. Maximum day demand data was analyzed for errors by calculating the ratio of maximum day demand to average day demand. The average for the data set was a ratio of 3.4, while the median value was 2.6. If this ratio was less than 1.0 or greater than 5.0, the data point was flagged for further investigation. A ratio of 1.0 or less would indicate the peak value did not exceed the average, meaning no variability in the data, which would likely indicate an error. A ratio of 5.0 was picked to indicate roughly twice the median value. Further investigation included looking at the cause of the maximum day demand (reported in data), looking at the actual report filed by the community with the WPSC, and calculating the variability of the maximum day demand over the three year analysis period. In many instances, it appeared that data was over reported (ratio greater than 5) by a factor of 10 or 1000 when compared to similar data reported for the same system in other years. This error can be explained by a utility worker transferring unadjusted meter readings and totals from operator tally sheet to WPSC reports. Some master water meters at pump houses read in tenths of gallons, so the daily reading recorded by an operator may need to be divided by ten to get gallons for reporting to the WPSC. Total pumping that is reported to the WSPC needs to be in thousands of gallons, so records showing total gallons pumped in gallons need to be divided by one thousand for reporting purposes. A total of 33 maximum day demand data were corrected in the database. In a few instances, a ratio of greater than 5 was not explained by an apparent data error and was assumed to be correct. Two instances occurred where the ratio of maximum day to average day was less than one. These data could not be explained and were not corrected.

Well capacity data was analyzed for errors by calculating the number of hours pumped on an average day basis (maximum day demand divided by total well capacity). If this calculation was greater than 12 hours (greater than a rule of thumb), or less than 1 hour (arbitrary low value), the data point was flagged for further investigation. As an additional measure to further verify the well capacity data, a list of all high capacity wells constructed in Wisconsin was obtained from the WDNR. This list was compared line by line to the WPSC data. This manual data comparison was used to verify the quantity of wells serving each municipal water system and to investigate differences in reported capacity. Manual comparison clarified many discrepancies in the WPSC data, to properly allocate a listed capacity as a source versus a booster station, but did not resolve all differences in reported well capacities. To resolve these differences, the most reasonable well capacity based on analysis of the WPSC report and WDNR data was used. Many wells in the WPSC data base were listed as standby, and did not have an associated capacity, so the test pumping data or pumping capacity data listed on the DNR was used. For minor discrepancies, the WPSC data was used.

Storage capacity was analyzed for errors by calculating the ratio of effective storage capacity to average day demand. The data set had an average ratio of 0.61 and a median value of 0.56. If this number was greater than 4.0, representing an excessive amount of storage, it was flagged for further investigation. One data point was investigated further, and by analyzing previous year WPSC reports available in pdf format on the PSC's webpage, it was discovered that the storage capacity was over reported by a factor of 10 in the 2003 WPSC report. After correction of this data point, the maximum ratio of effective storage to average day demand was 3.7. The storage data were also manually analyzed line by line for apparent under reported storage values, looking for values of less than 1,000. Experience indicates a small elevated storage tank or standpipe would contain approximately 40,000 gallons, while a small hydro pneumatic tank would contain 1,500 gallon. Based on the above, a value of less than 1,000 was used to flag input errors. A number of small storage values were investigated, with many of these values for very small systems containing small hydro pneumatic pressure tanks (no elevated storage). Three data points were adjusted by a factor of 1,000 to reflect an input error of thousands of gallons instead of gallons on the 2003 PSC report. These errors were verified by inspection of previous year WPSC reports available in pdf format on the PSC's webpage.

Effective Storage Calculation

Effective storage was assumed to be 90% of total storage, based on engineering experience. This assumption reflects a 2-foot operating range within a 400,000 gallon elevated reservoir to achieve a minimum well run time of 30 minutes using a 500 gallon per minute well pump during low water usage periods. Operationally, this approach would minimize the number of pump starts (easier on equipment and controls), and allows for forced turnover and withdrawal of water from storage capacity. This approach does include unavailable capacity and dead storage volume in the effective storage calculation (see **Figure 2**), however the impact of this simplified approach is addressed in the sensitivity analysis.

Two municipal systems in southwestern Wisconsin, one small and one medium, were polled to assess effective storage and unavailable capacity based on operational range setpoints. These two systems are operated so that effective storage is approximately 90% and 85% of total storage.

Firm Well Capacity Calculation

Firm well capacity of a water system was calculated by subtracting the capacity of the largest well(s) in the system from the total well capacity. To reflect redundant reliability of systems with numerous wells, firm well capacity included the potential for multiple pumps out of service. For sake of analysis, for every ten wells in a system, the largest available well was assumed to be out of service. With this approach, systems with 10 to 19 wells had the capacity of their two largest wells subtracted from total well capacity (six systems) to get firm well capacity, while systems with 20 to 29 wells had the capacity of their three largest wells subtracted from total well capacity (two systems) to get firm well capacity. For the data set, the average number of wells in service was approximately 2.9, with a median of 2 and a maximum of 24. The largest remaining well in the firm well capacity calculation was termed the largest available well. In systems with only one well, for analysis purposes this sole well was termed the largest available well.

Sensitivity Analysis

With variability in engineering recommendations and design approaches, multiple analyses of spare capacity were performed by considering combinations of design parameters, such as fire protection amount, reserve capacity and analysis period. Sensitivity analysis included further analysis of each result to determine if statistical correction of errors in the data set influenced the analysis, and the effect of varying effective storage. Sensitivity to effective storage was determined by analysis with effective storage ratios of 90% and 85% to get an approximation of 90% ± 5.

Supply Efficiency

To analyze the results and compare the spare capacity calculations within the data set, it was necessary to normalize the calculations in a meaningful manner. A novel approach of normalizing the data was developed, taking the spare capacity calculation and dividing it by the capacity of the largest available well to get a ratio reflecting supply efficiency (SE). This approach quantifies utilization of available capacity in terms of largest well in service, provides a measurement of supply sizing efficiency, and allows for comparison of all water systems regardless of size. If SE calculates to be less than zero, it represents the deficit capacity as a ratio of the largest available well. For example, if SE was negative 1.6, the water system would need to add capacity equal to approximately twice the capacity of the largest available well to achieve a surplus capacity. This added capacity requirement could be met with additional well capacity and/or storage capacity, and/or by reduction of demand. If SE was greater than zero, it represents the amount of surplus capacity (in well capacity or storage) as equivalent number of largest available wells. For example, if SE was 1.7, the water system would have an equivalent surplus capacity of nearly twice the largest available well, and could indicate that excess and unnecessary capacity exists. The choice to normalize capacity calculations based on largest available well helps one visualize how the capacity of a system is being utilized. **Figure 6** is a graphical representation of SE.

FIGURE 6. Supply efficiency (SE) to balance supply and demand



Proposed efficiency classifications for SE are shown in **Table 3**. An SE of 0.25 indicates that spare capacity in a system is equivalent to 25% of the capacity of the largest available well. It is proposed that an SE of 0.25 be a point at which the process to obtain additional capacity be started, assuming continued growth of a community is expected. At an SE of 0.25 to 0.50, a community should be actively planning for additional capacity or looking for ways to shift peak periods and/or reduce demands. At an SE of greater than 1.5, if could be interpreted that a system is oversized, containing facilities that are not essential to operations. An SE of less than zero indicates an immediate need for additional capacity or reduction in demand. The

proposed SE classifications are meant to be a starting point for analysis purposes, and should be modified by each community to reflect community policy decisions and specific growth rates within a community.

TABLE 3. Proposed classification of SE values

Ratio SE	Classification
SE < 0.25	CWS has deficit capacity or needs additional capacity
0.25 < SE < 0.50	CWS should be actively planning for additional capacity
0.50 < SE < 1.50	CWS is efficiently sized, accounts for demand growth
SE > 1.50	CWS has excess capacity, or capacity for considerable growth

Results and Discussion

Spare Capacity Analysis

Spare capacity analysis is performed by subtracting demands from capacity based on the analysis period of interest. This analysis is important for the day of maximum water system usage, however it can be used for determining the impact of a failure or planned maintenance activity on capacity at other times of the year. **Figure 7** is a typical maximum day demand curve for illustration purposes. The maximum day demand is the average demand for the maximum usage day, as shown in the figure. The peak period above the average period constitutes the peak hour period, which in some cases can last longer than 1 hour. Since the maximum day demand rate is an average of the data, the area above the curve will be equal in area to that below the curve. In this illustration, if a system is sized so that capacity equals the maximum day demand, meaning no spare capacity, demands above the maximum day demand will draw from storage whereas demands below will allow replenishment of storage. If a fire event were to occur, the maximum day demand in addition to the fire demand must be met over the duration of the fire demand, with maximum day demand satisfied over the remainder of the day. During the peak hour period on the maximum day, fire demands are usually not considered. This is because if a large fire demand occurs, pressure drop in the water system will automatically cause a drop in demand by users based on pressure loss principles through orifices (user connections); a reduction in pressure before a connection will mean less flow across the connection to point of discharge.

Spare capacity was determined for each CWS in the data set using **Equation 3** and **Equation 4** for six analysis scenarios to determine sensitivity of the data to engineering recommendations. In **Analysis 1**, spare capacity was calculated using **Equation 3** by setting reserve storage and fire protection rate to zero. This analysis was a basic indicator of system reliability for anticipated demands, determining if systems could satisfy a maximum day demand with the largest well out of service. The normalized results of this analysis are shown in **Figure 8**, which indicate that 19.3% ± 1.5 of Wisconsin CWSs were undersized in 2003 for basic system demands. Interpreting these results, if the largest well would have failed during maximum usage in one of these undersized systems in 2003, the systems would not have had enough capacity to satisfy routine demands or other demands such as fire protection or reserve. This

analysis also indicates that if these systems were not sized for fire protection, meaning fire capacity would be provided through alternate sources, the deficit systems did not contain sufficient redundancy to be considered reliable.

$$SC = FWC + \frac{ES}{24 * 60} - \frac{(R + F * T * 60 + MD)}{24 * 60} \quad (3)$$

$$SC = FWC + \frac{ES}{T * 60} - F - \frac{(R + MD)}{24 * 60} \quad (4)$$

SC = spare capacity (gpm)
FWC = firm well (or source) capacity (gpm)
ES = effective storage (gallons)
R = reserve (gallons)
F = fire demand rate (gpm)
T = fire demand duration (hours)
MD = maximum day demand (gallons)
MH = maximum hour demand (gpm)

FIGURE 7. Typical diurnal demand curve

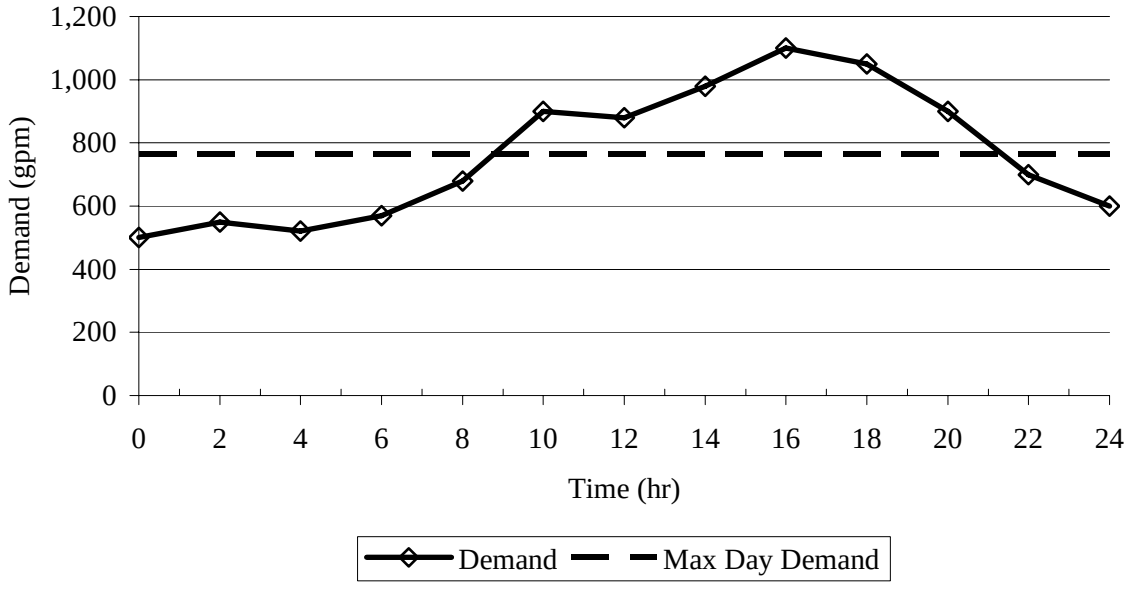
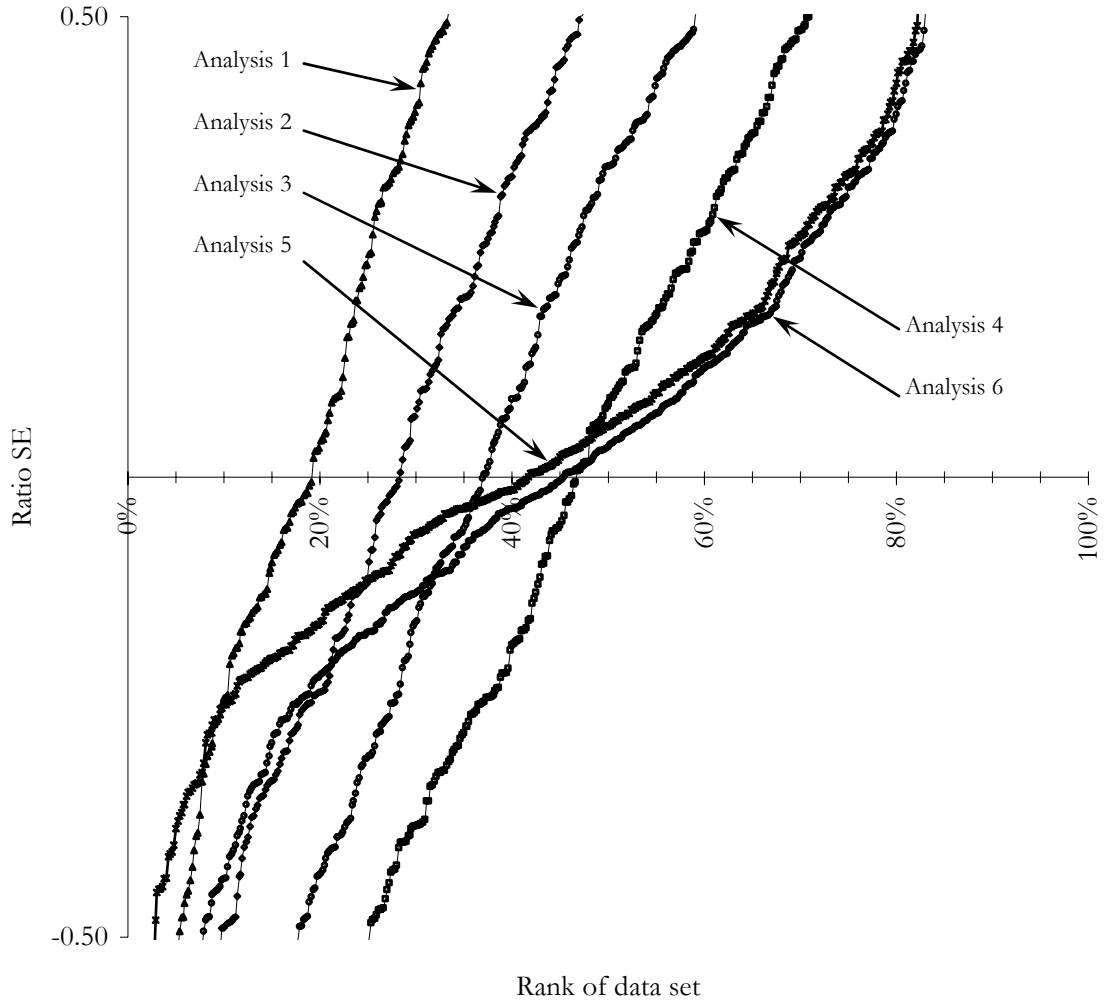


FIGURE 8. Normalized spare capacity of municipal water systems



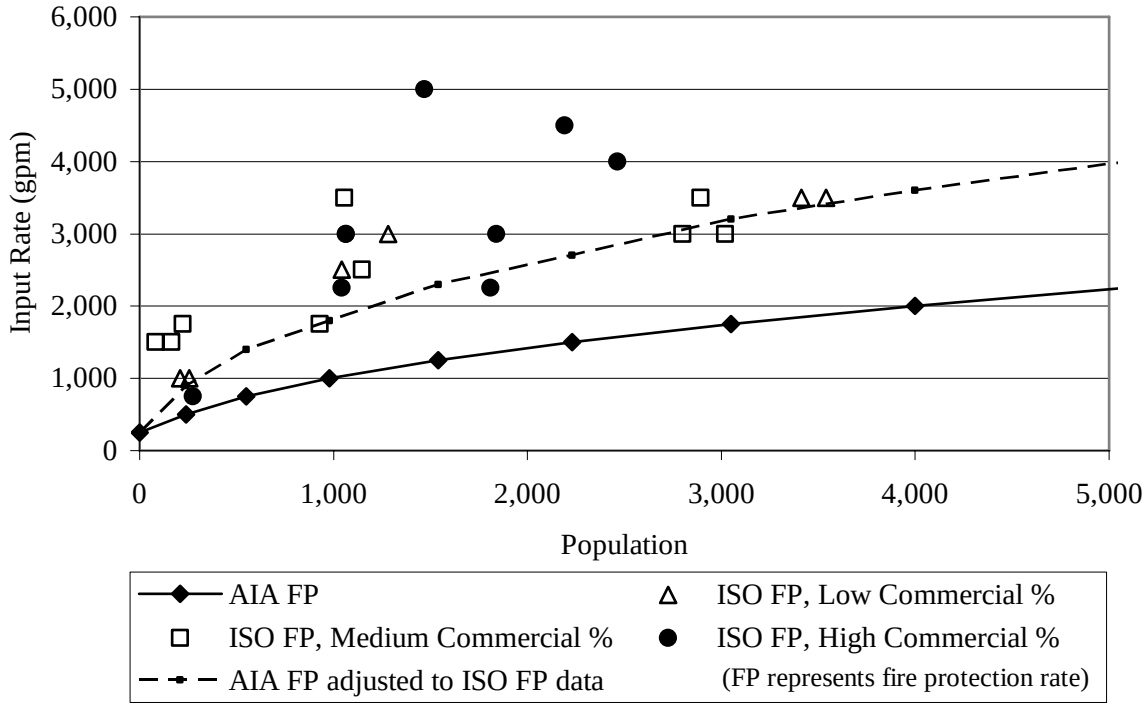
Footnotes: Ratio SE represents spare system capacity divided by largest available well.
Analysis 1 = max day, no fire or reserve; Analysis 2 = max day plus AIA fire rate, no reserve;
Analysis 3 = max day plus modified AIA fire rate, no reserve; Analysis 4 = max day plus AIA fire rate plus ave day in reserve; Analysis 5 = max day plus modified AIA fire rate for fire duration period, no reserve;
Analysis 6 = worst case between Analysis 1 and Analysis 5

Analysis 2 was a modification of **Analysis 1**, still based on **Equation 3**, utilizing the minimum recommended AIA fire protection rate and duration. The normalized results of this analysis are shown in **Figure 8**, which indicate that 27.0% ± 2.1 of Wisconsin municipal systems were undersized in 2003 for maximum day demand plus fire demand. This analysis was considered to be the least conservative approach to sizing since it used the smallest recommended fire protection rate and duration. This analysis approach using water system capacity for fire

protection was representative of systems in the study since systems without fire hydrants were excluded from the study. Interpreting these results for Wisconsin for 2003, if the largest well would have failed during maximum usage and a major fire demand in a deficit system, the system may not have had enough capacity to satisfy all demands. If a situation like this were to occur, the resulting impact to the water system would depend upon the specifics of the system, the size of the fire demand, and magnitude of the deficit capacity. A minor occurrence could have resulted in low pressures in the distribution system, while a major shortage could have caused negative system pressures (cross connection potential) and severe damage to pumping facilities.

A request was made to ISO to obtain recommended fire rates for each community in the study for use in spare capacity analysis. However, due to the nature of ISO's database, this request could not be fulfilled. ISO did provide data for a sampling of small to very small water systems with varying degree of commercial development. As shown in **Figure 9**, every recommended fire protection rate determined by ISO was larger than the minimum fire protection rate recommended by the AIA formula. Various degrees of commercial usage were utilized for obtaining ISO recommended fire protection rates to determine if a correlation existed between fire protection rate and commercial usage. At higher commercial usage, it was theorized that higher commercial valuation would result within the community, which would require a larger fire protection rate. In **Figure 9**, "low" commercial represents 10% commercial usage, "medium" represents 30% commercial usage and "high" represents 45% to 90% commercial usage. Based on the scattering of data, there does not appear to be a clear correlation between recommended ISO fire protection rate and amount of commercial development within a community.

FIGURE 9. Comparison of recommended ISO fire protection rates to AIA formula



Analysis 3 was a modification of **Analysis 2**, still using **Equation 3**, fitting the AIA fire protection rate to the lowest range of available ISO data (**Equation 6**). The normalized results of this analysis are shown in **Figure 8**, which indicate that 35.6% ± 2.6 of Wisconsin municipal systems were undersized in 2003 for maximum day demand plus fire demand using fitted ISO data. This analysis approach seemed to best reflect Wisconsin's water systems based on available data, using a fitted curve for reported ISO fire protection rates. Results of this analysis suggest that if actual ISO data were used for spare capacity analysis, there would have been a much larger percentage of undersized systems. These results were based on a curve fitted to minimum reported ISO values, however since many actual fire flow requirements are well above the fitted line using actual data may result in more deficit systems. Interpretation of these results is the same as what was indicated for **Analysis 2**. Incremental analysis of **Analysis 2** and **Analysis 3** with **Analysis 1** indicates that 8% to 18% of systems were undersized as a result of insufficient fire protection capacity.

$$Q = (0.80 * 1020)\sqrt{P}(1 - 0.01\sqrt{P})gpm \qquad (6)$$

Analysis 4 was a modification of **Analysis 2**, still using **Equation 3**, but using reserve capacity in an amount equal to the average day demand. Normalized results of this analysis are shown in **Figure 8**, which indicate that 45.1% ± 3.4 of Wisconsin municipal systems were undersized in 2003 for maximum day plus fire demands with capacity in reserve for unanticipated events. This analysis was considered the most conservative approach to sizing, and may not be appropriate for small systems. The use of reserve capacity in conjunction with the largest well out of service is a double redundant approach to spare capacity analysis. This analysis approach, while valid, would have limited application by small systems due to added costs and water quality concerns.

Analysis 2 through **Analysis 4** was based on **Equation 3**, treating fire protection requirement as an averaged system demand over a 24-hour period. This general approach in these analyses treats fire protection as a reserve quantity and in doing so ignores the peak fire rate that would occur for a large fire event over a short duration. **Analysis 5** addresses this fire duration aspect of the previous analyses, allowing comparison of **Analyses 2** through **Analysis 5** for sensitivity of assumptions.

Analysis 5 was a modification of **Analysis 3**, using **Equation 4**, to determine the impact of analysis period on the results. Approach for **Analysis 5** was considered to be the most realistic, analyzing spare capacity over the fire duration period, using fire protection rate based on a fitted curve for reported ISO fire protection rates. The normalized results of this analysis are shown in **Figure 8**, which indicates that 39.9% ± 6.3 of Wisconsin municipal systems were undersized in 2003 for maximum day demand plus fire demand using fitted ISO data over the fire duration period. Performing this same analysis, but using an average day demand, approximately 35% of Wisconsin municipal systems were undersized.

Further analysis was performed based on **Analysis 5** to determine sensitivity of results to fitting a curve to available ISO data. Further analysis indicated that approximately 75% of the 23 Wisconsin municipal systems (all small systems) with ISO NFF data were undersized in

2003 for maximum day demand plus fire demand using ISO NFF data over the fire duration period. This further analysis confirms the assumption that if actual ISO data were used for spare capacity analysis, there would have been a much larger percentage of undersized systems.

Interpretation of SE (**Table 3**) for **Analysis 5** indicates that in 2003, assuming further demand side reductions were not possible, approximately 69% of the systems should have been in the process of constructing or designing additional capacity, 14% should have been planning for additional capacity, 14% were efficiently sized and 3% had excess capacity. Had the Wisconsin communities with an SE of 0.25 or less constructed additional capacity in 2003 equivalent to the capacity of their largest available well, only 2 systems (less than 1%) would have had a deficit capacity. This analysis indicates the ability of a system to meet the maximum day demand rate plus recommended fire rate over the fire duration period, but not necessarily for the entire maximum day demand since the analysis period is less that a full day.

Analysis 6 reflects the combined results of **Analysis 1** and **Analysis 5** to report the minimum calculated SE by either analysis. With **Analysis 1** based on maximum day demand over a 24 hour period, and **Analysis 5** based on the recommended fire rate plus maximum day demand over fire duration period, **Analysis 6** was able to reflect the spare capacity of systems experiencing a maximum day demand plus fire demand over the whole 24-hour period. The normalized results of this analysis are shown in **Figure 8** which indicate that 43.2% ± 6.2 of Wisconsin municipal systems were undersized in 2003 for maximum day demand plus fire demand using fitted ISO data over the fire duration period. Incremental analysis of these results with **Analysis 1** indicates that approximately 24% of the municipal systems (55% of deficit systems) were undersized due to insufficient capacity for fire protection demands. Had the communities with an SE of 0.25 or less constructed additional capacity in 2003 equivalent to the capacity of their largest available well, only 11 systems (approximately 2%) would have had a deficit capacity. Interpreting the results of this analysis compared to **Analysis 5**, approximately 3% of the systems with surplus capacity for recommended fire demand plus maximum day demand over fire duration period had a deficit capacity for maximum day demand over the whole 24-hour period. This result indicates that systems which rely upon

storage capacity for maximum day demands could have sufficient capacity for a maximum day demand plus fire demand due to the short duration, but insufficient capacity for a maximum day demand.

Results of **Analysis 5** and **Analysis 6** vary considerably compared to **Analysis 2** through **Analysis 4,** reflecting the importance of understanding the basis period when performing spare capacity analysis. Using the fire duration period approach, there appears to be less variability in the results, resulting in a smaller average capacity deficit. For instance, the average deficit capacity for **Analysis 3** was 220 gpm whereas it was only 66 gpm for **Analysis 5**.

Uncertainty Analysis

Uncertainty estimates for **Analysis 1** through **Analysis 6** were calculated based on the number of deficit systems in each analysis that had corrected maximum day demand data, plus variation in spare capacity using effective storage capacity as 90% ± 5 of total storage capacity. Corrected data for well and storage capacity in the data set was not included in the uncertainty calculation since these corrections were verified through data examination. For **Analysis 1** through **Analysis 6**, the numbers of deficit systems with data corrected were 10, 14, 15, 17, 19 and 22 respectively.

Deficit Capacity versus Water System Size

To determine whether a correlation existed between population served and spare capacity, specifically for small and very small water systems, a series of scatter plots of SE versus population were generated. Results for **Analysis 1** through **Analysis 6** are shown in **Figure 10** through **Figure 15** respectively. Data shown were limited to populations of 25,000 or less since no systems larger than this population had a deficit capacity, and an SE of 1.0 or less to emphasize the deficit systems. Results for systems with deficit capacity are summarized in **Table 4**. The results for **Analysis 2** through **Analysis 4** show a considerable amount of scatter compared to **Analysis 5** and **Analysis 6**. This result can be attributed to the analysis basis, which results in more variability in SE by averaging fire demand over a 24-hour period versus the fire duration period. This result further shows the importance of properly recognizing the analysis period.

FIGURE 10. Comparison of spare capacity by population, Analysis 1

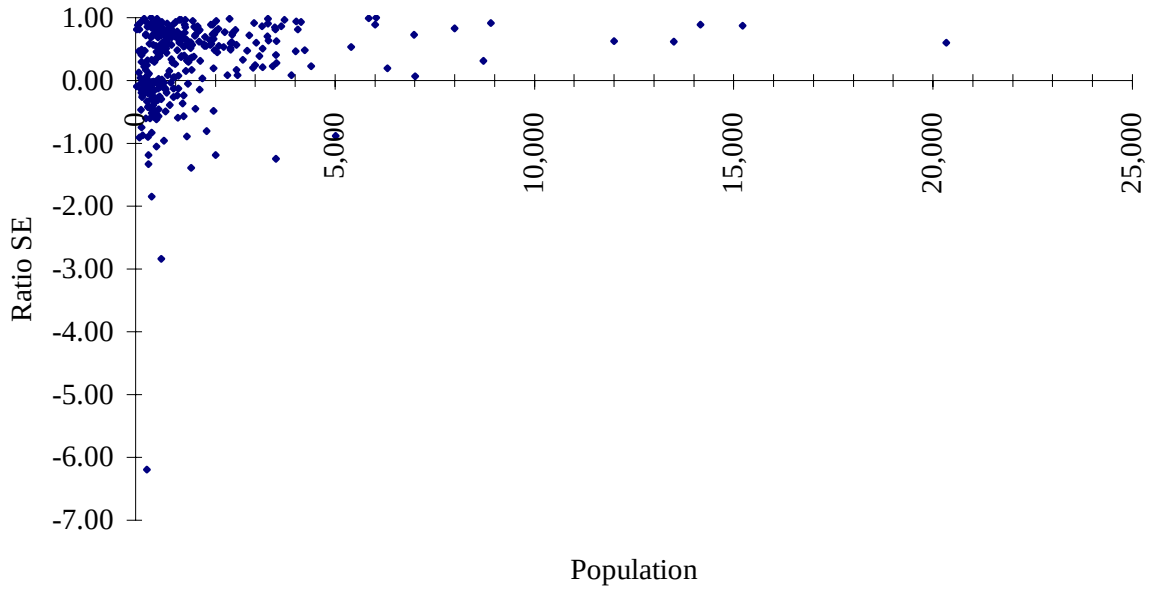


FIGURE 11. Comparison of spare capacity by population, Analysis 2

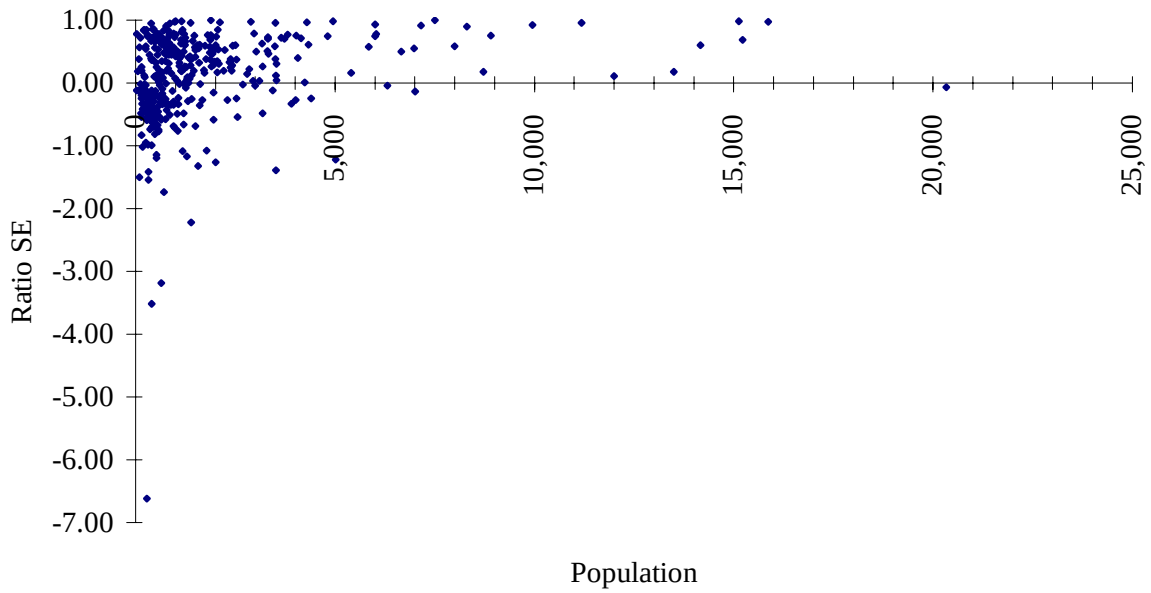


FIGURE 12. Comparison of spare capacity by population, Analysis 3

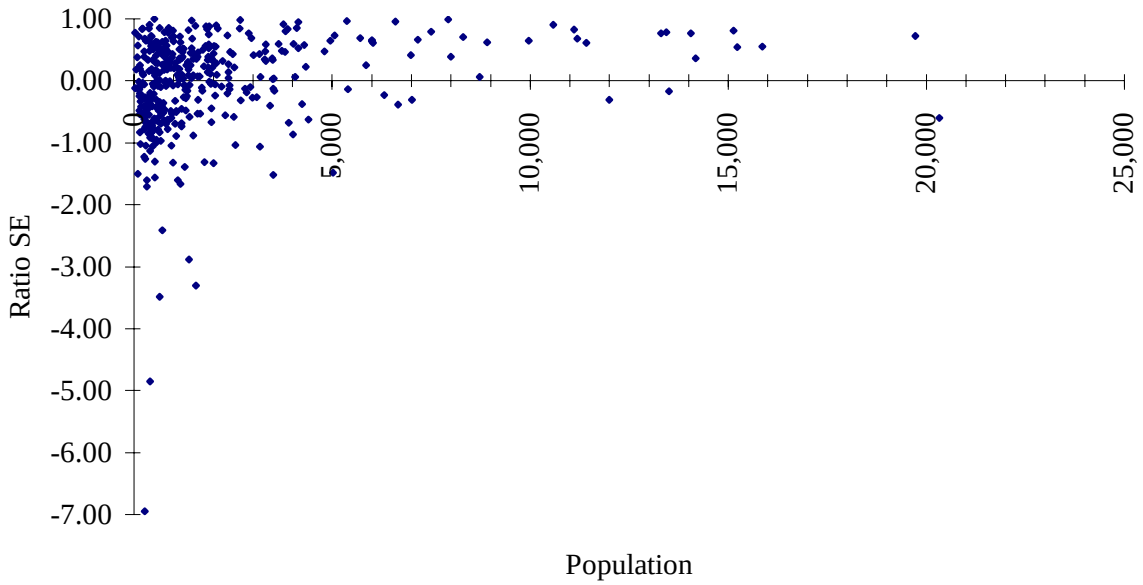


FIGURE 13. Comparison of spare capacity by population, Analysis 4

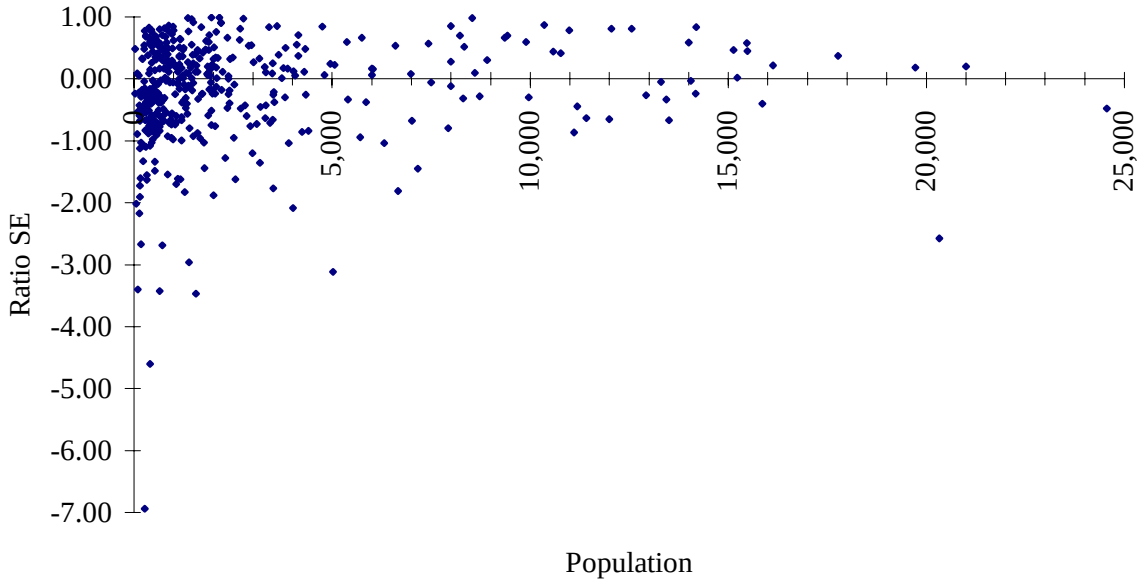


FIGURE 14. Comparison of spare capacity by population, Analysis 5

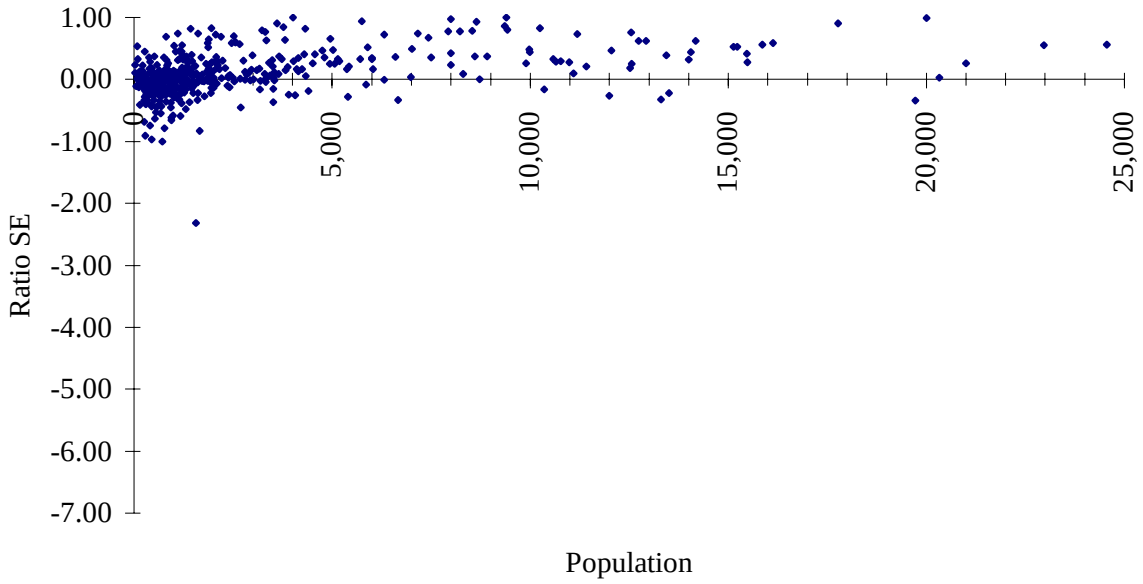
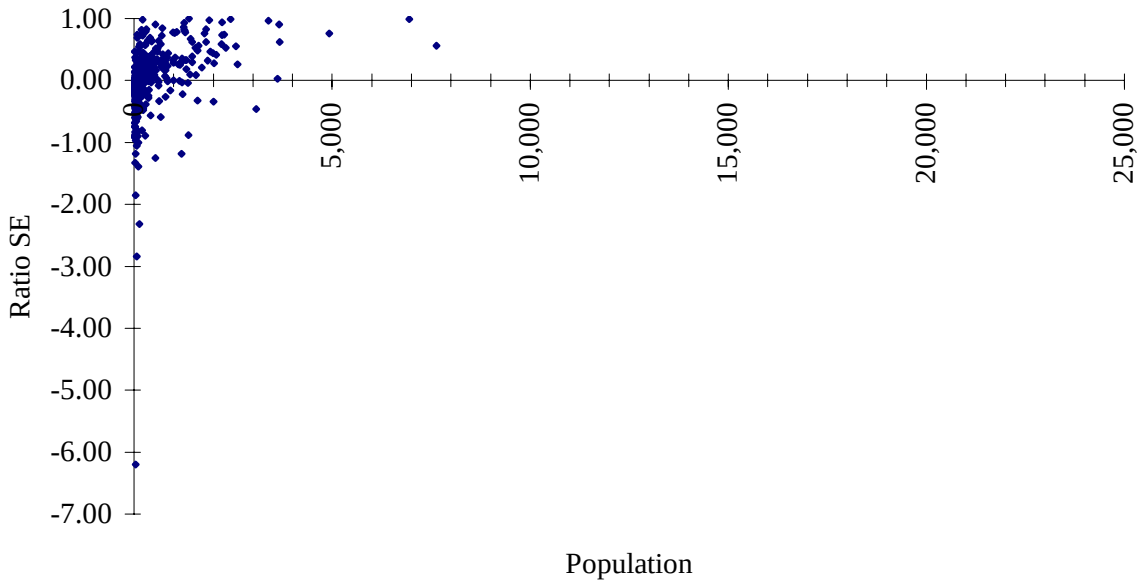


FIGURE 15. Comparison of spare capacity by population, Analysis 6



Based on the data presented in **Table 4**, regardless of analysis approach, it is clear that small and very small water systems constituted the majority of the Wisconsin water systems with deficit capacity in 2003. In addition, approximately 60% of all small and very small systems were undersized according to **Analysis 6**. These findings support the purpose of this study that

water system sizing and analysis guidelines would be useful for small to very small water systems in Wisconsin.

TABLE 4. Analysis of deficit capacity associated with population < 3,300

	Number of systems with deficit capacity	% of systems in study with deficit capacity	Percentage of deficit systems serving population less than 3,300	Percentage of systems serving population less than 3,300 with deficit capacity
Analysis 1	99	19%	98%	26%
Analysis 2	146	28%	93%	36%
Analysis 3	191	37%	93%	47%
Analysis 4	241	47%	82%	52%
Analysis 5	216	42%	94%	54%
Analysis 6	234	45%	94%	59%

Water System Sizing Guidance

A proposed water system analysis and sizing spreadsheet, based on **Equation 3** and **Equation 4**, is shown in **Figure 16**. This spreadsheet reflects the sizing approach of **Analysis 6**, based on maximum day demand for a 24-hour period and maximum day plus fire demand for the fire duration period. To illustrate the usefulness of this spreadsheet, data analysis using actual 2004 data from a utility in Wisconsin is shown, with a graph of the analysis shown in **Figure 17**. Interpreting this water system, it was efficiently sized for 2004 since 0.50<SE<1.50 (a new well was constructed in 2000), they had an acceptable storage turnover rate for freezing concerns, and the period from October through April would have been the appropriate for taking the largest well out of service to perform preventative maintenance. This system utilizes alternate sources as part of its fire protection systems to minimize the need for water system capacity. The spreadsheet can be used to determine the specific impact of a failure by deleting the failed facility's capacity in the spreadsheet, or assess the amount of capacity generated if a water conservation program was implemented. Also, the impact of reservoir maintenance can be easily evaluated by deleting the capacity of the facility needing maintenance to determine the best time for maintenance to be performed. The graphical representation of the data in **Figure 16, which is** shown in **Figure 17,** emphasizes the seasonal nature of demands in this community.

FIGURE 16. Proposed water system analysis and sizing spreadsheet

Water System Sizing and Spare Capacity Analysis Worksheet

System:
Analysis Year 2004
By: ADJ
Date: 4/18/2006 15:03

Demands												
Days in Month:	31	29	31	30	31	30	31	31	30	31	30	31
Month:	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**
Total Pumpage (gallons)	24,497,000	26,184,000	29,231,000	30,568,000	36,370,000	49,985,000	64,438,000	63,707,000	39,195,000	29,551,000	23,467,000	24,709,000
Maximum Day Demand (gallons)	1,226,000	1,276,000	1,309,000	1,328,000	1,882,000	2,182,000	2,487,000	2,613,000	2,241,000	1,489,000	1,190,000	1,210,000
Minimum Day Demand (gallons)	513,000	689,000	461,000	555,000	765,000	1,189,000	1,771,000	1,566,000	733,000	643,000	543,000	494,000
Average Day Demand (gpm)	549	627	655	708	815	1157	1444	1427	907	662	543	554
Maximum Day Demand (gpm)	851	886	909	922	1307	1515	1727	1815	1556	1034	826	840
Month: Max Day to Average Day	1.55	1.41	1.39	1.30	1.60	1.31	1.20	1.27	1.72	1.56	1.52	1.52
Month Ave Day to Year Ave Day	0.65	0.75	0.78	0.84	0.97	1.38	1.72	1.70	1.08	0.79	0.65	0.66
Max Day + Fire, Fire Basis (gpm)	5,851	5,886	5,909	5,922	6,307	6,515	6,727	6,815	6,556	6,034	5,826	5,840
Spare Capacity, Fire Basis (gpm)	1,399	1,364	1,341	1,328	943	735	523	435	694	1,216	1,424	1,410
Spare Capacity, Ave Basis (gpm)	1,774	1,739	1,716	1,703	1,318	1,110	898	810	1,069	1,591	1,799	1,785
Ratio SE	1.70	1.65	1.63	1.61	1.14	0.89	0.63	0.53	0.84	1.47	1.73	1.71

Capacities	
Number of wells out of service for firm well	1
Reserve capacity as percentage of average day	0%
ISO fire protection recommendation (gpm)	5,000
ISO fire duration (hr)	3
Fire protection alternate source (gpm)	2,000
Effective storage ratio (range 0.8 to 0.95)	0.90

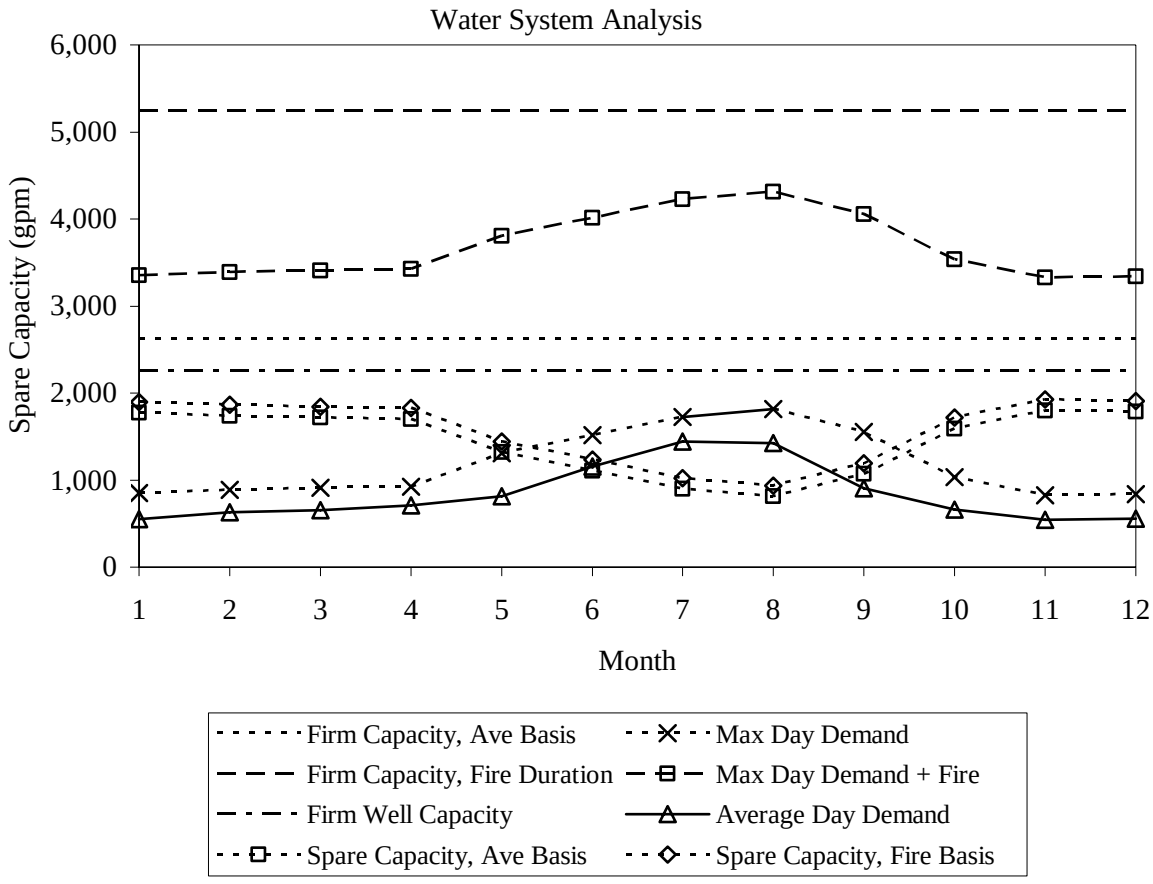
Well Data	
Number	**Capacity (gpm)**
1	325
2	450
3	825
4	650
5	950

Storage Data	
Location	**Capacity (gallons)**
Well 1	200,000
Elevated	400,000

Calculations	
Average Day Demand (gpm)	838
Maximum Day Demand (gpm)	1,815
Minimum Day Demand (gpm)	320
Maximum Day to Average Day	2.16
Firm Well Capacity (gpm)	2,250
Largest Available Well (gpm)	825
Effective Storage (gallons)	540,000
Effective Storage, Ave Basis (gpm)	375
Effective Storage, Fire Duration (gpm)	3,000
Storage turnover, min month average (hr)	1.17
Firm Capacity, Ave Basis (gpm)	2,625
Firm Capacity, Fire Basis (gpm)	7,250
Fire Protection Requirement (gallons)	540,000
Reserve Capacity (gallon)	0
Minimum Ratio SE	0.53
if SE < 0.25 : Add capacity	
if 0.25<SE<0.5 : Plan for additional capacity	
if 0.5<SE<1.5 : Efficiently sized	
if SE>1.5 : Excess capacity	

Notes: Data input cells are indicated by shading
Reserve capacity is amount deemed necessary by community officials
ISO data based on ISO recommendation obtained by fire department officials
Alternate fire protection source based on fire department officials, including storm water detention facilities, pools, etc

FIGURE 17. Water system analysis plot, Wisconsin community



Additional Capacity: Storage or Well?

Data analysis indicated that a number of small to very small water systems needed to construct additional water system capacity for the year 2003, assuming demand side reduction were not possible. The calculated deficit capacity for these systems was expressed as an amount in equivalent largest available well (SE in **Figure 8)**. Communities which have not yet added capacity (or further reduced demands) need further analysis to determine which type of capacity to construct. For water systems in climates which have extended periods of freezing weather, it is important to minimize the potential for water in storage to freeze. **Figure 18** is a plot of storage turn over in days based on 2003 minimum month average day demands for those Wisconsin systems with deficit spare capacity from **Analysis 6**. From a cursory perspective, lacking specifics of water system layout and concern for water quality, a system

with a turnover rate of less than 2 days could consider additional capacity as either storage volume or well capacity, provided added storage capacity considers water quality and thermal concerns in the design. A number of deficit systems had a storage turnover of greater than 2 days (to right of dashed line), with the longest turnover rate at 18 days. These systems are at risk of freezing their storage facility if mixing and/or other freeze prevention means are not implemented, and should consider additional capacity in the form of well capacity. Construction of additional capacity as storage in these systems would create a greater concern for thermal damage and water quality.

FIGURE 18. Storage turnover for deficit systems, Analysis 6

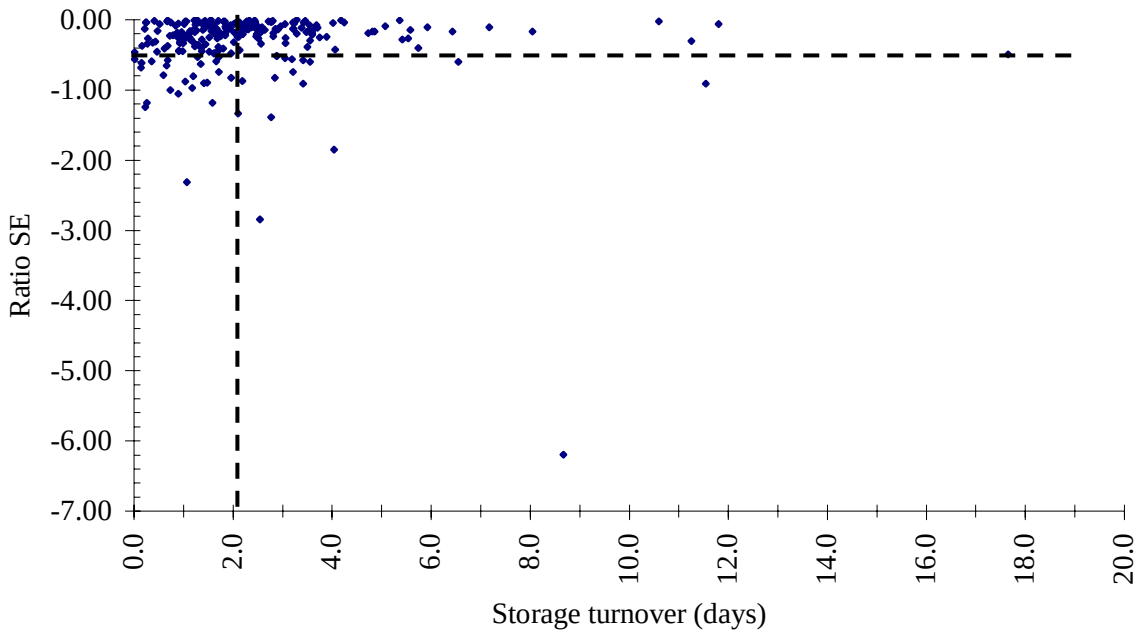


Figure 18 shows that a number of systems had a deficit capacity below SE = -0.5 (below dashed line), indicating the need for these systems to add capacity in an amount greater than an equivalent largest available well in order for the systems to be considered efficiently sized (0.5< SE< 1.5). For system with a storage turnover of less than 2 days (lower left quadrant), an equivalent largest well and additional storage could be added to achieve efficient supply. For systems with a storage turnover of greater than two days (lower right quadrant), a large well or multiple wells could be added to achieve efficient supply. When adding a single large well, if

the capacity of the new well is larger than the largest well in the system, the new large well would become the largest well in the firm well analysis requiring a new spare capacity analysis to evaluate the sizing efficiency of this option.

Cost Implications of Study

Using **Analysis 1** as a basis, 99 Wisconsin systems had a deficit capacity, and a total of 131 systems (25% of systems in study) needed to construct additional capacity in 2003 (SE<0.25). The average deficit capacity in these systems was 180 gpm, with a maximum deficit of 1,900 gpm. Assuming capacity was added to the systems as well capacity to satisfy the deficit and provide an SE of 1.0 (assuming further demand reductions are not possible), approximately 132 wells with an average capacity of 530 gpm would need to be constructed. In 2003, the average construction cost of a well, including engineering and construction, was approximately $1,000 per gpm of capacity based on experienced cost history. Using this analysis, the cost to add well capacity to eliminate the deficit water system capacity in Wisconsin based on 2003 data would have been approximately $70 million dollars. Using an 8% inflation rate, which reflects the escalation in steel and fuel prices experienced by the industry, if these wells are constructed in 2006, the total cost would be approximately $88 million.

Using **Analysis 6** as a basis, 234 systems had a deficit capacity, and a total of 363 systems (70% of systems in study) needed to construct additional capacity in 2003 (SE<0.25). The average deficit capacity in these systems was 120 gpm, with a maximum deficit of 1,800 gpm. Assuming capacity was added to the systems as well capacity to satisfy the deficit and provide an SE of 1.0 (assuming further demand reductions are not possible), approximately 364 wells with an average capacity of 560 gpm would need to be constructed. Using this analysis, the cost to add well capacity to eliminate the deficit water system capacity in Wisconsin based on 2003 data would have been approximately $204 million dollars. Factoring in inflation, if these wells are constructed in 2006, the total cost would be approximately $257 million.

Analysis 6 represents the results of **Analysis 1** plus the impact of fire duration on water system capacity. While **Analysis 1** indicates a basic shortcoming of capacity that must be addressed with capacity or demand reduction measures, **Analysis 6** has the benefit of other alternatives

since it relates to fire protection. For instance, a community with surface water or storm water detention ponds can use the water from these sources to supplement water system capacity for the less frequent but large fire event. While there is a cost associated with making this source available, such as additional equipment or installation of dry hydrants to access the source, a cost benefit analysis of the alternatives may prove one of these alternate sources beneficial to the system. Combining **Analysis 1** with **Analysis 6**, the estimated cost of needed additional well capacity, based on 2006 construction, is $176 million ± $84 million, depending upon the ability of water systems to supplement fire capacity with alternate sources. Should demand side reduction be feasible, which could not be analyzed based on the data available, a lower cost estimate and larger standard deviation would result.

Cause of Maximum Day Event

The data set for maximum day demand included an indication for the cause of the maximum day demand event as recorded by the operator of the water system. This cause was manually assigned in the data set to one of nine categories for use in further analysis. **Table 5** summarizes the entire data set as well as the results from **Analysis 1** through **Analysis 6**. **Table 6** shows that in deficit capacity communities, 37% ± 4.1 of the deficit capacities were caused by scheduled activities (flushing and reservoir maintenance), and another 33% ± 1.2 were caused by failures (equipment, main breaks or leaks). Experience indicates that a maximum day demand caused by reservoir maintenance is the results of pumping water to waste to maintain pressure within a distribution system. Reservoir maintenance need not create a maximum day demand with proper installation of pressure reducing pump control valves with emergency relief valves or variable frequency drives at well houses, each of which can control water system pressure without wasting water. These results suggest that better planning of scheduled maintenance, equipment upgrades, and/or performance of preventative maintenance during lower demand periods could reduce the number of deficit communities, and emphasizes the importance of sizing facilities based on the largest well out of service (failure condition). The data in **Table 5** further suggests that weather related causes for maximum day demand played a diminished role in communities with deficit capacity compared to the overall data set.

TABLE 5. Causal analysis of maximum day demand

Cause	All Data	Deficit Systems by Analysis 1	2	3	4	5	6
Equipment Failure	8.5%	14.0%	12.9%	13.0%	12.0%	9.7%	9.8%
Main Break – Leak	19.5%	20.0%	20.4%	20.2%	17.4%	24.1%	23.4%
Scheduled Flushing	18.3%	20.0%	19.0%	18.7%	16.5%	26.4%	24.7%
Reservoir Maintenance	9.7%	18.0%	15.6%	13.5%	12.0%	10.2%	13.2%
Fire	4.1%	5.0%	5.4%	5.2%	4.1%	5.1%	4.7%
Weather Related	23.6%	5.0%	8.8%	13.0%	19.4%	9.7%	9.4%
Multiple Causes	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Industry or Specific User	8.3%	10.0%	8.8%	7.8%	9.5%	8.3%	8.5%
Fill Reservoir	1.4%	1.0%	2.0%	1.6%	1.7%	0.9%	0.9%
Unknown	3.1%	3.0%	3.4%	4.1%	4.5%	2.8%	3.0%
New Water Main Construction	2.5%	3.0%	2.0%	2.1%	2.1%	2.3%	2.1%
Vandalism	0.4%	1.0%	0.7%	0.5%	0.4%	0.5%	0.4%
Road Construction	0.8%	0.0%	0.7%	0.5%	0.4%	0.0%	0.0%
Total Count	**518**	**100**	**147**	**192**	**242**	**216**	**235**

TABLE 6. Analysis of maximum day demand cause related to maintenance

Analysis	Failure Related	Scheduled Maintenance	Total Maintenance Related
All Data	28%	31%	58%
Analysis 1	34%	41%	75%
Analysis 2	33%	37%	70%
Analysis 3	33%	34%	67%
Analysis 4	29%	31%	60%
Analysis 5	34%	39%	73%
Analysis 6	33%	40%	73%
Average of Analyses	**33% ± 1.2**	**37% ± 4.1**	**70% ± 5.3**

Rules of Thumb

An investigation was performed to determine the validly of rules of thumb for assessing spare capacity of a CWS. This investigation compared the number of communities with deficit spare capacity in each analysis with violation of the rule for average day demand and maximum day pumping cited by Ten States Standards (GL-UMRB, 2003). Results of this investigation are

shown in **Table 7**. Investigation of the maximum day rule of thumb, where a water system could use the total capacity of all well pumps operating provided that the average pumping time was less than 20 hours, resulted in deviations of 190%, 330%, 460%, 610%, 540%, and 590% when compared to **Analysis 1** through **Analysis 6** respectively. These results clearly shows that rules of thumb are inappropriate for use in determine spare capacity of a water system. These results were expected since rules of thumb are not based on a detailed analysis and do not consider specific operational properties of water systems. Since the average day rule of thumb indicated a lower number of deficit systems, comparison of this rule of thumb to results of **Analysis 1** through **Analysis 6** would result in larger deviations.

TABLE 7. Comparison of deficit capacity analysis results with sizing rules of thumb

Number of systems with deficit capacity in each category							
Average Day Rule of Thumb	**Maximum Day Rule of Thumb**	**Analysis**					
		1	**2**	**3**	**4**	**5**	**6**
8	34	100	147	192	242	216	235

Footnote: Average day rule of thumb is average of 12 hours of pumping, Maximum day rule of thumb is average of 20 hours of pumping. Average hours of pumping based on all wells.

Maximum Hour Demand Analysis

Analysis for spare capacity based on maximum day demand resulted in a significant portion of the municipal water systems having a deficit capacity. It is believed that these results would have been slightly worse had analysis based on maximum hour demands been possible. For instance, a system which had surplus capacity under the maximum day demand analysis could have had a deficit capacity under the maximum hour demand analysis much like comparison of **Analysis 5** to **Analysis 6**. This belief is based on engineering experience; however it can be illustrated by looking at calculation of ratios. In the data set, the ratio obtained by dividing maximum day demand by average day demand, resulted in an average value of 2.67, median of 2.18 and minimum of 1.09. A similar trend in peaking factors of maximum hour demand divided by maximum day demand occurs when maximum hour data are available for analysis. Since peak factors are water system specific, determined by how customers use a water system, a low maximum day demand to average day demand ratio in conjunction with a larger maximum hour demand to maximum day demand ratio could result in a larger maximum hour

demand requirement than a maximum day demand plus fire duration requirement. However, this incremental analysis will not change the results significantly, since the maximum day demand or maximum hour demand plus fire demand analyses are able to adequately describe most of the demand situations encountered, leaving analysis of maximum hour demand for those systems with known large maximum hour to average day demand ratios. Since sizing and analysis should be based on the worst combination of demands, i.e. maximum day demand, or maximum day demand plus fire demand or maximum hour demand, full analysis including maximum hour demands could have resulted in a larger number of systems with deficit capacity.

True Deficit Capacity?

Spare capacity analyses for maximum day demand plus fire demand over fire duration and maximum day demand over 24-hour period with largest well out of service resulted in 43.2% ± 6.2 of Wisconsin CWSs being considered undersized in 2003. By this calculation, approximately 60% of Wisconsin's small and very small CWSs were undersized. Contrary to these calculations, it appears that these deficit systems were able to satisfy demands imposed on them for 2003, indicating none of them experienced a combination of conditions equal to the analysis conditions, i.e. large fire demand on their maximum day with their largest well out of service. While nothing may have been reported in print for 2003, or for similar situations in other years, there have been numerous second hand reports of where a utility had to inform the fire department during a fire response that they had to find another water source because the system was almost out of water. The spare capacity analysis approach presented here would have prevented this situation, but the question remains, is this approach overly conservative? Further study should be performed to determine the overall level of reliability provided by this approach, analyzing historical system demands combined with failure conditions for a sampling of water systems to quantify impact on these systems, the results of which could be factored into the methods used for spare capacity analysis.

Conclusions

It is evident from analysis of 518 municipal water systems in Wisconsin that water system sizing guidelines would be useful for small and very small municipal water systems. Furthermore, it is evident that rules of thumb are poor indicators of determining whether water systems have sufficient capacity to satisfy demands. While these results are specific to Wisconsin, it is believed that similar results would be present in other states. This belief is based on the lack of cohesive demonstration of water system sizing in literature, lack of regulations for water system sizing and analysis, and the recommended use of rules of thumb for evaluating capacity.

For analytical purposes, this study assumed demand side reductions, if possible, were already implemented. Without personal interviews with each of the 518 municipal systems analyzed, this assumption could not be validated. While it is believed that some municipalities may be addressing conservation and demand side reduction as a matter of policy, the practice is probably not wide spread is Wisconsin.

Recommendations

Based on the result of this study, it is recommended that water system analysis and sizing guidelines be developed based on a risk assessment analysis of current recommended engineering practices, with provisions to address storage freezing and water quality issues. These recommendations will help small to very small water systems determine the basic needs of their water system, and provide them with direction on how to meet these needs. By incorporating additional data into the analysis, which was not readily available from the WPSC or WDNR for this project, the guidance can assist in operational decisions such as scheduling of preventative maintenance to avoid creating a deficit supply situation, and determining the impact of a component failure on system reliability. It should be the intent of these guidelines to assist communities, providing them with a basis for analysis and sizing, while allowing them the ability to incorporate engineering judgment and justification for specific situations and/or needs which a guideline may not adequately address. The guidance would also be helpful to communities when evaluating recommendations on sizing that are provided to them by consultants they hire, or the impact of water conservation programs.

For successful implementation of a water system sizing guideline, accurate and system specific data are needed. System specific data includes physical pumping and storage capacities, monthly demand data, maximum day and hour demand data, fire protection rate and duration, and reserve capacity requirement as shown in **Figure 17**. To easily acquire the demand data for Wisconsin, it is recommended that maximum day demand and minimum day demand recording be added to the WDNR monthly report requirements, with these values transferred by water system operators to the yearly WPSC report. It is further recommended that as water system improvements are performed, specifically to telemetry and control systems, that provision be made for SCADA improvement for continuous calculation of water system demands. This improvement would allow for water system analysis using maximum hour demands (**Equation 5)**, as well as provide an opportunity for establishing alarm conditions which can help with operations.

In addition to sizing guidelines, water system personnel and fire department officials need to establish open lines of communication. This proactive measure will ensure that recommended

fire protection capacity and needs of the fire department are incorporated into water system facilities. This communication will also allow for determination of which needs of the fire department can be easily provided for by the water system, and if there is a need to establish alternate fire protection sources, such as dry hydrant connections to swimming pools or storm water detention ponds.

ISO's calculation of needed fire flow depends upon physical survey of buildings within a community. This study emphasizes the importance of these surveys in determining the amount of capacity that needs to be provided by a water system for a community to be rated positively by ISO. In addition, the study implies that commercial development could result in a need for additional fire protection capacity, which needs to be considered when development within a community is proposed. For proper design of a water system which includes capacity for fire protection of the community, the fire flow must be accurately determined, communicated with the entity responsible for engineering of the water system, and accounted for in planning for community development and water demand forecasts. A lack of ISO involvement or failure to recognize the need for planning in association with community development could result in insufficient water system capacity to satisfy demands which the water system will be subjected to and is expected to fulfill.

It is indicated by the WDNR in the capacity development strategy that they will continue to enhance and modify their capacity development strategy over time (WDNR, 2000). Based on this willingness, it is recommended that the WDNR develop and adopt a water system sizing guidance for small to very small water systems, based on redundant approach to reliability. A recent study showed that poor water system management was often a reflection of poor community management (Bik et al, 2004). While this may not be the reason for the results of this research, it does show that lacking specific direction or guidance, poor results can occur. Development and adoption of a sizing guidance will help small to very small utilities become effective and reliable.

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APPENDIX A: WELL CAPACITY DATA

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
1	1	185	230	22	20	325	20	20	20	20	250	35	35														1,183	575	12	2	230	99	608	51.4%
2	1	300	530	825																							1,656	825	3	1	530	552	831	50.2%
3	1	210	225																								436	225	2	1	210	218	211	48.4%
4	1	190	440																								631	440	2	1	190	316	191	30.3%
5	0	300	150	370	520																						1,340	520	4	1	370	335	820	61.2%
6	1	325	450																								776	450	2	1	325	388	326	42.0%
7	0	500	750	500	1,300	800	1,600	1,400																			6,850	1,600	7	1	1,400	979	5,250	76.6%
8	1	250	275																								526	275	2	1	250	263	251	47.7%
9	1	250																									251	250	1	1	0	251	1	0.4%
10	1	120	200																								321	200	2	1	120	161	121	37.7%
11	0	125	300	155	157	189																					926	300	5	1	189	185	626	67.6%
12	1	375	612																								988	612	2	1	375	494	376	38.1%
13	1	410	210	550																							1,171	550	3	1	410	390	621	53.0%
14	0	650	500	465	525																						2,140	650	4	1	525	535	1,490	69.6%
15	1	600	600	1,250	410																						2,861	1,250	4	1	600	715	1,611	56.3%
16	1	300																									301	300	1	1	0	301	1	0.3%
17	1	50	300	520																							871	520	3	1	300	290	351	40.3%
18	1	335																									336	335	1	1	0	336	1	0.3%
19	0	1,200	1,100	1,250	1,250	1,750	1,200																				7,750	1,750	6	1	1,250	1,292	6,000	77.4%
20	1	70	15	20	50	60	60	60																			336	70	7	1	60	48	266	79.2%
21	1	250	270	350	350																						1,221	350	4	1	350	305	871	71.3%
22	1	350																									351	350	1	1	0	351	1	0.3%
23	1	340	300																								641	340	2	1	300	321	301	47.0%
24	0	750	1,050																								1,800	1,050	2	1	750	900	750	41.7%
25	1	150	300	300																							751	300	3	1	300	250	451	60.1%
26	1	380	350																								731	380	2	1	350	366	351	48.0%
27	0	650	1,100	900	1,300																						3,950	1,300	4	1	1,100	988	2,650	67.1%
28	1	152	360																								513	360	2	1	152	257	153	29.8%
29	0	815	800	1,200	800																						3,615	1,200	4	1	815	904	2,415	66.8%
30	1	256																									257	256	1	1	0	257	1	0.4%
31	1	553	560																								1,114	560	2	1	553	557	554	49.7%
32	1	300	200																								501	300	2	1	200	251	201	40.1%
33	0	1,400	1,050	1,050	1,400																						4,900	1,400	4	1	1,400	1,225	3,500	71.4%
34	1	650	800	500																							1,951	800	3	1	650	650	1,151	59.0%
35	1	275	500																								776	500	2	1	275	388	276	35.6%
36	0	730	1,000	1,000	1,000																						3,730	1,000	4	1	1,000	933	2,730	73.2%
37	1	265	300																								566	300	2	1	265	283	266	47.0%
38	1	185	420																								606	420	2	1	185	303	186	30.7%
39	0	1,000	1,400	1,100																							3,500	1,400	3	1	1,100	1,167	2,100	60.0%
40	1	325	90																								416	325	2	1	90	208	91	21.9%
41	1	500	500																								1,001	500	2	1	500	501	501	50.0%
42	1	500	650																								1,151	650	2	1	500	576	501	43.5%
43	1	350	500																								851	500	2	1	350	426	351	41.2%
44	0	250	600	300	350																						1,500	600	4	1	350	375	900	60.0%
45	1	540	500																								1,041	540	2	1	500	521	501	48.1%
46	1	200	400																								601	400	2	1	200	301	201	33.4%
47	0	117	117	100	240																						574	240	4	1	117	144	334	58.2%
48	1	260																									261	260	1	1	0	261	1	0.4%
49	1	375	420																								796	420	2	1	375	398	376	47.2%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
50	1	300																									301	300	1	1	0	301	1	0.3%
51	1	175	370	500																							1,046	500	3	1	370	349	546	52.2%
52	1	600	500	750																							1,851	750	3	1	600	617	1,101	59.5%
53	1	150																									151	150	1	1	0	151	1	0.7%
54	1	330																									331	330	1	1	0	331	1	0.3%
55	1	165	90																								256	165	2	1	90	128	91	35.5%
56	1	300	100	220																							621	300	3	1	220	207	321	51.7%
57	1	238	744	771																							1,754	771	3	1	744	585	983	56.0%
58	1	440	440	270																							1,151	440	3	1	440	384	711	61.8%
59	1	350	460																								811	460	2	1	350	406	351	43.3%
60	1	620	620																								1,241	620	2	1	620	621	621	50.0%
61	1	200	1,300	1,600	650																						3,751	1,600	4	1	1,300	938	2,151	57.3%
62	0	600	525	700	950	200	850	236	400	210	400	600	1,000	500	250	200	750	500	200	1,100	550	1,000	300	215			12,236	3,100	23	3	950	532	9,136	74.7%
63	1	470	270																								741	470	2	1	270	371	271	36.6%
64	0	1,900	1,900	1,500	1,500	1,500	1,900																				10,200	1,900	6	1	1,900	1,700	8,300	81.4%
65	1	200	350																								551	350	2	1	200	276	201	36.5%
66	1	130																									131	130	1	1	0	131	1	0.8%
67	1	175	178																								354	178	2	1	175	177	176	49.7%
68	1	250																									251	250	1	1	0	251	1	0.4%
69	0	1,200	1,100	1,000	950																						4,250	1,200	4	1	1,100	1,063	3,050	71.8%
70	1	375	375	purcha																							751	375	2	1	375	376	376	50.1%
71	1	100	500																								601	500	2	1	100	301	101	16.8%
72	1	400	300	300	400																						1,401	400	4	1	400	350	1,001	71.4%
73	1	1,000	1,000																								2,001	1,000	2	1	1,000	1,001	1,001	50.0%
74	1	400	300																								701	400	2	1	300	351	301	42.9%
75	1	450	480																								931	480	2	1	450	466	451	48.4%
76	1	250	500																								751	500	2	1	250	376	251	33.4%
77	1	220																									221	220	1	1	0	221	1	0.5%
78	1	320																									321	320	1	1	0	321	1	0.3%
79	1	300	300																								601	300	2	1	300	301	301	50.1%
80	1	400	650																								1,051	650	2	1	400	526	401	38.2%
81	1	250	200																								451	250	2	1	200	226	201	44.6%
82	0	610	975	600	750	700																					3,635	975	5	1	750	727	2,660	73.2%
83	1	300	350	400																							1,051	400	3	1	350	350	651	61.9%
84	1	500	80																								581	500	2	1	80	291	81	13.9%
85	1	229																									230	229	1	1	0	230	1	0.4%
86	1	500	500																								1,001	500	2	1	500	501	501	50.0%
87	0	400	500	700																							1,600	700	3	1	500	533	900	56.3%
88	0	1,000	650	1,275	1,100	1,200	1,000	1,000	1,250																		8,475	1,275	8	1	1,250	1,059	7,200	85.0%
89	1	260	560																								821	560	2	1	260	411	261	31.8%
90	1	500	600																								1,101	600	2	1	500	551	501	45.5%
91	1	600	575																								1,176	600	2	1	575	588	576	49.0%
92	1	550	1,550																								2,101	1,550	2	1	550	1,051	551	26.2%
93	0	250	1,200	500	400	450	265																				3,065	1,200	6	1	500	511	1,865	60.8%
94	1	550	750	980																							2,281	980	3	1	750	760	1,301	57.0%
95	1	500																									501	500	1	1	0	501	1	0.2%
96	1	320																									321	320	1	1	0	321	1	0.3%
97	1	60	65	25	30	60																					241	65	5	1	60	48	176	73.0%
98	1	500	600																								1,101	600	2	1	500	551	501	45.5%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
99	1	240	250	325																							816	325	3	1	250	272	491	60.2%
100	1	190	400																								591	400	2	1	190	296	191	32.3%
101	0	500	500	850																							1,850	850	3	1	500	617	1,000	54.1%
102	1	500	300																								801	500	2	1	300	401	301	37.6%
103	1	400	100																								501	400	2	1	100	251	101	20.2%
104	0	130	750	1,100																							1,980	1,100	3	1	750	660	880	44.4%
105	1	400																									401	400	1	1	0	401	1	0.2%
106	1	300	500																								801	500	2	1	300	401	301	37.6%
107	1	300	400																								701	400	2	1	300	351	301	42.9%
108	1	410	600																								1,011	600	2	1	410	506	411	40.7%
109	1	710	650	230																							1,591	710	3	1	650	530	881	55.4%
110	1	210	720	570	750																						2,251	750	4	1	720	563	1,501	66.7%
111	1	30	30	30	30	100																					221	100	5	1	30	44	121	54.8%
112	1	150	200																								351	200	2	1	150	176	151	43.0%
113	1	350	250																								601	350	2	1	250	301	251	41.8%
114	1	400	820																								1,221	820	2	1	400	611	401	32.8%
115	0	500	725	735																							1,960	735	3	1	725	653	1,225	62.5%
116	1	350	500																								851	500	2	1	350	426	351	41.2%
117	1	500	530																								1,031	530	2	1	500	516	501	48.6%
118	1	350	350	500																							1,201	500	3	1	350	400	701	58.4%
119	0	300	850	1,600																							2,750	1,600	3	1	850	917	1,150	41.8%
120	0	600	600	1,475	500																						3,175	1,475	4	1	600	794	1,700	53.5%
121	1	560	560																								1,121	560	2	1	560	561	561	50.0%
122	0	1,200	800	520	950	1,000	700																				5,170	1,200	6	1	1,000	862	3,970	76.8%
123	0	1,000																									1,000	1,000	1	1	0	1,000	0	0.0%
124	1	185	275																								461	275	2	1	185	231	186	40.3%
125	1	250																									251	250	1	1	0	251	1	0.4%
126	0	190	440	260	320																						1,210	440	4	1	320	303	770	63.6%
127	1	200	160																								361	200	2	1	160	181	161	44.6%
128	1	280	371																								652	371	2	1	280	326	281	43.1%
129	1	88	100																								189	100	2	1	88	95	89	47.1%
130	1	250	275																								526	275	2	1	250	263	251	47.7%
131	1	195																									196	195	1	1	0	196	1	0.5%
132	1	500	1,200																								1,701	1,200	2	1	500	851	501	29.5%
133	1	395	270																								666	395	2	1	270	333	271	40.7%
134	1	200	350	950																							1,501	950	3	1	350	500	551	36.7%
135	1	110																									111	110	1	1	0	111	1	0.9%
136	0	397	727	406																							1,530	727	3	1	406	510	803	52.5%
137	0	1,200	833	1,725	1,900	755	1,950	1,570	1,260	1,500	1,500	1,300	1,550	1,800	1,000	2,500											22,343	4,450	15	2	1,900	1,490	17,893	80.1%
138	1	125	25	80	165	95																					491	165	5	1	125	98	326	66.4%
139	0	650	975	850																							2,475	975	3	1	850	825	1,500	60.6%
140	1	100	300																								401	300	2	1	100	201	101	25.2%
141	1	100	120																								221	120	2	1	100	111	101	45.7%
142	1	1,005	610	480																							2,096	1,005	3	1	610	699	1,091	52.1%
143	0	720	425	1,030	800																						2,975	1,030	4	1	800	744	1,945	65.4%
144	1	175	380																								556	380	2	1	175	278	176	31.7%
145	1	250	450																								701	450	2	1	250	351	251	35.8%
146	1	600	600	230																							1,431	600	3	1	600	477	831	58.1%
147	1	550	750																								1,301	750	2	1	550	651	551	42.4%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
148	1	150																									151	150	1	1	0	151	1	0.7%
149	1	100	200																								301	200	2	1	100	151	101	33.6%
150	0	550	740																								1,290	740	2	1	550	645	550	42.6%
151	1	140																									141	140	1	1	0	141	1	0.7%
152	1	200	180																								381	200	2	1	180	191	181	47.5%
153	1	525																									526	525	1	1	0	526	1	0.2%
154	1	170	170																								341	170	2	1	170	171	171	50.1%
155	1	500	1,000																								1,501	1,000	2	1	500	751	501	33.4%
156	1	75	75																								151	75	2	1	75	76	76	50.3%
157	0	1,200	500	1,100	1,200	400	250	850																			5,500	1,200	7	1	1,200	786	4,300	78.2%
158	1	425	205	1,250																							1,881	1,250	3	1	425	627	631	33.5%
159	0	600	800	1,200	600	400	580	600	540	500	500	570	350	430	900	800	800										10,170	2,100	16	2	800	636	8,070	79.4%
160	1	400	448	750																							1,599	750	3	1	448	533	849	53.1%
161	1	455	500																								956	500	2	1	455	478	456	47.7%
162	1	275																									276	275	1	1	0	276	1	0.4%
163	0	400	600	750	1,000	1,200	1,200																				5,150	1,200	6	1	1,200	858	3,950	76.7%
164	1	110																									111	110	1	1	0	111	1	0.9%
165	1	580	580																								1,161	580	2	1	580	581	581	50.0%
166	0	1,000	1,000	purcha																							2,000	1,000	2	1	1,000	1,000	1,000	50.0%
167	1	400	300	400	450																						1,551	450	4	1	400	388	1,101	71.0%
168	1	450	450																								901	450	2	1	450	451	451	50.1%
169	1	355	360																								716	360	2	1	355	358	356	49.7%
170	1	300	450																								751	450	2	1	300	376	301	40.1%
171	1	650																									651	650	1	1	0	651	1	0.2%
172	1	175																									176	175	1	1	0	176	1	0.6%
173	1	300	300																								601	300	2	1	300	301	301	50.1%
174	0	500	750	420	825	1,200																					3,695	1,200	5	1	825	739	2,495	67.5%
175	1	600	750	900																							2,251	900	3	1	750	750	1,351	60.0%
176	1	250	250																								501	250	2	1	250	251	251	50.1%
177	1	300																									301	300	1	1	0	301	1	0.3%
178	1	350	1,400																								1,751	1,400	2	1	350	876	351	20.0%
179	1	60																									61	60	1	1	0	61	1	1.6%
180	1	200	200																								401	200	2	1	200	201	201	50.1%
181	1	150	150																								301	150	2	1	150	151	151	50.2%
182	0	334	484	565	569	974	736	1,000																			4,662	1,000	7	1	974	666	3,662	78.5%
183	0	700	700	700	700	1,600	1,600																				6,000	1,600	6	1	1,600	1,000	4,400	73.3%
184	1	180	180																								361	180	2	1	180	181	181	50.1%
185	1	200	160	240																							601	240	3	1	200	200	361	60.1%
186	1	150	225																								376	225	2	1	150	188	151	40.2%
187	0	875	1,400	2,100	2,100																						6,475	2,100	4	1	2,100	1,619	4,375	67.6%
188	1	450	400																								851	450	2	1	400	426	401	47.1%
189	0	360	360	700																							1,420	700	3	1	360	473	720	50.7%
190	1	50	50	50	50	50	50	50	50	50	50	50															551	100	11	2	50	50	451	81.9%
191	1	24	80	85																							190	85	3	1	80	63	105	55.3%
192	0	196	300																								496	300	2	1	196	248	196	39.5%
193	1	310	420																								731	420	2	1	310	366	311	42.5%
194	1	300																									301	300	1	1	0	301	1	0.3%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
195	1	350	300																								651	350	2	1	300	326	301	46.2%
196	0	710	275	500	325	1,250	500																				3,560	1,250	6	1	710	593	2,310	64.9%
197	0	670	1,200	300	1,100																						3,270	1,200	4	1	1,100	818	2,070	63.3%
198	1	300																									301	300	1	1	0	301	1	0.3%
199	1	1,500																									1,501	1,500	1	1	0	1,501	1	0.1%
200	1	150	60																								211	150	2	1	60	106	61	28.9%
201	1	500	300	400	110																						1,311	500	4	1	400	328	811	61.9%
202	1	300	435																								736	435	2	1	300	368	301	40.9%
203	1	100	350																								451	350	2	1	100	226	101	22.4%
204	1	116	346																								463	346	2	1	116	232	117	25.3%
205	1	420	420																								841	420	2	1	420	421	421	50.1%
206	1	175																									176	175	1	1	0	176	1	0.6%
207	1	1,000																									1,001	1,000	1	1	0	1,001	1	0.1%
208	1	275	235																								511	275	2	1	235	256	236	46.2%
209	1	217	500																								718	500	2	1	217	359	218	30.4%
210	0	1,270	1,100	1,200																							3,570	1,270	3	1	1,200	1,190	2,300	64.4%
211	0	550	850	300	300																						2,000	850	4	1	550	500	1,150	57.5%
212	1	280	300																								581	300	2	1	280	291	281	48.4%
213	0	430	1,500	1,550																							3,480	1,550	3	1	1,500	1,160	1,930	55.5%
214	0	500	600	500	900	700	900	900																			5,000	900	7	1	900	714	4,100	82.0%
215	1	220	260																								481	260	2	1	220	241	221	45.9%
216	1	340																									341	340	1	1	0	341	1	0.3%
217	1	400	330																								731	400	2	1	330	366	331	45.3%
218	1	375	400																								776	400	2	1	375	388	376	48.5%
219	1	100	100																								201	100	2	1	100	101	101	50.2%
220	1	250	280																								531	280	2	1	250	266	251	47.3%
221	1	220	350																								571	350	2	1	220	286	221	38.7%
222	1	550																									551	550	1	1	0	551	1	0.2%
223	0	420	85	850	1,100																						2,455	1,100	4	1	850	614	1,355	55.2%
224	0	1,750	3,500	4,400	4,200	4,200																					18,050	4,400	5	1	4,200	3,610	13,650	75.6%
225	0	950	800	1,400	950																						4,100	1,400	4	1	950	1,025	2,700	65.9%
226	1	320	525																								846	525	2	1	320	423	321	37.9%
227	1	70	40	45																							156	70	3	1	45	52	86	55.1%
228	1	280	230	570																							1,081	570	3	1	280	360	511	47.3%
229	0	220	600	380	600	1,200																					3,000	1,200	5	1	600	600	1,800	60.0%
230	1	250																									251	250	1	1	0	251	1	0.4%
231	1	350	240																								591	350	2	1	240	296	241	40.8%
232	0	70	400	280	450	710																					1,910	710	5	1	450	382	1,200	62.8%
233	1	850	850	575																							2,276	850	3	1	850	759	1,426	62.7%
234	0	525	500	1,000	1,150																						3,175	1,150	4	1	1,000	794	2,025	63.8%
235	1	300	270																								571	300	2	1	270	286	271	47.5%
236	0	1,330	901	1,400																							3,631	1,400	3	1	1,330	1,210	2,231	61.4%
237	1	250	350																								601	350	2	1	250	301	251	41.8%
238	1	1,350																									1,351	1,350	1	1	0	1,351	1	0.1%
239	0	750	500																								1,250	750	2	1	500	625	500	40.0%
240	0	1,050	1,680	2,100	1,918	2,450	2,180	1,960	2,340	2,960	3,250	2,320	2,020	1,920	1,756	2,050											31,954	6,210	15	2	2,450	2,130	25,744	80.6%
241	0	250	500	800	130																						1,680	800	4	1	500	420	880	52.4%
242	1	425	250																								676	425	2	1	250	338	251	37.1%
243	1	568	560																								1,129	568	2	1	560	565	561	49.7%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
244	1	425	510	870	480	1,000																					3,286	1,000	5	1	870	657	2,286	69.6%
245	0	860	1,000	1,000	1,300																						4,160	1,300	4	1	1,000	1,040	2,860	68.8%
246	1	925	925																								1,851	925	2	1	925	926	926	50.0%
247	0	1,300	1,300	1,700																							4,300	1,700	3	1	1,300	1,433	2,600	60.5%
248	0	600	860	1,100																							2,560	1,100	3	1	860	853	1,460	57.0%
249	1	350																									351	350	1	1	0	351	1	0.3%
250	1	290																									291	290	1	1	0	291	1	0.3%
251	1	185																									186	185	1	1	0	186	1	0.5%
252	1	860																									861	860	1	1	0	861	1	0.1%
253	1	275	630																								906	630	2	1	275	453	276	30.5%
254	1	200																									201	200	1	1	0	201	1	0.5%
255	1	350																									351	350	1	1	0	351	1	0.3%
256	1	230																									231	230	1	1	0	231	1	0.4%
257	0	1,400	1,300	1,100																							3,800	1,400	3	1	1,300	1,267	2,400	63.2%
258	1	300																									301	300	1	1	0	301	1	0.3%
259	1	400	1,000	1,000																							2,401	1,000	3	1	1,000	800	1,401	58.4%
260	1	220																									221	220	1	1	0	221	1	0.5%
261	1	300	300																								601	300	2	1	300	301	301	50.1%
262	1	350	350																								701	350	2	1	350	351	351	50.1%
263	1	450																									451	450	1	1	0	451	1	0.2%
264	1	90	30	50	50	35																					256	90	5	1	50	51	166	64.8%
265	1	250	500																								751	500	2	1	250	376	251	33.4%
266	1	150	225	120																							496	225	3	1	150	165	271	54.6%
267	1	215	310																								526	310	2	1	215	263	216	41.1%
268	0	1,700	1,120	2,300	2,320	1,700	1,750	2,150	2,200	2,350	2,035	2,400	2,200	2,250	2,300	2,200	2,000	200	550	1,200	2,100	2,160	2,125	2,200	2,100		45,610	7,070	24	3	2,300	1,900	38,540	84.5%
269	1	350																									351	350	1	1	0	351	1	0.3%
270	1	200	200	100	150	50	425	405	250																		1,781	425	8	1	405	223	1,356	76.1%
271	1	100	100																								201	100	2	1	100	101	101	50.2%
272	1	280	310	400																							991	400	3	1	310	330	591	59.6%
273	1	400																									401	400	1	1	0	401	1	0.2%
274	1	450	300																								751	450	2	1	300	376	301	40.1%
275	1	400	400																								801	400	2	1	400	401	401	50.1%
276	0	500	600																								1,100	600	2	1	500	550	500	45.5%
277	0	214	112	440	167	175	410	375	320	420	400	350	350	440													4,173	880	13	2	420	321	3,293	78.9%
278	1	35																									36	35	1	1	0	36	1	2.8%
279	1	140	300																								441	300	2	1	140	221	141	32.0%
280	0	900	900	560																							2,360	900	3	1	900	787	1,460	61.9%
281	0	650	760	655	650																						2,715	760	4	1	655	679	1,955	72.0%
282	1	32	500	500																							1,033	500	3	1	500	344	533	51.6%
283	0	500	450	1,000	1,000																						2,950	1,000	4	1	1,000	738	1,950	66.1%
284	0	170	220	200	225	270																					1,085	270	5	1	225	217	815	75.1%
285	1	125	315																								441	315	2	1	125	221	126	28.6%
286	1	80	100																								181	100	2	1	80	91	81	44.8%
287	0	980	1,000	390	1,450																						3,820	1,450	4	1	1,000	955	2,370	62.0%
288	0	1,800	1,000	800	1,300																						4,900	1,800	4	1	1,300	1,225	3,100	63.3%
289	1	300	325																								626	325	2	1	300	313	301	48.1%
290	0	1,240	640	383	1,222	1,853																					5,338	1,853	5	1	1,240	1,068	3,485	65.3%
291	1	110	140																								251	140	2	1	110	126	111	44.2%
292	1	450																									451	450	1	1	0	451	1	0.2%
293	0	350	1,060	1,200	1,325	1,550																					5,485	1,550	5	1	1,325	1,097	3,935	71.7%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
294	1	50	50																								101	50	2	1	50	51	51	50.5%
295	1	300	280																								581	300	2	1	280	291	281	48.4%
296	0	220	680	1,000	1,130																						3,030	1,130	4	1	1,000	758	1,900	62.7%
297	1	175																									176	175	1	1	0	176	1	0.6%
298	1	750	750																								1,501	750	2	1	750	751	751	50.0%
299	1	425	455																								881	455	2	1	425	441	426	48.4%
300	1	475	500																								976	500	2	1	475	488	476	48.8%
301	1	300	450	457																							1,208	457	3	1	450	403	751	62.2%
302	0	1,000	1,300	1,600																							3,900	1,600	3	1	1,300	1,300	2,300	59.0%
303	0	810	995	950	1,150	930																					4,835	1,150	5	1	995	967	3,685	76.2%
304	1	310	275																								586	310	2	1	275	293	276	47.1%
305	1	120	390																								511	390	2	1	120	256	121	23.7%
306	1	250	620																								871	620	2	1	250	436	251	28.8%
307	1	449	198																								648	449	2	1	198	324	199	30.7%
308	1	350	500																								851	500	2	1	350	426	351	41.2%
309	0	340	340	380	240	245																					1,545	380	5	1	340	309	1,165	75.4%
310	1	700	450																								1,151	700	2	1	450	576	451	39.2%
311	1	140																									141	140	1	1	0	141	1	0.7%
312	0	525	500	877																							1,902	877	3	1	525	634	1,025	53.9%
313	1	220																									221	220	1	1	0	221	1	0.5%
314	0	800	700	850	300																						2,650	850	4	1	800	663	1,800	67.9%
315	1	325	1,050																								1,376	1,050	2	1	325	688	326	23.7%
316	0	175	175	575	175	720	720	110																			2,650	720	7	1	720	379	1,930	72.8%
317	1	300	280	500																							1,081	500	3	1	300	360	581	53.7%
318	1	420	300	150	400																						1,271	420	4	1	400	318	851	67.0%
319	1	550	550	650																							1,751	650	3	1	550	584	1,101	62.9%
320	1	250																									251	250	1	1	0	251	1	0.4%
321	1	215																									216	215	1	1	0	216	1	0.5%
322	0	500	300	900	600	420	1,000	700	540	700																	5,660	1,000	9	1	900	629	4,660	82.3%
323	1	320	350	225																							896	350	3	1	320	299	546	60.9%
324	0	575	1,000	820																							2,395	1,000	3	1	820	798	1,395	58.2%
325	1	125	200	325																							651	325	3	1	200	217	326	50.1%
326	0	220	115	276	667	490	490	775																			3,033	775	7	1	667	433	2,258	74.4%
327	0	670	800	670	1,100																						3,240	1,100	4	1	800	810	2,140	66.0%
328	1	360	600																								961	600	2	1	360	481	361	37.6%
329	1	100																									101	100	1	1	0	101	1	1.0%
330	1	30	30																								61	30	2	1	30	31	31	50.8%
331	0	350	350	775																							1,475	775	3	1	350	492	700	47.5%
332	1	320																									321	320	1	1	0	321	1	0.3%
333	1	320	250																								571	320	2	1	250	286	251	44.0%
334	1	625																									626	625	1	1	0	626	1	0.2%
335	1	500	500	405																							1,406	500	3	1	500	469	906	64.4%
336	0	640	1,450	1,340	950	950	1,450																				6,780	1,450	6	1	1,450	1,130	5,330	78.6%
337	0	800	840	850																							2,490	850	3	1	840	830	1,640	65.9%
338	1	500	500	500																							1,501	500	3	1	500	500	1,001	66.7%
339	1	110																									111	110	1	1	0	111	1	0.9%
340	1	210	230																								441	230	2	1	210	221	211	47.8%
341	0	1,020	2,390	2,070	2,750																						8,230	2,750	4	1	2,390	2,058	5,480	66.6%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
342	1	140																									141	140	1	1	0	141	1	0.7%
343	1	400	430	400																							1,231	430	3	1	400	410	801	65.1%
344	0	1,000	850	850																							2,700	1,000	3	1	850	900	1,700	63.0%
345	1	460	900																								1,361	900	2	1	460	681	461	33.9%
346	1	200	650																								851	650	2	1	200	426	201	23.6%
347	1	25	30	25	20	150	35																				286	150	6	1	35	48	136	47.6%
348	1	360	180																								541	360	2	1	180	271	181	33.5%
349	1	380	464																								845	464	2	1	380	423	381	45.1%
350	1	450	320	360																							1,131	450	3	1	360	377	681	60.2%
351	1	300	740	440																							1,481	740	3	1	440	494	741	50.0%
352	1	300																									301	300	1	1	0	301	1	0.3%
353	0	400	400																								800	400	2	1	400	400	400	50.0%
354	1	150	375																								526	375	2	1	150	263	151	28.7%
355	0	450	500																								950	500	2	1	450	475	450	47.4%
356	0	521	762	700	498																						2,481	762	4	1	700	620	1,719	69.3%
357	0	410	500	150	50	500	350	400	580	875																	3,815	875	9	1	580	424	2,940	77.1%
358	1	300	400																								701	400	2	1	300	351	301	42.9%
359	1	340	310	345																							996	345	3	1	340	332	651	65.4%
360	1	250																									251	250	1	1	0	251	1	0.4%
361	1	75	100	110																							286	110	3	1	100	95	176	61.5%
362	1	300	500																								801	500	2	1	300	401	301	37.6%
363	1	345	500																								846	500	2	1	345	423	346	40.9%
364	0	825	950	950	900																						3,625	950	4	1	950	906	2,675	73.8%
365	0	800	1,700	1,700																							4,200	1,700	3	1	1,700	1,400	2,500	59.5%
366	0	1,600	2,000	1,575																							5,175	2,000	3	1	1,600	1,725	3,175	61.4%
367	0	354	372	85	527	263	411																				2,012	527	6	1	411	335	1,485	73.8%
368	0	1,500	1,000	1,500	2,150																						6,150	2,150	4	1	1,500	1,538	4,000	65.0%
369	1	225	290	310	300																						1,126	310	4	1	300	282	816	72.5%
370	1	65	50																								116	65	2	1	50	58	51	44.0%
371	1	68	327																								396	327	2	1	68	198	69	17.4%
372	1	450																									451	450	1	1	0	451	1	0.2%
373	1	600	1,000																								1,601	1,000	2	1	600	801	601	37.5%
374	0	1,400	1,280	1,400	1,500																						5,580	1,500	4	1	1,400	1,395	4,080	73.1%
375	1	500	1,500																								2,001	1,500	2	1	500	1,001	501	25.0%
376	1	500	500																								1,001	500	2	1	500	501	501	50.0%
377	0	500	1,000	1,000																							2,500	1,000	3	1	1,000	833	1,500	60.0%
378	1	450	590																								1,041	590	2	1	450	521	451	43.3%
379	1	300	1,000																								1,301	1,000	2	1	300	651	301	23.1%
380	1	55	225																								281	225	2	1	55	141	56	19.9%
381	1	425	400	350																							1,176	425	3	1	400	392	751	63.9%
382	1	550	500																								1,051	550	2	1	500	526	501	47.7%
383	1	220																									221	220	1	1	0	221	1	0.5%
384	1	500	550																								1,051	550	2	1	500	526	501	47.7%
385	0	285	715	500	1,060	310	1,200																				4,070	1,200	6	1	1,060	678	2,870	70.5%
386	1	340	350																								691	350	2	1	340	346	341	49.3%
387	1	310	260																								571	310	2	1	260	286	261	45.7%
388	1	150	260																								411	260	2	1	150	206	151	36.7%

		Well Capacity in gallons per minute																									Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0							
389	0	1,800	1,800	1,000																							4,600	1,800	3	1	1,800	1,533	2,800	60.9%
390	1	150	150																								301	150	2	1	150	151	151	50.2%
391	0	450	450	350	450																						1,700	450	4	1	450	425	1,250	73.5%
392	0	1,000	500	900	900																						3,300	1,000	4	1	900	825	2,300	69.7%
393	0	500	1,000																								1,500	1,000	2	1	500	750	500	33.3%
394	1	120	225																								346	225	2	1	120	173	121	35.0%
395	1	455	440																								896	455	2	1	440	448	441	49.2%
396	0	1,180	1,200	1,010	1,550																						4,940	1,550	4	1	1,200	1,235	3,390	68.6%
397	1	600	300																								901	600	2	1	300	451	301	33.4%
398	1	175																									176	175	1	1	0	176	1	0.6%
399	1	175																									176	175	1	1	0	176	1	0.6%
400	1	600	1,050	450																							2,101	1,050	3	1	600	700	1,051	50.0%
401	1	300	495																								796	495	2	1	300	398	301	37.8%
402	1	50	80	68	125	200																					524	200	5	1	125	105	324	61.8%
403	1	250	25																								276	250	2	1	25	138	26	9.4%
404	1	650	300																								951	650	2	1	300	476	301	31.7%
405	1	1,200	1,200																								2,401	1,200	2	1	1,200	1,201	1,201	50.0%
406	0	420	190	470	1,050	790																					2,920	1,050	5	1	790	584	1,870	64.0%
407	1	700	850	750																							2,301	850	3	1	750	767	1,451	63.1%
408	1	350																									351	350	1	1	0	351	1	0.3%
409	1	120																									121	120	1	1	0	121	1	0.8%
410	1	180																									181	180	1	1	0	181	1	0.6%
411	0	600	625																								1,225	625	2	1	600	613	600	49.0%
412	1	600	400																								1,001	600	2	1	400	501	401	40.1%
413	0	650	650	700	1,000																						3,000	1,000	4	1	700	750	2,000	66.7%
414	0	950	350	400																							1,700	950	3	1	400	567	750	44.1%
415	0	490	420																								910	490	2	1	420	455	420	46.2%
416	0	1,100	1,100	1,100	120	120	1,740	1,740																			7,020	1,740	7	1	1,740	1,003	5,280	75.2%
417	1	300	300																								601	300	2	1	300	301	301	50.1%
418	1	475	525																								1,001	525	2	1	475	501	476	47.6%
419	1	500	305																								806	500	2	1	305	403	306	38.0%
420	1	600	600																								1,201	600	2	1	600	601	601	50.0%
421	1	290	300																								591	300	2	1	290	296	291	49.2%
422	1	300	375																								676	375	2	1	300	338	301	44.5%
423	1	500	500	460																							1,461	500	3	1	500	487	961	65.8%
424	0	350	30	650																							1,030	650	3	1	350	343	380	36.9%
425	1	456	220																								677	456	2	1	220	339	221	32.6%
426	1	1,000	1,000																								2,001	1,000	2	1	1,000	1,001	1,001	50.0%
427	1	240	240																								481	240	2	1	240	241	241	50.1%
428	0	500	395	510	650	800	875																				3,730	875	6	1	800	622	2,855	76.5%
429	1	100	150	150																							401	150	3	1	150	134	251	62.6%
430	1	1,100	650																								1,751	1,100	2	1	650	876	651	37.2%
431	1	300	800																								1,101	800	2	1	300	551	301	27.3%
432	1	210	280																								491	280	2	1	210	246	211	43.0%
433	0	100	350	340																							790	350	3	1	340	263	440	55.7%
434	1	310																									311	310	1	1	0	311	1	0.3%
435	0	2,100	2,100	1,500	1,410	2,100	2,100	2,100	1,200																		14,610	2,100	8	1	2,100	1,826	12,510	85.6%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
436	1	250																									251	250	1	1	0	251	1	0.4%
437	1	160	180																								341	180	2	1	160	171	161	47.2%
438	1	200	500																								701	500	2	1	200	351	201	28.7%
439	1	120																									121	120	1	1	0	121	1	0.8%
440	0	560	1,200	1,015	1,040	1,000																					4,815	1,200	5	1	1,040	963	3,615	75.1%
441	1	71	105	71	80	30																					358	105	5	1	80	72	253	70.7%
442	1	42	83	23																							149	83	3	1	42	50	66	44.3%
443	0	700	1,350	700	880	700																					4,330	1,350	5	1	880	866	2,980	68.8%
444	1	200	500																								701	500	2	1	200	351	201	28.7%
445	0	1,200	1,200	1,350	1,200	1,400																					6,350	1,400	5	1	1,350	1,270	4,950	78.0%
446	1	320	225																								546	320	2	1	225	273	226	41.4%
447	0	436	660	328	894	734																					3,052	894	5	1	734	610	2,158	70.7%
448	1	250	250																								501	250	2	1	250	251	251	50.1%
449	1	300																									301	300	1	1	0	301	1	0.3%
450	1	350	750																								1,101	750	2	1	350	551	351	31.9%
451	1	44	22	65	20	32																					184	65	5	1	44	37	119	64.7%
452	1	350	220																								571	350	2	1	220	286	221	38.7%
453	1	425	400																								826	425	2	1	400	413	401	48.5%
454	1	810																									811	810	1	1	0	811	1	0.1%
455	0	1,400	600	800	400	500																					3,700	1,400	5	1	800	740	2,300	62.2%
456	0	901	844																								1,745	901	2	1	844	873	844	48.4%
457	1	200																									201	200	1	1	0	201	1	0.5%
458	1	360	390																								751	390	2	1	360	376	361	48.1%
459	1	264	550																								815	550	2	1	264	408	265	32.5%
460	1	370																									371	370	1	1	0	371	1	0.3%
461	0	810	700	1,010																							2,520	1,010	3	1	810	840	1,510	59.9%
462	1	700	500																								1,201	700	2	1	500	601	501	41.7%
463	0	370	1,000	1,500	1,500																						4,370	1,500	4	1	1,500	1,093	2,870	65.7%
464	1	50	100	200																							351	200	3	1	100	117	151	43.0%
465	1	200	500																								701	500	2	1	200	351	201	28.7%
466	0	350	250	350																							950	350	3	1	350	317	600	63.2%
467	1	320	320																								641	320	2	1	320	321	321	50.1%
468	1	300																									301	300	1	1	0	301	1	0.3%
469	1	520	350																								871	520	2	1	350	436	351	40.3%
470	1	180																									181	180	1	1	0	181	1	0.6%
471	1	425	450																								876	450	2	1	425	438	426	48.6%
472	0	350	500	190																							1,040	500	3	1	350	347	540	51.9%
473	0	700	475	530																							1,705	700	3	1	530	568	1,005	58.9%
474	0	600	600	1,400	2,000	1,500	1,075	1,300	1,200	1,000																	10,675	2,000	9	1	1,500	1,186	8,675	81.3%
475	0	1,134	2,544	605	800	1,102	1,533	1,684	1,350																		10,752	2,544	8	1	1,684	1,344	8,208	76.3%
476	0	625	1,100	1,100	1,200																						4,025	1,200	4	1	1,100	1,006	2,825	70.2%
477	0	435	670	700	1,900	950	510	600																			5,765	1,900	7	1	950	824	3,865	67.0%
478	0	650	1,050	650	1,375	1,475																					5,200	1,475	5	1	1,375	1,040	3,725	71.6%
479	0	3,000	2,000	1,500	1,500	1,000	2,500																				11,500	3,000	6	1	2,500	1,917	8,500	73.9%
480	1	200	180																								381	200	2	1	180	191	181	47.5%
481	1	625	625																								1,251	625	2	1	625	626	626	50.0%
482	1	350	150																								501	350	2	1	150	251	151	30.1%

		Well Capacity in gallons per minute																														
Point Number	System Size, 1 if small or very small, 0 otherwise	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	0	Total Well Capacity (gpm)	Largest Available Well (gpm)	Number of Wells	Number of Wells Offline for Firm Well Analysis	Largest Well in Firm Well Analysis	Average Well Capacity (gpm)	Firm Well Capacity (gpm)	Firm Capacity as % of Total Capacity
483	0	350	350																								700	350	2	1	350	350	350	50.0%
484	1	300	300	300																							901	300	3	1	300	300	601	66.7%
485	0	4,000	4,000	3,150	4,200	4,200	4,200																				23,750	4,200	6	1	4,200	3,958	19,550	82.3%
486	0	1,550	330	740	870	1,490	670	380	600	850																	7,480	1,550	9	1	1,490	831	5,930	79.3%
487	1	340	42																								383	340	2	1	42	192	43	11.2%
488	0	420	300	300	300	325	120																				1,765	420	6	1	325	294	1,345	76.2%
489	1	375	375																								751	375	2	1	375	376	376	50.1%
490	0	600	630	930	925	890																					3,975	930	5	1	925	795	3,045	76.6%
491	0	495	495	600																							1,590	600	3	1	495	530	990	62.3%
492	1	700	500																								1,201	700	2	1	500	601	501	41.7%
493	1	500	500	900																							1,901	900	3	1	500	634	1,001	52.7%
494	1	210																									211	210	1	1	0	211	1	0.5%
495	1	350																									351	350	1	1	0	351	1	0.3%
496	1	400	400																								801	400	2	1	400	401	401	50.1%
497	1	300	600																								901	600	2	1	300	451	301	33.4%
498	1	550																									551	550	1	1	0	551	1	0.2%
499	0	1,000	1,200	1,000	1,100	1,000																					5,300	1,200	5	1	1,100	1,060	4,100	77.4%
500	1	600	600																								1,201	600	2	1	600	601	601	50.0%
501	1	1,150	800	700																							2,651	1,150	3	1	800	884	1,501	56.6%
502	1	300																									301	300	1	1	0	301	1	0.3%
503	1	200	200																								401	200	2	1	200	201	201	50.1%
504	1	500	490																								991	500	2	1	490	496	491	49.5%
505	1	500	190																								691	500	2	1	190	346	191	27.6%
506	1	160	250																								411	250	2	1	160	206	161	39.2%
507	1	85	140																								226	140	2	1	85	113	86	38.1%
508	1	460	450	780	600	950	500																				3,741	950	6	1	780	624	2,791	74.6%
509	0	900	400	1,300	700	1,500	400	1,800	900																		7,900	1,800	8	1	1,500	988	6,100	77.2%
510	1	25	200	180																							406	200	3	1	180	135	206	50.7%
511	1	400	150																								551	400	2	1	150	276	151	27.4%
512	1	200	500																								701	500	2	1	200	351	201	28.7%
513	1	200	550																								751	550	2	1	200	376	201	26.8%
514	1	240	300	750																							1,291	750	3	1	300	430	541	41.9%
515	1	200	210																								411	210	2	1	200	206	201	48.9%
516	1	300	250																								551	300	2	1	250	276	251	45.6%
517	1	790																									791	790	1	1	0	791	1	0.1%
518	1	85																									86	85	1	1	0	86	1	1.2%

		Well Capacity in gallons per minute																																	
Point Number	**System Size, 1 if small or very small, 0 otherwise**	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	**0**	**Total Well Capacity (gpm)**	**Largest Available Well (gpm)**	**Number of Wells**	**Number of Wells Offline for Firm Well Analysis**	**Largest Well in Firm Well Analysis**	**Average Well Capacity (gpm)**	**Firm Well Capacity (gpm)**	**Firm Capacity as % of Total Capacity**
	376	#####	#####	#####	#####	#####	#####	#####	#####	#####	8,385	7,625	7,505	7,340	6,206	7,750	3,550	700	750	2,300	2,650	3,160	2,425	2,415	2,100	0	940,602	Ave	Ave			Ave	594,590	Ave
																												667.98	2.89			506.32		43.3%
																													Max						
																													24.00						
																													Median						
																													2.00						
																													Min						
																													1.00						
																												well summary					**small systems**	
																												Total	1,476			number of small systems		376
																												Average	2.9			% of systems in analysis		72.6%
																												Maximum	24				total wells	800
																					Query, change cell to right for rank largest number of wells								15	4		ave number of wells		2.13
																																small systems with 1 well		23%
																											1 well in system	87					
																											2 wells in system	226					
																											3 wells in system	88					
																											4 wells in system	47					

APPENDIX B: STORAGE DATA

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	188,000	400,000																	
2	400,000	75,000																	
3	46,450	75,000																	
4	120,000	150,000																	
5	300,000	300,000																	
6	300,000																		
7	230,000	100,000	1,100,000	250,000	250,000	250,000	250,000	1,000,000											
8	158,565																		
9	75,000																		
10	30,000																		
11	500,000																		
12	65,000	300,000																	
13	60,000																		
14	500,000	200,000	150,000																
15	1,000,000	500,000																	
16	50,000																		
17	200,000																		
18	18,700	250,000																	
19	150,000	250,000	500,000	500,000	1,000,000	750,000	150,000												
20	150,000	150,000																	
21	400,000																		
22	144,000																		
23	84,000																		
24	300,000	200,000																	
25	50,000	175,000																	
26	18,400																		
27	277,000	1,250,000	250,000	300,000	300,000														
28	120,000	500,000	40,000	40,000															
29	300,000																		
30	200,000																		
31	160,000	47,000																	
32	75,000																		
33	1,000,000	400,000	500,000																
34	60,000	75,000	100,000																
35	300,000																		
36	500,000	400,000																	
37	200,000																		
38	150,000	65,000																	
39	60,000	100,000	32,000	513,000															
40	125,000																		
41	250,000																		
42	400,000																		
43	200,000																		
44	150,000	500,000	250,000																
45	400,000	150,000																	
46	95,800	300,000																	
47	500,000	500,000	250,000																
48	100,000																		
49	164,494																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
50	100,000																		
51	50,000	250,000																	
52	200,000	500,000	400,000																
53	100,000	50,000																	
54	250,000																		
55	110,000																		
56	40,000	51,750																	
57	150,000	200,000																	
58	100,000																		
59	100,000																		
60	500,000	80,000																	
61	50,000	750																	
62	345,000	500,000	400,000	1,000,000	101,000	191,500	507,000	250,000	400,000	700,000	1,000,000	50,000							
63	200,000																		
64	2,000,000																		
65	50,000																		
66	102,738																		
67	65,000																		
68	3,100	250,000																	
69	300,000	300,000	300,000	300,000	2,200,000														
70	400,000	300,000																	
71	57,000																		
72	100,000	150,000																	
73	209,000																		
74	400,000																		
75	60,000	300,000																	
76	300,000	66,000																	
77	80,000																		
78	100,000																		
79	80,000																		
80	30,000	300,000																	
81	88,000																		
82	200,000	50,000	1,000,000																
83	75,000	300,000																	
84	75,000																		
85	88,000																		
86	500,000																		
87	200,000	300,000	100,000	500,000															
88	1,000,000	500,000	750,000																
89	125,000																		
90	200,000																		
91	100,000	80,000																	
92	300,000																		
93	400,000	250,000																	
94	250,000																		
95	100,000																		
96	199,000																		
97	200,000	100,000																	
98	300,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
99	150,000																		
100	44,000																		
101	240,000	300,000	250,000																
102	200,000																		
103	300,000																		
104	40,000	550,000																	
105	50,000																		
106	55,000	200,000																	
107	250,000																		
108	48,000	500,000																	
109	100,000	300,000																	
110	300,000																		
111	150,000																		
112	85,000																		
113	7,500																		
114	22,000	150,000																	
115	480,000	300,000																	
116	100,000																		
117	300,000	300,000																	
118	660,000	5,000																	
119	600,000	300,000																	
120	250,000	150,000	500,000	1,000,000	400,000														
121	200,000	100,000																	
122	250,000	250,000	250,000	250,000	160,000	500,000	250,000	250,000											
123	10,000																		
124	250,000																		
125	102,000																		
126	500,000																		
127	250,000																		
128	300,000																		
129	50,000																		
130	200,000																		
131	200,000																		
132	100,000	424,000																	
133	100,000	100,000	150,000																
134	300,000																		
135	52,000																		
136	200,000	650,000																	
137	5,000,000	3,200,000	2,000,000	500,000	1,000,000	4,000,000													
138	200,000																		
139	400,000	300,000																	
140	190,000	110,000																	
141	150,000																		
142	110,000	300,000	160,000																
143	200,000	500,000	300,000																
144	80,000																		
145	400,000																		
146	256,000																		
147	88,000	235,000																	

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
148	50,000																		
149	85,000	200,000																	
150	400,000	300,000																	
151	50,000																		
152	137,000																		
153	50,000																		
154	250,000																		
155	100,000	300,000																	
156	75,000																		
157	500,000	500,000	500,000																
158	200,000	69,000																	
159	500,000	1,000,000	2,000,000	500,000	1,500,000	500,000	3,000,000	75,000	250,000										
160	200,000	960,000																	
161	15,000	200,000																	
162	50,000																		
163	300,000	250,000	585,000	500,000															
164	150,000																		
165	250,000																		
166	1,500,000																		
167	30,000	200,000																	
168	300,000	40,000	40,000																
169	63,000																		
170	150,000	500,000																	
171	151,000																		
172	80,000																		
173	110,000	50,000	500,000																
174	500,000	500,000	1,000,000																
175	75,000	300,000	100,000																
176	46,000																		
177	130,000																		
178	40,000																		
179	50,000																		
180	50,000																		
181	100,000	35,000	3,000																
182	200,000	300,000	300,000	23,000	23,000														
183	500,000																		
184	40,000																		
185	100,000	200,000																	
186	52,000																		
187	1,000,000	1,500,000	410,000																
188	250,000																		
189	300,000	300,000																	
190	350,000																		
191	100,000																		
192	230,000	720,000																	
193	200,000																		
194	50,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
195	69,000	155,000																	
196	150,000	300,000	500,000	150,000	150,000														
197	1,000	300,000	550,000	250,000	250,000	550,000													
198	65,000																		
199	50,000																		
200	50,000																		
201	50,600	150,000	510,000																
202	200,000																		
203	200,000																		
204	65,000	83,000																	
205	500,000																		
206	82,500																		
207	300,000																		
208	175,000																		
209	65,000																		
210	55,000	250,000	300,000																
211	200,000	103,700	400,000																
212	300,000																		
213	100,000	250,000	500,000	1,000,000	1,000,000														
214	150,000	1,000,000	150,000	500,000	200,000	750,000													
215	200,000	200,000																	
216	25,000																		
217	400,000																		
218	132,000																		
219	33,000																		
220	275,000																		
221	150,000																		
222	30,000																		
223	200,000	500,000																	
224	9,000,000	5,000,000	80,000	560,000															
225	750,000	750,000	75,000	75,000	100,000	180,000	93,000												
226	400,000																		
227	50,000																		
228	500,000	500,000	500,000																
229	284,000	295,000	500,000	500,000															
230	75,000																		
231	100,000																		
232	75,000	75,000	200,000	100,000	75,000	300,000													
233	200,000	200,000																	
234	200,000	200,000																	
235	80,000																		
236	100,000	230,000	100,000	250,000	200,000	300,000													
237	86,600																		
238	250,000																		
239	300,000																		
240	1,000,000	5,000,000																	
241	500,000																		
242	128,000																		
243	200,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
244	200,000	400,000																	
245	98,750	160,500	300,000	200,000	1,500,000														
246	75,000	300,000																	
247	400,000	100,000	500,000																
248	350,000	500,000																	
249	40,000																		
250	200,000																		
251	80,000																		
252	3,600																		
253	300,000																		
254	50,000																		
255	125,000																		
256	25,000																		
257	300,000	500,000	250,000	300,000	250,000														
258	125,000																		
259	185,400	146,000	200,000																
260	80,000																		
261	300,000	50,000	40,000																
262	50,000	50,000																	
263	50,000																		
264	200,000																		
265	40,000	250,000																	
266	47,500	250,000																	
267	40,000																		
268	3,000,000	500,000	6,000,000	4,200,000	100,000	55,000	4,000,000	3,000,000	500,000	40,000	250,000	155,000	135,000	140,000	100,000	150,000	150,000	150,000	150,000
269	75,000																		
270	100,000	120,000	25,000	200,000															
271	1,000																		
272	76,000	300,000	75,000																
273	50,000																		
274	100,000	250,000																	
275	200,000																		
276	300,000																		
277	500,000	3,000,000	75,000	25,000	15,224	500,000													
278	45,000	1,600																	
279	100,000																		
280	400,000	500,000																	
281	200,000	500,000																	
282	96,000	350,000																	
283	500,000	750,000																	
284	400,000	500,000																	
285	80,000	150,000																	
286	50,000																		
287	1,000,000	1,000,000	1,000,000	300,000	300,000	300,000													
288	65,000	65,000	46,000	750,000	400,000	750,000													
289	150,000																		
290	200,000	200,000																	
291	150,000																		
292	75,000																		
293	1,000,000	500,000	750,000	100,000															

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
294	50,000																		
295	75,000																		
296	200,000	500,000																	
297	50,000																		
298	400,000																		
299	165,000																		
300	50,000	75,000	20,000	20,000															
301	750,000																		
302	208,000	122,000	500,000	400,000	100,000														
303	100,000	100,000	100,000	100,000	500,000	500,000	137,000	500,000											
304	250,000																		
305	150,000																		
306	233,000	136,000																	
307	250,000																		
308	50,000	25,000																	
309	350,000	200,000	450,000	250,000	75,000														
310	100,000																		
311	60,000																		
312	300,000	50,000	50,000	300,000	100,000														
313	117,000																		
314	500,000	500,000	330,000																
315	50,000	300,000																	
316	750,000	250,000																	
317	175,000																		
318	250,000	50,000	200,000																
319	148,000	50,000	600,000																
320	86,600																		
321	50,000																		
322	80,000	150,000	1,000,000	290,000		557,600	578,985	500,000	750,000	500,000									
323	300,000																		
324	65,000	60,000	100,000	250,000	200,000														
325	200,000																		
326	400,000	300,000	200,000	500,000															
327	300,000	250,000																	
328	100,000	200,000	58,643	160,849															
329	100,000																		
330	27,000																		
331	200,000	500,000																	
332	130,000																		
333	150,000																		
334	75,000																		
335	60,000	75,000	500,000																
336	500,000	500,000	500,000	150,000	133,000	500,000													
337	500,000	200,000																	
338	300,000	50,000	50,000																
339	900																		
340	400,000																		
341	600,000	600,000	750,000	225,000	1,100,000														

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
342	80,000																		
343	60,000	250,000																	
344	450,000	400,000	58,000	70,000	40,000														
345	300,000																		
346	100,000	500,000																	
347	100,000	250,000																	
348	10,000																		
349	200,000																		
350	70,000	300,000																	
351	250,000	300,000	125,000																
352	50,000																		
353	300,000																		
354	80,000																		
355	200,000	250,000																	
356	200,000	250,000	1,000,000	125,000	125,000														
357	250,000	300,000	70,000	650,000	233,000	200,000													
358	60,000																		
359	250,000	100,000																	
360	100,000																		
361	150,000																		
362	200,000																		
363	50,000																		
364	500,000	400,000	500,000																
365	500,000	200,000	750,000	5,000,000	750,000	5,000,000													
366	1,000,000	500,000																	
367	500,000	600,000																	
368	750,000	500,000	500,000																
369	60,000	500,000																	
370	120,000																		
371	50,000	63,000	50,000																
372	60,000																		
373	250,000	103,000																	
374	1,000,000	500,000	1,000,000																
375	400,000																		
376	50,000	200,000																	
377	250,000	250,000																	
378	200,000	100,000																	
379	500,000	150,000	100,000																
380	30,000																		
381	75,000	250,000																	
382	300,000																		
383	75,000																		
384	75,000	60,000	100,000																
385	500,000	500,000	500,000	200,000	500,000														
386	50,000	100,000																	
387	200,000																		
388	50,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
389	500,000	1,250,000	400,000	300,000															
390	38,001																		
391	450,000																		
392	250,000	250,000	150,000																
393	500,000	500,000																	
394	150,000																		
395	150,000																		
396	250,000	750,000	300,000																
397	250,000																		
398	50,000																		
399	127,000																		
400	100,000	300,000																	
401	50,000																		
402	155,000	200,000	50,000	150,000	50,000														
403	50,000	100,000																	
404	100,000																		
405	300,000	300																	
406	400,000	500,000	100,000	300,000	150,000														
407	75,000	200,000	250,000																
408	150,000																		
409	146,750																		
410	50,000																		
411	300,000	50,000	80,000																
412	250,000																		
413	2,000,000	250,000																	
414	500,000	400,000																	
415	200,000	300,000																	
416	2,000,000	2,000,000	200,000																
417	60,000																		
418	100,000	150,000																	
419	100,000	20,500	200,000																
420	60,000																		
421	200,000																		
422	150,500																		
423	100,000	150,000																	
424	250,000	60,000																	
425	32,000	100,000																	
426	200,000																		
427	150,000																		
428	435,000	600,000	600,000																
429	50,000	200,000																	
430	150,000	150,000																	
431	90,000	250,000																	
432	65,000	100,000																	
433	250,000	300,000																	
434	200,000																		
435	2,250,000	1,000,000																	

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
436	50,000																		
437	150,000	44,000																	
438	80,000	200,000																	
439	30,000																		
440	250,000	400,000	300,000																
441	40,000	150,000																	
442	150,000	90,000																	
443	1,000,000	550,000	150,000	150,000	150,000	250,000													
444	500,000	7,000																	
445	500,000	500,000	200,000	500,000	400,000														
446	85,000	100,000																	
447	1,000,000	250,000	500,000	250,000															
448	247,000																		
449	99,000																		
450	200,000																		
451	150,000																		
452	150,000																		
453	60,000																		
454	200,000																		
455	500,000	1,000,000																	
456	400,000																		
457	50,000																		
458	300,000																		
459	150,000																		
460	82,000																		
461	118,000	500,000																	
462	250,000																		
463	300,000	300,000																	
464	100,000	50,000																	
465	140,000																		
466	250,000	250,000																	
467	120,000																		
468	50,000																		
469	500,000																		
470	80,000																		
471	250,000																		
472	200,000	400,000																	
473	1,000,000	100,000																	
474	300,000	300,000	360,000	324,000	500,000	300,000													
475	222,000	2,000,000	2,000,000	2,000,000	1,500,000	250,000	5,000,000	400,000	300,000	100,000	250,000	1,250,000							
476	300,000	50,000	200,000	300,000	500,000														
477	300,000	750,000	750,000																
478	250,000	500,000	32,000	400,000															
479	500,000	2,500,000	1,000,000	1,000,000	300,000	250,000													
480	150,000																		
481	250,000																		
482	150,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
483	400,000																		
484	150,000																		
485	1,500,000	1,500,000	4,000,000																
486	197,000	1,000,000	298,000	120,000	300,000	300,000	400,000	2,000,000											
487	3,000	1,500																	
488	215,000	225,000	250,000																
489	500,000																		
490	250,000	100,000	100,000	100,000															
491	750,000																		
492	300,000																		
493	100,000	85,000	250,000																
494	50,000																		
495	50,000																		
496	120,000	500,000	350,000	150,000															
497	100,000																		
498	50,000																		
499	180,000	860,000	500,000																
500	250,000																		
501	150,000	150,000	50,000	100,000	100,000														
502	60,000																		
503	130,000																		
504	300,000	300,000																	
505	77,000	60,000	100,000	500,000															
506	200,000																		
507	25,000	50,000																	
508	80,000	200,000	300,000	300,000															
509	400,000	703,741	2,000,000	400,000															
510	100,000																		
511	150,000																		
512	110,000																		
513	150,000																		
514	75,000	200,000																	
515	112,000																		
516	100,000																		
517	750,000																		
518	36,000																		

	Storage Capacity in gallons																		
Point Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	134,133,448	97,049,341	54,977,643	31,670,849	19,280,224	17,984,100	14,365,985	7,975,000	2,200,000	1,340,000	1,500,000	1,455,000	135,000	140,000	100,000	150,000	150,000	150,000	150,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
1												588,000	529,200
2												475,000	427,500
3												121,450	109,305
4												270,000	243,000
5												600,000	540,000
6												300,000	270,000
7												3,430,000	3,087,000
8												158,565	142,709
9												75,000	67,500
10												30,000	27,000
11												500,000	450,000
12												365,000	328,500
13												60,000	54,000
14												850,000	765,000
15												1,500,000	1,350,000
16												50,000	45,000
17												200,000	180,000
18												268,700	241,830
19												3,300,000	2,970,000
20												300,000	270,000
21												400,000	360,000
22												144,000	129,600
23												84,000	75,600
24												500,000	450,000
25												225,000	202,500
26												18,400	16,560
27												2,377,000	2,139,300
28												700,000	630,000
29												300,000	270,000
30												200,000	180,000
31												207,000	186,300
32												75,000	67,500
33												1,900,000	1,710,000
34												235,000	211,500
35												300,000	270,000
36												900,000	810,000
37												200,000	180,000
38												215,000	193,500
39												705,000	634,500
40												125,000	112,500
41												250,000	225,000
42												400,000	360,000
43												200,000	180,000
44												900,000	810,000
45												550,000	495,000
46												395,800	356,220
47												1,250,000	1,125,000
48												100,000	90,000
49												164,494	148,045

Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
													90% of Total
50												100,000	90,000
51												300,000	270,000
52												1,100,000	990,000
53												150,000	135,000
54												250,000	225,000
55												110,000	99,000
56												91,750	82,575
57												350,000	315,000
58												100,000	90,000
59												100,000	90,000
60												580,000	522,000
61												50,750	45,675
62												5,444,500	4,900,050
63												200,000	180,000
64												2,000,000	1,800,000
65												50,000	45,000
66												102,738	92,464
67												65,000	58,500
68												253,100	227,790
69												3,400,000	3,060,000
70												700,000	630,000
71												57,000	51,300
72												250,000	225,000
73												209,000	188,100
74												400,000	360,000
75												360,000	324,000
76												366,000	329,400
77												80,000	72,000
78												100,000	90,000
79												80,000	72,000
80												330,000	297,000
81												88,000	79,200
82												1,250,000	1,125,000
83												375,000	337,500
84												75,000	67,500
85												88,000	79,200
86												500,000	450,000
87												1,100,000	990,000
88												2,250,000	2,025,000
89												125,000	112,500
90												200,000	180,000
91												180,000	162,000
92												300,000	270,000
93												650,000	585,000
94												250,000	225,000
95												100,000	90,000
96												199,000	179,100
97												300,000	270,000
98												300,000	270,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
99												150,000	135,000
100												44,000	39,600
101												790,000	711,000
102												200,000	180,000
103												300,000	270,000
104												590,000	531,000
105												50,000	45,000
106												255,000	229,500
107												250,000	225,000
108												548,000	493,200
109												400,000	360,000
110												300,000	270,000
111												150,000	135,000
112												85,000	76,500
113												7,500	6,750
114												172,000	154,800
115												780,000	702,000
116												100,000	90,000
117												600,000	540,000
118												665,000	598,500
119												900,000	810,000
120												2,300,000	2,070,000
121												300,000	270,000
122												2,160,000	1,944,000
123												10,000	9,000
124												250,000	225,000
125												102,000	91,800
126												500,000	450,000
127												250,000	225,000
128												300,000	270,000
129												50,000	45,000
130												200,000	180,000
131												200,000	180,000
132												524,000	471,600
133												350,000	315,000
134												300,000	270,000
135												52,000	46,800
136												850,000	765,000
137												15,700,000	14,130,000
138												200,000	180,000
139												700,000	630,000
140												300,000	270,000
141												150,000	135,000
142												570,000	513,000
143												1,000,000	900,000
144												80,000	72,000
145												400,000	360,000
146												256,000	230,400
147												323,000	290,700

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
148												50,000	45,000
149												285,000	256,500
150												700,000	630,000
151												50,000	45,000
152												137,000	123,300
153												50,000	45,000
154												250,000	225,000
155												400,000	360,000
156												75,000	67,500
157												1,500,000	1,350,000
158												269,000	242,100
159												9,325,000	8,392,500
160												1,160,000	1,044,000
161												215,000	193,500
162												50,000	45,000
163												1,635,000	1,471,500
164												150,000	135,000
165												250,000	225,000
166												1,500,000	1,350,000
167												230,000	207,000
168												380,000	342,000
169												63,000	56,700
170												650,000	585,000
171												151,000	135,900
172												80,000	72,000
173												660,000	594,000
174												2,000,000	1,800,000
175												475,000	427,500
176												46,000	41,400
177												130,000	117,000
178												40,000	36,000
179												50,000	45,000
180												50,000	45,000
181												138,000	124,200
182												846,000	761,400
183												500,000	450,000
184												40,000	36,000
185												300,000	270,000
186												52,000	46,800
187												2,910,000	2,619,000
188												250,000	225,000
189												600,000	540,000
190												350,000	315,000
191												100,000	90,000
192												950,000	855,000
193												200,000	180,000
194												50,000	45,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
195												224,000	201,600
196												1,250,000	1,125,000
197												1,901,000	1,710,900
198												65,000	58,500
199												50,000	45,000
200												50,000	45,000
201												710,600	639,540
202												200,000	180,000
203												200,000	180,000
204												148,000	133,200
205												500,000	450,000
206												82,500	74,250
207												300,000	270,000
208												175,000	157,500
209												65,000	58,500
210												605,000	544,500
211												703,700	633,330
212												300,000	270,000
213												2,850,000	2,565,000
214												2,750,000	2,475,000
215												400,000	360,000
216												25,000	22,500
217												400,000	360,000
218												132,000	118,800
219												33,000	29,700
220												275,000	247,500
221												150,000	135,000
222												30,000	27,000
223												700,000	630,000
224												14,640,000	13,176,000
225												2,023,000	1,820,700
226												400,000	360,000
227												50,000	45,000
228												1,500,000	1,350,000
229												1,579,000	1,421,100
230												75,000	67,500
231												100,000	90,000
232												825,000	742,500
233												400,000	360,000
234												400,000	360,000
235												80,000	72,000
236												1,180,000	1,062,000
237												86,600	77,940
238												250,000	225,000
239												300,000	270,000
240												6,000,000	5,400,000
241												500,000	450,000
242												128,000	115,200
243												200,000	180,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
244												600,000	540,000
245												2,259,250	2,033,325
246												375,000	337,500
247												1,000,000	900,000
248												850,000	765,000
249												40,000	36,000
250												200,000	180,000
251												80,000	72,000
252												3,600	3,240
253												300,000	270,000
254												50,000	45,000
255												125,000	112,500
256												25,000	22,500
257												1,600,000	1,440,000
258												125,000	112,500
259												531,400	478,260
260												80,000	72,000
261												390,000	351,000
262												100,000	90,000
263												50,000	45,000
264												200,000	180,000
265												290,000	261,000
266												297,500	267,750
267												40,000	36,000
268	150,000	279,000	375,000	477,000	3,000,000	100,000	325,000	250,000	4,000,000	315,000	340,000	32,386,000	29,147,400
269												75,000	67,500
270												445,000	400,500
271												1,000	900
272												451,000	405,900
273												50,000	45,000
274												350,000	315,000
275												200,000	180,000
276												300,000	270,000
277												4,115,224	3,703,702
278												46,600	41,940
279												100,000	90,000
280												900,000	810,000
281												700,000	630,000
282												446,000	401,400
283												1,250,000	1,125,000
284												900,000	810,000
285												230,000	207,000
286												50,000	45,000
287												3,900,000	3,510,000
288												2,076,000	1,868,400
289												150,000	135,000
290												400,000	360,000
291												150,000	135,000
292												75,000	67,500
293												2,350,000	2,115,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
294												50,000	45,000
295												75,000	67,500
296												700,000	630,000
297												50,000	45,000
298												400,000	360,000
299												165,000	148,500
300												165,000	148,500
301												750,000	675,000
302												1,330,000	1,197,000
303												2,037,000	1,833,300
304												250,000	225,000
305												150,000	135,000
306												369,000	332,100
307												250,000	225,000
308												75,000	67,500
309												1,325,000	1,192,500
310												100,000	90,000
311												60,000	54,000
312												800,000	720,000
313												117,000	105,300
314												1,330,000	1,197,000
315												350,000	315,000
316												1,000,000	900,000
317												175,000	157,500
318												500,000	450,000
319												798,000	718,200
320												86,600	77,940
321												50,000	45,000
322												4,406,585	3,965,927
323												300,000	270,000
324												675,000	607,500
325												200,000	180,000
326												1,400,000	1,260,000
327												550,000	495,000
328												519,492	467,543
329												100,000	90,000
330												27,000	24,300
331												700,000	630,000
332												130,000	117,000
333												150,000	135,000
334												75,000	67,500
335												635,000	571,500
336												2,283,000	2,054,700
337												700,000	630,000
338												400,000	360,000
339												900	810
340												400,000	360,000
341												3,275,000	2,947,500

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
342												80,000	72,000
343												310,000	279,000
344												1,018,000	916,200
345												300,000	270,000
346												600,000	540,000
347												350,000	315,000
348												10,000	9,000
349												200,000	180,000
350												370,000	333,000
351												675,000	607,500
352												50,000	45,000
353												300,000	270,000
354												80,000	72,000
355												450,000	405,000
356												1,700,000	1,530,000
357												1,703,000	1,532,700
358												60,000	54,000
359												350,000	315,000
360												100,000	90,000
361												150,000	135,000
362												200,000	180,000
363												50,000	45,000
364												1,400,000	1,260,000
365												12,200,000	10,980,000
366												1,500,000	1,350,000
367												1,100,000	990,000
368												1,750,000	1,575,000
369												560,000	504,000
370												120,000	108,000
371												163,000	146,700
372												60,000	54,000
373												353,000	317,700
374												2,500,000	2,250,000
375												400,000	360,000
376												250,000	225,000
377												500,000	450,000
378												300,000	270,000
379												750,000	675,000
380												30,000	27,000
381												325,000	292,500
382												300,000	270,000
383												75,000	67,500
384												235,000	211,500
385												2,200,000	1,980,000
386												150,000	135,000
387												200,000	180,000
388												50,000	45,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
389												2,450,000	2,205,000
390												38,001	34,201
391												450,000	405,000
392												650,000	585,000
393												1,000,000	900,000
394												150,000	135,000
395												150,000	135,000
396												1,300,000	1,170,000
397												250,000	225,000
398												50,000	45,000
399												127,000	114,300
400												400,000	360,000
401												50,000	45,000
402												605,000	544,500
403												150,000	135,000
404												100,000	90,000
405												300,300	270,270
406												1,450,000	1,305,000
407												525,000	472,500
408												150,000	135,000
409												146,750	132,075
410												50,000	45,000
411												430,000	387,000
412												250,000	225,000
413												2,250,000	2,025,000
414												900,000	810,000
415												500,000	450,000
416												4,200,000	3,780,000
417												60,000	54,000
418												250,000	225,000
419												320,500	288,450
420												60,000	54,000
421												200,000	180,000
422												150,500	135,450
423												250,000	225,000
424												310,000	279,000
425												132,000	118,800
426												200,000	180,000
427												150,000	135,000
428												1,635,000	1,471,500
429												250,000	225,000
430												300,000	270,000
431												340,000	306,000
432												165,000	148,500
433												550,000	495,000
434												200,000	180,000
435												3,250,000	2,925,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
436												50,000	45,000
437												194,000	174,600
438												280,000	252,000
439												30,000	27,000
440												950,000	855,000
441												190,000	171,000
442												240,000	216,000
443												2,250,000	2,025,000
444												507,000	456,300
445												2,100,000	1,890,000
446												185,000	166,500
447												2,000,000	1,800,000
448												247,000	222,300
449												99,000	89,100
450												200,000	180,000
451												150,000	135,000
452												150,000	135,000
453												60,000	54,000
454												200,000	180,000
455												1,500,000	1,350,000
456												400,000	360,000
457												50,000	45,000
458												300,000	270,000
459												150,000	135,000
460												82,000	73,800
461												618,000	556,200
462												250,000	225,000
463												600,000	540,000
464												150,000	135,000
465												140,000	126,000
466												500,000	450,000
467												120,000	108,000
468												50,000	45,000
469												500,000	450,000
470												80,000	72,000
471												250,000	225,000
472												600,000	540,000
473												1,100,000	990,000
474												2,084,000	1,875,600
475												15,272,000	13,744,800
476												1,350,000	1,215,000
477												1,800,000	1,620,000
478												1,182,000	1,063,800
479												5,550,000	4,995,000
480												150,000	135,000
481												250,000	225,000
482												150,000	135,000

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	Total Storage	Effective Storage
483												400,000	360,000
484												150,000	135,000
485												7,000,000	6,300,000
486												4,615,000	4,153,500
487												4,500	4,050
488												690,000	621,000
489												500,000	450,000
490												550,000	495,000
491												750,000	675,000
492												300,000	270,000
493												435,000	391,500
494												50,000	45,000
495												50,000	45,000
496												1,120,000	1,008,000
497												100,000	90,000
498												50,000	45,000
499												1,540,000	1,386,000
500												250,000	225,000
501												550,000	495,000
502												60,000	54,000
503												130,000	117,000
504												600,000	540,000
505												737,000	663,300
506												200,000	180,000
507												75,000	67,500
508												880,000	792,000
509												3,503,741	3,153,367
510												100,000	90,000
511												150,000	135,000
512												110,000	99,000
513												150,000	135,000
514												275,000	247,500
515												112,000	100,800
516												100,000	90,000
517												750,000	675,000
518												36,000	32,400

													90%
													of Total
Point Number	20	21	22	23	24	25	26	27	28	29	30	**Total Storage**	**Effective Storage**
	150,000	279,000	375,000	477,000	3,000,000	100,000	325,000	250,000	4,000,000	315,000	340,000	##########	##########
												Ave	Ave
												761,616.97	685,455.27
												Max	Max
												32,386,000	29,147,400
												Median	Median
												269,500.00	242,550.00
												Min	Min
												900.00	810.00

APPENDIX C: MAXIMUM DAY DEMAND

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
1	306.0	318.3	342.2	341.3	350.5	358.6	298.5	311.9	288.7	276.3	242.0	252.2	307	1.00	1.04	1.11	1.11	1.14	1.17	0.97	1.02	0.94
2	313.6	372.2	320.1	323.2	345.4	369.1	363.5	343.1	335.0	283.6	283.3	302.5	330	0.95	1.13	0.97	0.98	1.05	1.12	1.10	1.04	1.02
3	25.9	25.6	27.2	31.7	29.9	35.4	32.8	32.9	28.2	31.4	24.9	26.2	29	0.88	0.87	0.93	1.08	1.02	1.21	1.12	1.12	0.96
4	68.7	81.1	79.7	98.0	99.0	102.0	108.4	110.6	83.7	68.7	64.0	64.5	86	0.80	0.95	0.93	1.14	1.16	1.19	1.26	1.29	0.98
5	256.2	290.2	277.2	271.4	262.7	289.4	283.6	283.1	267.1	268.1	222.5	229.3	267	0.96	1.09	1.04	1.02	0.98	1.08	1.06	1.06	1.00
6	85.9	80.1	75.4	74.1	77.3	83.4	80.5	85.7	82.4	87.6	67.7	65.1	79	1.09	1.02	0.96	0.94	0.98	1.06	1.02	1.09	1.05
7	1426.1	1524.8	1443.2	1526.5	1616.0	1747.0	1796.4	1592.7	1631.3	1430.2	1416.5	1384.8	1,545	0.92	0.99	0.93	0.99	1.05	1.13	1.16	1.03	1.06
8	66.8	70.2	71.4	77.9	85.7	97.2	109.3	120.9	107.3	94.5	72.9	71.9	87	0.77	0.81	0.82	0.89	0.98	1.12	1.25	1.39	1.23
9	42.5	41.2	39.3	40.8	47.6	49.2	47.0	52.8	44.8	41.0	41.3	39.5	44	0.97	0.94	0.90	0.93	1.08	1.12	1.07	1.20	1.02
10	48.8	50.7	47.5	48.9	52.1	58.9	53.5	61.4	54.5	45.8	45.3	48.1	51	0.95	0.99	0.93	0.95	1.02	1.15	1.04	1.20	1.06
11	516.2	544.4	541.5	486.3	540.0	701.2	692.3	824.4	737.2	557.2	692.5	715.0	629	0.82	0.87	0.86	0.77	0.86	1.11	1.10	1.31	1.17
12	282.9	285.3	302.0	307.9	308.2	336.3	335.2	375.8	342.4	295.5	258.5	265.5	308	0.92	0.93	0.98	1.00	1.00	1.09	1.09	1.22	1.11
13	92.5	86.9	80.0	71.6	70.7	82.7	88.1	88.1	92.0	67.3	62.0	63.7	79	1.17	1.10	1.02	0.91	0.90	1.05	1.12	1.12	1.17
14	964.0	1130.8	1091.0	1010.9	1020.2	1080.3	1195.6	1101.9	1067.4	964.7	916.4	913.1	1,038	0.93	1.09	1.05	0.97	0.98	1.04	1.15	1.06	1.03
15	1042.9	1016.8	1010.0	1084.0	1025.5	1050.0	1049.4	1041.9	1045.3	1019.7	865.7	965.5	1,018	1.02	1.00	0.99	1.06	1.01	1.03	1.03	1.02	1.03
16	54.0	52.4	53.1	56.9	57.2	89.5	65.2	83.7	64.4	60.0	50.6	52.1	62	0.88	0.85	0.86	0.92	0.93	1.45	1.06	1.36	1.05
17	77.8	71.4	61.5	60.8	61.0	65.4	67.0	73.6	64.8	59.6	61.9	60.3	65	1.19	1.09	0.94	0.93	0.93	1.00	1.02	1.13	0.99
18	51.1	46.2	47.0	48.2	48.1	49.4	50.4	52.6	46.6	46.1	69.7	43.7	50	1.02	0.92	0.94	0.97	0.96	0.99	1.01	1.05	0.93
19	3278.6	3343.1	3295.2	3304.6	3714.0	4155.1	4313.0	4190.5	4014.1	3619.3	3399.2	3394.1	3,668	0.89	0.91	0.90	0.90	1.01	1.13	1.18	1.14	1.09
20	98.4	69.8	89.9	69.4	66.6	71.0	74.5	79.9	70.7	68.6	65.0	66.7	74	1.33	0.94	1.21	0.93	0.90	0.96	1.00	1.08	0.95
21	316.3	337.6	301.2	294.2	307.9	293.9	307.0	309.3	292.3	315.8	311.9	266.1	304	1.04	1.11	0.99	0.97	1.01	0.97	1.01	1.02	0.96
22	73.8	76.4	75.9	78.6	77.7	78.6	79.2	81.7	68.5	59.7	61.8	68.3	73	1.01	1.04	1.03	1.07	1.06	1.07	1.08	1.11	0.93
23	28.1	64.1	55.3	36.0	34.6	38.2	41.6	40.8	33.8	29.3	28.5	27.0	38	0.74	1.68	1.45	0.94	0.91	1.00	1.09	1.07	0.89
24	279.4	299.0	295.1	315.8	327.8	382.9	407.0	481.8	408.2	336.0	294.2	286.8	343	0.81	0.87	0.86	0.92	0.96	1.12	1.19	1.41	1.19
25	89.5	101.8	119.3	109.5	90.0	97.1	105.5	132.1	111.3	77.2	79.6	78.0	99	0.90	1.03	1.20	1.10	0.91	0.98	1.06	1.33	1.12
26	105.3	105.3	107.8	112.9	117.8	136.4	152.6	200.3	149.3	134.8	129.8	146.3	133	0.79	0.79	0.81	0.85	0.88	1.02	1.15	1.50	1.12
27	2132.5	2233.2	2011.4	2011.6	2220.0	2394.2	2470.0	2623.2	2219.3	2109.5	2035.7	2115.3	2,215	0.96	1.01	0.91	0.91	1.00	1.08	1.12	1.18	1.00
28	76.1	72.8	68.0	69.4	70.7	74.0	73.5	74.4	72.9	73.7	71.8	73.3	73	1.05	1.00	0.94	0.96	0.97	1.02	1.01	1.03	1.01
29	1165.4	1213.7	1216.5	1282.4	1337.4	1498.5	1574.8	1690.8	1489.6	1399.1	1226.7	1224.2	1,360	0.86	0.89	0.89	0.94	0.98	1.10	1.16	1.24	1.10
30	34.5	34.1	35.8	34.0	36.4	43.4	41.4	54.0	42.7	40.3	33.5	36.8	39	0.89	0.88	0.92	0.87	0.94	1.12	1.06	1.39	1.10
31	110.0	123.5	119.1	136.1	146.5	164.6	184.1	220.4	192.4	151.5	110.3	108.4	147	0.75	0.84	0.81	0.92	0.99	1.12	1.25	1.50	1.31
32	24.1	23.5	28.9	44.6	26.0	31.1	30.6	28.8	29.4	26.2	21.9	20.0	28	0.86	0.84	1.03	1.60	0.93	1.11	1.10	1.03	1.05
33	1849.3	1992.5	1856.2	2080.9	1960.5	2065.8	2285.6	2438.8	2281.7	2102.6	1980.7	1942.0	2,070	0.89	0.96	0.90	1.01	0.95	1.00	1.10	1.18	1.10
34	153.3	165.0	163.0	162.7	234.2	222.8	297.9	352.6	391.3	368.0	235.2	147.6	241	0.64	0.68	0.68	0.67	0.97	0.92	1.24	1.46	1.62
35	158.4	169.5	161.9	172.0	184.7	214.3	189.1	238.6	196.2	177.2	165.9	168.7	183	0.87	0.93	0.88	0.94	1.01	1.17	1.03	1.30	1.07
36	1040.8	1039.5	1027.4	1292.5	1190.9	1425.9	1462.8	1357.2	1452.3	1213.5	1089.5	1102.0	1,225	0.85	0.85	0.84	1.06	0.97	1.16	1.19	1.11	1.19
37	115.6	136.2	127.1	131.0	151.2	153.6	170.8	220.1	168.6	146.8	141.0	137.1	150	0.77	0.91	0.85	0.87	1.01	1.02	1.14	1.47	1.12
38	60.9	63.6	57.5	58.8	65.9	69.7	71.5	71.7	64.2	58.2	58.0	61.5	63	0.96	1.00	0.91	0.93	1.04	1.10	1.13	1.13	1.01
39	794.0	725.0	710.2	751.9	791.8	965.3	921.2	946.6	864.0	780.5	647.3	661.7	797	1.00	0.91	0.89	0.94	0.99	1.21	1.16	1.19	1.08
40	64.4	61.5	62.1	61.6	55.2	59.5	60.4	60.2	60.4	52.9	53.8	53.1	59	1.10	1.05	1.06	1.05	0.94	1.01	1.03	1.03	1.03
41	125.3	139.4	126.2	129.2	122.3	153.3	169.8	154.1	125.8	114.5	102.3	106.1	131	0.96	1.07	0.97	0.99	0.94	1.17	1.30	1.18	0.96
42	432.9	424.3	422.6	428.0	436.1	461.7	445.5	445.4	470.7	458.3	426.2	435.5	441	0.98	0.96	0.96	0.97	0.99	1.05	1.01	1.01	1.07
43	90.5	90.0	89.7	93.7	97.0	108.2	94.0	112.5	95.0	93.9	95.4	89.4	96	0.95	0.94	0.94	0.98	1.01	1.13	0.98	1.18	0.99
44	495.3	457.9	422.1	497.6	540.5	599.4	580.6	716.8	643.9	572.2	447.7	509.3	540	0.92	0.85	0.78	0.92	1.00	1.11	1.07	1.33	1.19
45	393.4	385.3	384.0	375.7	380.1	397.5	399.2	427.1	404.3	383.1	382.4	381.9	391	1.01	0.98	0.98	0.96	0.97	1.02	1.02	1.09	1.03
46	84.2	77.5	71.4	71.5	71.0	78.8	74.1	81.6	78.7	70.4	67.8	69.8	75	1.13	1.04	0.96	0.96	0.95	1.05	0.99	1.09	1.05
47	268.6	269.7	278.5	306.4	283.0	310.3	306.5	385.5	337.9	294.3	283.1	302.4	302	0.89	0.89	0.92	1.01	0.94	1.03	1.01	1.28	1.12
48	46.0	44.2	43.0	45.6	55.9	72.5	58.2	57.9	52.1	48.9	44.5	46.1	51	0.90	0.86	0.84	0.89	1.09	1.41	1.14	1.13	1.02
49	45.3	46.4	40.7	47.7	47.5	48.6	48.5	56.2	49.4	45.1	45.7	53.9	48	0.94	0.97	0.85	0.99	0.99	1.01	1.01	1.17	1.03

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
50	29.5	30.0	30.0	30.7	33.0	36.2	37.5	44.0	41.6	30.3	32.3	34.7	34	0.86	0.88	0.88	0.90	0.97	1.06	1.10	1.29	1.22
51	98.5	101.2	105.1	107.3	99.7	103.3	99.2	100.8	99.7	99.2	94.0	100.0	101	0.98	1.01	1.04	1.07	0.99	1.03	0.99	1.00	0.99
52	265.5	271.5	259.4	278.4	317.0	322.4	317.5	356.1	303.8	282.4	257.0	273.4	292	0.91	0.93	0.89	0.95	1.09	1.10	1.09	1.22	1.04
53	25.6	24.8	27.5	24.1	26.4	28.1	30.2	29.1	29.0	25.7	24.4	23.0	26	0.97	0.94	1.04	0.91	1.00	1.06	1.14	1.10	1.09
54	105.6	107.9	126.3	128.4	119.4	144.5	91.0	135.5	115.7	116.3	93.2	99.6	115	0.92	0.94	1.10	1.11	1.04	1.25	0.79	1.18	1.00
55	37.9	40.9	40.9	38.1	39.4	36.9	36.9	40.9	35.0	32.5	33.1	34.0	37	1.02	1.10	1.10	1.03	1.06	0.99	0.99	1.10	0.94
56	75.3	75.4	72.3	72.3	72.4	79.9	79.7	88.8	80.8	68.4	67.3	68.1	75	1.00	1.00	0.96	0.96	0.96	1.06	1.06	1.18	1.08
57	788.8	908.3	841.4	810.2	782.5	892.6	886.8	885.3	974.1	893.1	799.3	772.5	853	0.92	1.06	0.99	0.95	0.92	1.05	1.04	1.04	1.14
58	193.0	191.8	194.9	194.0	213.8	237.9	250.1	244.5	244.6	202.8	174.0	174.1	210	0.92	0.92	0.93	0.93	1.02	1.14	1.19	1.17	1.17
59	201.9	217.5	224.1	226.1	233.0	244.2	262.6	286.7	237.1	212.1	197.6	195.3	228	0.89	0.95	0.98	0.99	1.02	1.07	1.15	1.26	1.04
60	266.9	266.5	238.5	240.4	267.2	271.0	277.9	320.1	284.7	293.0	227.7	226.9	265	1.01	1.01	0.90	0.91	1.01	1.02	1.05	1.21	1.07
61	2944.3	3083.3	3093.0	2837.2	2862.5	3479.4	3359.1	3357.8	3192.4	3023.9	2911.8	2843.8	3,082	0.96	1.00	1.00	0.92	0.93	1.13	1.09	1.09	1.04
62	3283.8	3357.5	3269.7	3413.9	3841.6	4618.9	4864.2	6005.9	5044.9	3718.2	3353.1	3347.2	4,010	0.82	0.84	0.82	0.85	0.96	1.15	1.21	1.50	1.26
63	58.6	59.5	64.2	66.1	65.5	84.5	74.0	92.4	93.5	64.9	65.1	58.2	71	0.83	0.84	0.91	0.94	0.93	1.20	1.05	1.31	1.33
64	1477.7	1369.4	1351.2	1348.4	1398.0	1793.2	1809.2	1751.0	1945.3	1348.3	1158.9	890.4	1,470	1.01	0.93	0.92	0.92	0.95	1.22	1.23	1.19	1.32
65	79.8	52.3	55.9	50.9	46.1	60.1	57.0	63.2	57.4	48.4	48.5	48.7	56	1.43	0.94	1.00	0.91	0.83	1.08	1.02	1.14	1.03
66	20.6	20.0	20.0	17.5	20.3	22.5	22.9	25.3	19.7	15.6	17.3	16.1	20	1.04	1.01	1.01	0.88	1.02	1.13	1.16	1.28	1.00
67	56.4	69.6	54.6	56.4	55.5	56.1	55.5	60.6	57.8	55.3	56.5	52.6	57	0.98	1.22	0.95	0.99	0.97	0.98	0.97	1.06	1.01
68	16.5	15.6	14.3	16.7	13.4	12.6	11.8	13.1	13.0	13.9	12.5	12.5	14	1.19	1.13	1.04	1.21	0.97	0.91	0.85	0.95	0.94
69	1678.7	1772.9	1708.2	1776.2	1882.1	2425.8	2205.6	2525.9	2104.1	1761.2	1668.5	1631.0	1,928	0.87	0.92	0.89	0.92	0.98	1.26	1.14	1.31	1.09
70	370.9	338.8	343.6	348.6	343.8	376.5	377.1	392.6	391.2	341.9	306.2	340.0	356	1.04	0.95	0.97	0.98	0.97	1.06	1.06	1.10	1.10
71	75.9	70.5	64.8	63.0	67.7	64.1	56.7	70.0	71.3	58.8	57.8	63.3	65	1.16	1.08	0.99	0.96	1.04	0.98	0.87	1.07	1.09
72	126.5	117.2	116.3	117.3	116.1	126.2	127.0	130.2	121.9	110.3	105.7	106.0	118	1.07	0.99	0.98	0.99	0.98	1.07	1.07	1.10	1.03
73	80.0	79.8	81.8	87.9	96.4	130.4	428.1	519.3	463.4	105.9	93.9	83.5	188	0.43	0.43	0.44	0.47	0.51	0.70	2.28	2.77	2.47
74	140.8	135.4	149.1	153.8	167.6	184.5	185.8	229.7	216.7	188.8	189.2	188.8	178	0.79	0.76	0.84	0.87	0.94	1.04	1.05	1.29	1.22
75	193.6	216.3	298.1	330.7	183.2	196.7	191.5	208.8	204.5	187.9	189.7	179.1	215	0.90	1.01	1.39	1.54	0.85	0.92	0.89	0.97	0.95
76	138.5	141.9	140.7	147.2	154.2	156.0	161.0	183.6	163.7	139.6	137.4	141.5	150	0.92	0.94	0.94	0.98	1.03	1.04	1.07	1.22	1.09
77	52.9	53.6	50.0	53.0	57.5	64.9	67.5	76.8	60.0	57.2	56.5	54.7	59	0.90	0.91	0.85	0.90	0.98	1.11	1.15	1.31	1.02
78	49.2	53.8	54.0	54.9	55.2	61.1	66.4	58.1	52.9	51.9	50.0	49.0	55	0.90	0.98	0.99	1.00	1.01	1.12	1.21	1.06	0.97
79	76.3	87.6	80.9	83.3	65.2	74.7	82.1	77.1	81.4	63.1	67.1	69.9	76	1.01	1.16	1.07	1.10	0.86	0.99	1.08	1.02	1.07
80	112.2	208.5	270.7	264.2	305.2	432.7	357.3	113.2	92.9	83.1	82.8	77.9	200	0.56	1.04	1.35	1.32	1.53	2.16	1.79	0.57	0.46
81	20.6	19.8	19.4	19.4	20.8	23.7	22.3	25.0	19.7	19.8	18.7	20.1	21	0.99	0.95	0.93	0.94	1.00	1.14	1.07	1.20	0.95
82	1335.7	1358.3	1337.6	1449.4	1433.6	1633.2	1819.7	1643.4	1593.3	1367.5	1335.7	1325.6	1,469	0.91	0.92	0.91	0.99	0.98	1.11	1.24	1.12	1.08
83	187.8	201.6	198.5	194.8	187.5	228.1	235.7	237.0	232.6	188.3	171.0	184.2	204	0.92	0.99	0.97	0.96	0.92	1.12	1.16	1.16	1.14
84	94.8	92.4	114.8	120.4	116.4	111.7	117.5	113.4	105.8	101.9	121.3	110.6	110	0.86	0.84	1.04	1.09	1.06	1.02	1.07	1.03	0.96
85	58.0	53.9	59.3	51.1	45.3	53.3	53.5	57.9	48.9	55.3	60.9	66.8	55	1.05	0.97	1.07	0.92	0.82	0.96	0.97	1.05	0.88
86	244.5	266.3	289.9	260.3	295.9	295.0	311.0	319.6	280.2	217.7	211.0	223.0	268	0.91	0.99	1.08	0.97	1.10	1.10	1.16	1.19	1.05
87	608.5	655.8	687.6	660.4	730.4	827.2	899.5	859.9	735.4	637.7	609.2	584.0	708	0.86	0.93	0.97	0.93	1.03	1.17	1.27	1.21	1.04
88	2835.7	3598.4	3496.3	3576.4	3347.3	4024.6	4283.8	4806.7	3987.7	3575.2	3277.2	3301.9	3,676	0.77	0.98	0.95	0.97	0.91	1.09	1.17	1.31	1.08
89	68.7	76.7	60.6	70.8	70.8	71.1	77.9	84.5	75.4	63.0	68.7	55.7	70	0.98	1.09	0.86	1.01	1.01	1.01	1.11	1.20	1.07
90	509.5	748.4	688.4	639.4	680.9	801.9	682.7	693.2	729.8	703.4	559.9	707.0	679	0.75	1.10	1.01	0.94	1.00	1.18	1.01	1.02	1.08
91	93.0	95.2	88.6	93.6	102.2	133.4	149.0	147.0	171.1	160.3	161.4	134.2	127	0.73	0.75	0.70	0.73	0.80	1.05	1.17	1.15	1.34
92	198.4	244.9	211.0	257.7	232.3	278.0	263.4	238.9	273.1	230.2	214.3	230.6	239	0.83	1.02	0.88	1.08	0.97	1.16	1.10	1.00	1.14
93	416.1	408.0	430.4	409.9	467.1	511.3	505.5	470.3	432.9	444.6	365.2	380.6	437	0.95	0.93	0.99	0.94	1.07	1.17	1.16	1.08	0.99
94	65.9	61.0	62.1	53.4	38.2	59.7	274.0	702.8	875.8	876.6	445.8	115.2	303	0.22	0.20	0.21	0.18	0.13	0.20	0.91	2.32	2.89
95	25.4	29.0	26.1	30.6	36.5	40.7	36.9	42.0	34.2	29.0	26.5	31.8	32	0.78	0.89	0.80	0.95	1.13	1.26	1.14	1.30	1.06
96	37.3	42.5	43.4	40.3	41.6	57.4	50.9	63.4	46.8	43.4	41.0	36.9	45	0.82	0.94	0.95	0.89	0.92	1.26	1.12	1.40	1.03
97	132.0	133.6	116.0	115.4	120.0	125.1	118.7	120.1	110.9	111.1	110.2	119.0	119	1.11	1.12	0.97	0.97	1.01	1.05	0.99	1.01	0.93
98	79.2	77.5	77.1	80.7	84.7	100.9	107.9	676.5	958.5	701.8	514.6	98.8	297	0.27	0.26	0.26	0.27	0.29	0.34	0.36	2.28	3.23

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
99	96.9	100.9	125.6	114.5	120.0	122.3	111.6	141.6	125.6	122.1	115.7	125.2	118	0.82	0.85	1.06	0.97	1.01	1.03	0.94	1.19	1.06
100	142.6	150.4	157.3	159.4	164.7	178.9	181.9	202.9	195.3	170.6	175.5	193.8	173	0.83	0.87	0.91	0.92	0.95	1.04	1.05	1.17	1.13
101	490.2	482.6	474.7	485.4	538.4	556.0	576.5	606.8	541.0	499.2	457.4	479.3	516	0.95	0.94	0.92	0.94	1.04	1.08	1.12	1.18	1.05
102	55.7	59.2	56.8	61.1	57.8	59.9	62.8	77.5	59.9	61.6	53.6	55.8	60	0.93	0.98	0.94	1.02	0.96	1.00	1.04	1.29	1.00
103	98.6	97.6	98.8	99.9	103.1	117.6	103.5	115.9	113.7	110.0	99.9	117.8	106	0.93	0.92	0.93	0.94	0.97	1.11	0.97	1.09	1.07
104	318.9	318.9	318.5	331.8	325.5	427.9	393.7	497.3	417.6	362.5	370.5	331.7	368	0.87	0.87	0.87	0.90	0.88	1.16	1.07	1.35	1.14
105	26.2	26.7	27.2	25.5	24.8	25.3	25.8	24.0	22.2	22.1	19.7	19.9	24	1.09	1.11	1.13	1.06	1.03	1.05	1.07	1.00	0.92
106	152.6	165.9	180.6	166.9	164.1	167.8	183.2	157.2	151.2	130.4	123.4	122.7	155	0.98	1.07	1.16	1.07	1.06	1.08	1.18	1.01	0.97
107	120.8	130.5	129.6	111.4	123.7	159.3	188.6	161.5	151.9	111.4	100.8	100.9	133	0.91	0.98	0.98	0.84	0.93	1.20	1.42	1.22	1.15
108	461.2	477.3	491.5	419.2	384.5	430.3	399.2	485.8	488.6	478.6	419.3	433.1	447	1.03	1.07	1.10	0.94	0.86	0.96	0.89	1.09	1.09
109	176.9	177.4	179.5	189.4	188.6	206.6	187.3	210.4	194.2	169.1	172.9	176.3	186	0.95	0.96	0.97	1.02	1.02	1.11	1.01	1.13	1.05
110	282.9	306.8	334.7	295.3	270.8	548.4	1335.7	1587.5	1298.1	368.9	243.9	284.5	596	0.47	0.51	0.56	0.50	0.45	0.92	2.24	2.66	2.18
111	75.5	80.6	81.0	86.4	89.9	101.3	95.7	89.4	92.6	79.9	72.7	81.9	86	0.88	0.94	0.95	1.01	1.05	1.18	1.12	1.04	1.08
112	24.6	20.8	25.8	27.3	26.5	30.7	26.1	30.1	26.1	22.6	24.7	23.1	26	0.96	0.81	1.00	1.06	1.03	1.19	1.01	1.17	1.02
113	25.0	24.1	21.4	24.7	27.5	26.5	24.6	24.0	24.4	7.9	27.9	6.8	22	1.13	1.09	0.97	1.12	1.25	1.20	1.11	1.09	1.11
114	53.6	53.3	54.2	57.8	63.7	71.5	63.5	87.8	72.5	72.3	53.9	53.5	63	0.85	0.84	0.86	0.92	1.01	1.13	1.01	1.39	1.15
115	677.9	676.8	684.0	708.1	835.1	930.9	994.1	933.3	950.5	742.7	690.7	707.9	794	0.85	0.85	0.86	0.89	1.05	1.17	1.25	1.17	1.20
116	93.6	91.2	93.1	96.3	101.7	125.8	121.6	121.6	110.4	98.4	94.1	93.7	103	0.91	0.88	0.90	0.93	0.98	1.22	1.18	1.18	1.07
117	284.3	295.4	309.6	296.1	315.6	312.0	302.4	341.0	289.1	272.8	267.9	250.5	295	0.96	1.00	1.05	1.00	1.07	1.06	1.03	1.16	0.98
118	162.5	166.5	170.4	164.5	173.7	185.9	189.7	203.1	181.5	160.5	149.0	146.3	171	0.95	0.97	1.00	0.96	1.01	1.09	1.11	1.19	1.06
119	742.4	799.8	818.8	813.3	858.1	933.3	921.6	1024.1	908.2	858.2	779.0	795.0	854	0.87	0.94	0.96	0.95	1.00	1.09	1.08	1.20	1.06
120	833.4	917.6	923.3	1045.7	962.6	1131.8	1010.2	1205.8	1200.6	984.7	898.5	941.2	1,005	0.83	0.91	0.92	1.04	0.96	1.13	1.01	1.20	1.20
121	208.4	217.2	222.7	230.4	235.7	246.8	238.8	242.2	237.1	203.7	188.7	191.1	222	0.94	0.98	1.00	1.04	1.06	1.11	1.08	1.09	1.07
122	3421.2	3447.8	3481.7	3593.2	4231.4	4681.3	4114.7	3607.8	3621.2	3129.1	3124.3	2925.5	3,615	0.95	0.95	0.96	0.99	1.17	1.29	1.14	1.00	1.00
123	211.8	225.6	214.7	212.1	73.7	39.9	450.8	908.2	1044.0	1031.1	1000.6	1085.6	542	0.39	0.42	0.40	0.39	0.14	0.07	0.83	1.68	1.93
124	69.3	77.7	68.5	70.4	77.7	83.8	76.3	82.7	69.5	73.7	72.5	72.1	75	0.93	1.04	0.92	0.94	1.04	1.12	1.02	1.11	0.93
125	7.8	7.8	10.4	8.7	8.7	10.8	9.4	16.5	10.7	9.1	7.8	8.0	10	0.81	0.81	1.08	0.90	0.91	1.12	0.98	1.71	1.11
126	506.5	453.9	443.4	446.6	483.4	534.7	523.0	579.2	491.1	453.3	432.2	444.2	483	1.05	0.94	0.92	0.93	1.00	1.11	1.08	1.20	1.02
127	65.7	65.0	85.4	72.7	69.9	79.7	82.2	78.8	82.2	77.7	65.2	71.7	75	0.88	0.87	1.14	0.97	0.94	1.07	1.10	1.05	1.10
128	149.6	156.7	161.9	166.1	178.5	216.3	219.2	244.2	220.5	178.3	152.8	156.2	183	0.82	0.85	0.88	0.91	0.97	1.18	1.20	1.33	1.20
129	34.8	43.8	32.0	22.1	24.3	25.4	23.4	30.2	27.1	30.4	22.0	21.5	28	1.24	1.56	1.14	0.79	0.86	0.91	0.83	1.08	0.97
130	121.1	120.1	124.2	133.9	142.5	146.2	159.4	186.0	160.0	130.5	111.6	114.4	137	0.88	0.87	0.90	0.97	1.04	1.06	1.16	1.35	1.16
131	24.9	33.5	36.0	28.8	22.1	18.6	56.3	16.0	21.9	26.3	23.7	23.1	28	0.90	1.21	1.30	1.04	0.80	0.67	2.04	0.58	0.79
132	191.7	195.2	192.8	195.6	224.0	254.0	250.3	334.5	257.1	191.9	181.0	178.9	221	0.87	0.88	0.87	0.89	1.02	1.15	1.13	1.52	1.17
133	135.8	147.8	158.4	131.8	144.9	181.0	163.8	193.3	179.0	152.5	122.8	168.9	157	0.87	0.94	1.01	0.84	0.93	1.16	1.05	1.23	1.14
134	235.7	233.6	266.9	202.4	243.2	284.0	321.7	297.1	243.3	222.6	163.4	218.9	244	0.96	0.96	1.09	0.83	1.00	1.16	1.32	1.22	1.00
135	27.5	26.1	28.1	30.4	32.3	38.3	31.9	35.6	31.0	30.5	28.5	26.5	31	0.90	0.85	0.92	0.99	1.06	1.25	1.04	1.17	1.01
136	535.0	569.8	543.5	598.3	684.8	774.6	743.5	801.1	634.3	587.1	518.2	499.7	624	0.86	0.91	0.87	0.96	1.10	1.24	1.19	1.28	1.02
137	7613.9	8149.1	7997.5	8199.9	9142.9	11054.4	10403.7	13780.3	11499.1	8709.3	7658.3	7629.8	9,320	0.82	0.87	0.86	0.88	0.98	1.19	1.12	1.48	1.23
138	110.4	97.5	90.5	80.5	85.5	93.6	91.1	102.7	95.0	79.2	87.8	86.9	92	1.20	1.06	0.99	0.88	0.93	1.02	0.99	1.12	1.04
139	421.5	463.9	400.1	354.2	378.5	413.5	405.8	446.3	426.8	385.2	344.0	347.4	399	1.06	1.16	1.00	0.89	0.95	1.04	1.02	1.12	1.07
140	36.6	97.5	106.2	42.4	37.4	36.8	38.6	35.7	34.5	33.7	31.1	31.3	47	0.78	2.08	2.27	0.91	0.80	0.79	0.82	0.76	0.74
141	37.5	39.5	43.5	37.6	42.4	45.8	43.1	49.9	43.7	38.8	38.4	39.8	42	0.90	0.95	1.04	0.90	1.02	1.10	1.03	1.20	1.05
142	130.8	135.0	125.0	135.3	159.7	203.7	248.0	190.1	190.0	140.7	113.2	118.9	158	0.83	0.86	0.79	0.86	1.01	1.29	1.57	1.21	1.21
143	1258.2	1275.0	1177.2	1160.4	1143.7	1261.1	1211.9	1458.3	1279.7	1121.5	1126.1	1135.1	1,217	1.03	1.05	0.97	0.95	0.94	1.04	1.00	1.20	1.05
144	56.0	57.1	56.5	59.8	67.6	70.0	64.1	88.5	76.1	64.4	56.0	55.6	64	0.87	0.89	0.88	0.93	1.05	1.09	1.00	1.38	1.18
145	297.1	289.5	286.4	291.2	291.2	291.5	295.5	365.3	323.6	279.5	256.6	268.3	295	1.01	0.98	0.97	0.99	0.99	0.99	1.00	1.24	1.10
146	58.7	59.5	57.8	57.7	74.9	69.3	65.9	71.4	63.6	64.5	61.9	66.0	64	0.91	0.93	0.90	0.90	1.17	1.08	1.03	1.11	0.99
147	129.2	126.8	123.7	128.5	125.8	127.7	126.2	141.6	137.3	135.3	109.0	116.9	127	1.01	1.00	0.97	1.01	0.99	1.00	0.99	1.11	1.08

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
148	37.0	39.8	39.7	37.3	39.1	42.8	44.0	43.1	41.9	41.3	45.1	37.1	41	0.91	0.98	0.98	0.92	0.96	1.05	1.08	1.06	1.03
149	28.2	32.3	45.6	31.9	31.0	31.2	33.6	39.5	34.6	33.9	31.5	31.3	34	0.84	0.96	1.35	0.95	0.92	0.92	1.00	1.17	1.03
150	406.7	416.8	405.9	374.2	372.2	411.6	406.2	486.9	419.9	365.8	323.8	331.7	393	1.03	1.06	1.03	0.95	0.95	1.05	1.03	1.24	1.07
151	18.2	19.9	18.1	17.5	19.8	21.0	22.3	25.8	21.6	20.8	19.1	21.2	20	0.89	0.97	0.88	0.86	0.97	1.03	1.09	1.26	1.06
152	29.4	35.6	30.3	25.0	27.9	133.3	98.8	30.2	27.8	29.5	26.8	24.2	43	0.68	0.82	0.70	0.58	0.65	3.08	2.29	0.70	0.64
153	31.9	35.3	32.3	33.3	34.7	70.9	100.6	275.5	311.8	40.4	38.4	77.4	90	0.35	0.39	0.36	0.37	0.38	0.79	1.12	3.05	3.46
154	79.9	80.2	80.7	87.4	84.7	85.9	91.6	104.1	99.5	85.9	87.0	89.8	88	0.91	0.91	0.92	0.99	0.96	0.98	1.04	1.18	1.13
155	202.1	270.7	203.3	244.1	219.5	260.8	255.9	263.6	297.9	223.6	245.0	200.6	241	0.84	1.13	0.84	1.01	0.91	1.08	1.06	1.10	1.24
156	13.2	11.8	12.6	12.4	18.0	20.0	17.1	17.3	23.1	16.0	14.3	14.3	16	0.83	0.74	0.79	0.78	1.14	1.26	1.08	1.09	1.46
157	1681.3	1675.4	1975.5	1819.0	1897.4	2341.0	2254.1	2655.8	2642.9	1916.0	1695.7	1666.1	2,018	0.83	0.83	0.98	0.90	0.94	1.16	1.12	1.32	1.31
158	99.4	166.8	153.6	133.8	166.8	245.9	286.2	265.9	294.1	113.4	114.5	107.6	179	0.56	0.93	0.86	0.75	0.93	1.37	1.60	1.49	1.64
159	5306.6	5610.0	5691.8	5347.5	5374.8	5835.0	5969.5	6293.3	5780.9	5383.9	5076.7	5066.7	5,561	0.95	1.01	1.02	0.96	0.97	1.05	1.07	1.13	1.04
160	509.1	443.9	417.6	326.7	447.3	799.4	971.0	1019.7	832.6	580.4	511.8	509.4	614	0.83	0.72	0.68	0.53	0.73	1.30	1.58	1.66	1.36
161	54.4	52.8	53.9	56.3	57.3	63.6	61.1	64.1	56.9	52.2	49.3	50.0	56	0.97	0.94	0.96	1.01	1.02	1.14	1.09	1.14	1.02
162	33.1	46.8	50.8	35.8	40.9	42.0	42.8	49.0	38.0	34.5	34.4	34.1	40	0.82	1.16	1.26	0.89	1.02	1.05	1.07	1.22	0.95
163	1725.5	1751.7	1762.7	1876.6	1867.4	2019.6	2044.5	2395.4	2343.6	1958.3	1742.2	1657.2	1,929	0.89	0.91	0.91	0.97	0.97	1.05	1.06	1.24	1.22
164	41.3	43.1	40.8	39.5	44.1	46.0	43.7	47.5	43.1	40.6	40.8	39.7	43	0.97	1.01	0.96	0.93	1.04	1.08	1.03	1.12	1.01
165	148.2	141.1	145.2	156.5	199.2	184.4	177.3	144.2	138.7	167.5	130.0	130.6	155	0.95	0.91	0.94	1.01	1.28	1.19	1.14	0.93	0.89
166	722.6	757.1	658.1	650.0	780.6	873.3	1048.4	1212.9	1056.7	583.9	483.3	477.4	775	0.93	0.98	0.85	0.84	1.01	1.13	1.35	1.56	1.36
167	190.6	197.9	199.5	172.7	172.3	258.4	253.5	209.3	189.9	183.0	152.7	154.1	194	0.98	1.02	1.03	0.89	0.89	1.33	1.30	1.08	0.98
168	167.2	164.1	175.0	183.8	168.9	219.5	258.1	228.6	220.3	186.1	176.7	176.7	194	0.86	0.85	0.90	0.95	0.87	1.13	1.33	1.18	1.14
169	20.8	22.0	20.0	19.5	19.3	29.1	19.9	23.5	22.2	19.1	18.2	16.5	21	1.00	1.06	0.96	0.93	0.93	1.39	0.95	1.13	1.06
170	186.0	176.1	181.0	196.1	194.3	217.4	233.0	258.5	183.3	174.4	148.3	166.7	193	0.96	0.91	0.94	1.02	1.01	1.13	1.21	1.34	0.95
171	53.7	60.7	59.0	55.8	53.6	60.4	58.4	59.6	46.6	49.4	43.5	42.2	54	1.00	1.13	1.10	1.04	1.00	1.13	1.09	1.11	0.87
172	21.9	20.8	21.9	23.9	31.3	30.6	39.0	44.2	30.6	27.8	20.9	20.7	28	0.79	0.75	0.79	0.86	1.13	1.10	1.40	1.59	1.10
173	268.5	268.7	209.5	212.2	229.3	227.9	213.8	217.0	210.1	187.9	141.1	184.7	214	1.25	1.25	0.98	0.99	1.07	1.06	1.00	1.01	0.98
174	1448.6	1489.6	1470.4	1529.7	1490.4	1826.7	2190.0	1970.0	1950.5	1613.8	1434.2	1185.9	1,633	0.89	0.91	0.90	0.94	0.91	1.12	1.34	1.21	1.19
175	112.9	137.4	114.7	109.3	128.3	129.2	512.5	794.8	625.7	116.8	113.2	113.7	251	0.45	0.55	0.46	0.44	0.51	0.52	2.04	3.17	2.50
176	38.0	39.9	30.3	30.2	30.2	34.2	32.2	46.2	37.1	31.8	31.0	29.0	34	1.11	1.17	0.89	0.88	0.88	1.00	0.94	1.35	1.08
177	35.3	36.0	39.5	37.2	34.3	37.3	35.0	33.5	36.1	32.9	36.2	38.2	36	0.98	1.00	1.10	1.04	0.95	1.04	0.97	0.93	1.00
178	83.7	88.9	97.4	97.0	93.4	103.9	105.2	123.5	112.0	89.5	85.1	89.2	97	0.86	0.91	1.00	1.00	0.96	1.07	1.08	1.27	1.15
179	11.5	11.8	12.6	11.9	14.5	14.6	12.9	12.6	11.6	11.6	17.3	9.5	13	0.90	0.93	0.99	0.94	1.14	1.15	1.01	1.00	0.91
180	73.2	78.3	88.0	79.6	73.5	74.0	73.2	72.9	72.7	66.2	68.7	67.8	74	0.99	1.06	1.19	1.08	0.99	1.00	0.99	0.99	0.98
181	31.9	41.6	78.9	65.7	44.2	43.9	50.5	37.5	32.2	34.4	36.0	40.2	45	0.71	0.93	1.76	1.47	0.99	0.98	1.13	0.84	0.72
182	1225.3	1332.0	1235.6	1357.3	1422.1	1637.5	1754.1	1579.3	1550.7	1360.4	1223.4	1264.5	1,412	0.87	0.94	0.88	0.96	1.01	1.16	1.24	1.12	1.10
183	1683.2	1907.2	1891.2	1870.3	1709.5	2160.3	2209.3	2378.8	2450.7	2014.9	1950.1	1912.3	2,011	0.84	0.95	0.94	0.93	0.85	1.07	1.10	1.18	1.22
184	24.2	21.7	22.6	24.7	22.6	24.7	23.6	25.6	25.2	26.7	22.9	24.2	24	1.01	0.90	0.94	1.03	0.94	1.03	0.98	1.06	1.05
185	127.6	125.0	122.1	175.1	157.1	168.1	174.4	220.9	181.8	187.6	126.6	123.4	157	0.81	0.79	0.78	1.11	1.00	1.07	1.11	1.40	1.15
186	19.5	18.6	19.6	20.4	20.1	24.6	21.0	24.6	21.4	19.7	15.5	16.6	20	0.97	0.92	0.98	1.01	1.00	1.22	1.04	1.22	1.06
187	1392.5	1331.2	1256.2	1261.6	1325.4	1863.3	1911.5	2251.7	2210.6	1312.1	1063.4	1372.9	1,546	0.90	0.86	0.81	0.82	0.86	1.21	1.24	1.46	1.43
188	124.2	117.5	116.3	188.8	144.4	166.8	196.5	212.3	174.9	133.0	121.1	117.1	151	0.82	0.78	0.77	1.25	0.96	1.10	1.30	1.41	1.16
189	399.9	426.0	409.5	418.9	462.6	520.8	548.5	500.0	510.6	446.0	410.8	414.5	456	0.88	0.93	0.90	0.92	1.02	1.14	1.20	1.10	1.12
190	141.9	155.3	127.2	132.0	146.5	124.0	129.5	127.5	151.3	125.1	115.3	126.1	133	1.06	1.16	0.95	0.99	1.10	0.93	0.97	0.95	1.13
191	39.2	51.4	42.4	43.1	36.7	39.8	46.9	44.1	40.0	37.9	36.0	43.0	42	0.94	1.23	1.02	1.03	0.88	0.95	1.12	1.06	0.96
192	127.4	122.5	121.5	149.3	206.2	275.7	263.8	366.0	248.6	187.1	147.7	151.8	197	0.65	0.62	0.62	0.76	1.05	1.40	1.34	1.86	1.26
193	116.3	115.3	114.6	106.9	130.9	157.8	151.2	207.7	160.0	123.5	113.0	110.2	134	0.87	0.86	0.86	0.80	0.98	1.18	1.13	1.55	1.19
194	37.8	45.8	39.7	39.4	55.6	63.9	62.3	75.6	45.9	27.9	29.1	28.0	46	0.82	1.00	0.86	0.86	1.21	1.39	1.36	1.65	1.00

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
195	92.6	112.3	105.6	104.1	110.7	134.4	145.3	200.6	129.2	97.1	89.5	91.2	118	0.79	0.95	0.90	0.88	0.94	1.14	1.23	1.70	1.10
196	1620.6	1665.9	1580.6	1612.6	1668.3	1829.6	1917.0	1897.3	1918.7	1654.4	1581.3	1574.3	1,710	0.95	0.97	0.92	0.94	0.98	1.07	1.12	1.11	1.12
197	833.7	880.9	934.2	839.6	921.3	1144.5	1229.9	1284.2	1219.4	872.2	837.9	767.7	980	0.85	0.90	0.95	0.86	0.94	1.17	1.25	1.31	1.24
198	33.1	38.3	37.8	34.2	30.3	31.0	31.6	30.7	35.8	32.2	28.9	30.4	33	1.01	1.17	1.15	1.04	0.92	0.94	0.96	0.93	1.09
199	18.7	16.9	17.0	17.1	18.7	19.5	19.9	23.1	19.2	18.1	16.3	16.4	18	1.01	0.92	0.92	0.93	1.01	1.06	1.08	1.26	1.04
200	29.2	48.0	34.1	26.3	32.1	32.5	28.9	30.7	29.7	33.1	29.7	33.0	32	0.91	1.49	1.06	0.82	0.99	1.01	0.89	0.95	0.92
201	348.0	379.5	378.8	374.4	379.3	447.6	554.7	460.9	403.9	348.2	350.1	377.1	400	0.87	0.95	0.95	0.94	0.95	1.12	1.39	1.15	1.01
202	85.3	81.8	84.9	82.9	92.4	96.8	90.7	112.0	94.0	88.0	79.0	82.8	89	0.96	0.92	0.95	0.93	1.04	1.08	1.02	1.26	1.05
203	55.6	54.6	51.6	52.2	54.8	45.8	56.3	72.4	57.9	50.4	52.1	54.0	55	1.01	1.00	0.94	0.95	1.00	0.84	1.03	1.32	1.06
204	108.1	85.4	80.2	85.7	85.8	89.2	89.5	89.5	100.6	96.1	81.7	90.0	90	1.20	0.95	0.89	0.95	0.95	0.99	0.99	0.99	1.12
205	258.0	223.9	217.2	220.1	247.6	248.6	146.3	160.1	128.9	126.6	126.7	126.6	186	1.39	1.20	1.17	1.18	1.33	1.34	0.79	0.86	0.69
206	47.2	46.4	45.7	49.1	47.2	52.2	53.5	57.9	51.1	47.8	43.5	50.5	49	0.96	0.94	0.93	0.99	0.96	1.06	1.08	1.17	1.04
207	194.5	199.9	202.4	215.8	291.7	287.5	285.9	253.0	255.9	218.2	167.4	186.1	230	0.85	0.87	0.88	0.94	1.27	1.25	1.24	1.10	1.11
208	66.4	61.5	65.2	69.2	74.0	60.0	86.1	85.2	77.5	71.8	69.3	68.5	71	0.93	0.86	0.92	0.97	1.04	0.84	1.21	1.20	1.09
209	19.5	19.6	19.7	18.2	17.9	19.9	18.8	19.2	20.5	15.8	17.3	17.3	19	1.04	1.05	1.06	0.98	0.96	1.07	1.01	1.03	1.10
210	484.0	531.9	491.6	572.6	699.5	1117.4	1489.6	1801.4	972.7	637.0	494.1	493.1	815	0.59	0.65	0.60	0.70	0.86	1.37	1.83	2.21	1.19
211	555.0	583.8	563.8	598.5	570.2	598.7	578.3	660.6	537.2	443.2	424.6	483.6	550	1.01	1.06	1.03	1.09	1.04	1.09	1.05	1.20	0.98
212	167.4	166.4	174.6	190.1	191.9	205.2	206.5	219.5	233.9	166.5	161.3	164.7	187	0.89	0.89	0.93	1.01	1.02	1.10	1.10	1.17	1.25
213	1755.0	1697.9	1713.0	1667.4	1955.5	2032.9	2172.0	1934.6	1938.2	1717.8	1615.1	1575.5	1,815	0.97	0.94	0.94	0.92	1.08	1.12	1.20	1.07	1.07
214	1273.7	1298.8	1277.5	1412.2	1706.1	2315.2	2529.0	3325.2	2926.8	2064.8	1427.6	1424.0	1,915	0.67	0.68	0.67	0.74	0.89	1.21	1.32	1.74	1.53
215	84.6	97.8	95.6	88.5	82.4	95.1	84.5	108.8	170.2	88.1	83.2	81.2	97	0.87	1.01	0.99	0.92	0.85	0.98	0.87	1.13	1.76
216	14.9	13.9	12.5	12.3	13.5	14.7	15.1	18.8	15.9	14.7	15.4	15.6	15	1.01	0.94	0.85	0.83	0.91	0.99	1.02	1.27	1.07
217	108.0	120.3	110.8	107.0	106.1	119.1	116.8	147.2	107.6	119.7	120.1	99.8	115	0.94	1.04	0.96	0.93	0.92	1.03	1.01	1.28	0.93
218	120.0	189.0	105.5	103.6	131.3	190.6	196.8	168.4	152.3	105.4	112.5	117.0	141	0.85	1.34	0.75	0.73	0.93	1.35	1.40	1.19	1.08
219	13.8	13.6	21.4	17.5	19.7	17.1	20.4	12.8	13.6	12.6	11.7	11.8	16	0.89	0.88	1.38	1.13	1.27	1.11	1.31	0.82	0.88
220	62.2	62.6	67.3	70.2	72.7	69.1	70.2	77.0	71.3	72.9	69.4	71.7	70	0.89	0.90	0.96	1.01	1.04	0.99	1.01	1.10	1.02
221	44.1	47.9	55.2	55.2	54.1	61.4	70.2	69.2	57.1	51.4	51.3	47.6	55	0.80	0.87	1.00	1.00	0.98	1.11	1.27	1.25	1.03
222	18.9	18.5	18.3	17.7	14.9	14.8	15.1	15.6	14.3	12.8	12.8	11.6	15	1.23	1.20	1.18	1.14	0.96	0.96	0.98	1.01	0.92
223	596.3	610.4	641.3	714.8	706.4	860.5	977.6	939.9	872.6	778.2	710.3	728.2	761	0.78	0.80	0.84	0.94	0.93	1.13	1.28	1.23	1.15
224	12495.0	13143.9	13367.6	12219.5	12321.1	14190.7	14477.1	17538.4	15650.7	12836.8	11784.9	11722.3	13,479	0.93	0.98	0.99	0.91	0.91	1.05	1.07	1.30	1.16
225	1123.8	1148.0	961.7	1105.0	1155.0	1204.0	1350.3	1454.6	1376.3	1248.6	1102.1	1087.0	1,193	0.94	0.96	0.81	0.93	0.97	1.01	1.13	1.22	1.15
226	168.8	161.9	164.6	190.2	189.4	217.6	231.6	233.0	245.6	198.2	167.2	187.2	196	0.86	0.82	0.84	0.97	0.97	1.11	1.18	1.19	1.25
227	39.6	38.6	38.2	39.5	38.6	46.9	49.3	49.1	46.6	44.0	40.2	40.5	43	0.93	0.91	0.90	0.93	0.91	1.10	1.16	1.15	1.09
228	206.9	204.6	199.5	208.5	221.8	257.5	341.4	343.1	283.8	219.9	220.8	209.5	243	0.85	0.84	0.82	0.86	0.91	1.06	1.40	1.41	1.17
229	1404.9	1464.4	1484.9	1502.6	1589.5	1604.6	1443.7	1397.1	1494.5	1503.6	1400.5	1344.5	1,470	0.96	1.00	1.01	1.02	1.08	1.09	0.98	0.95	1.02
230	33.5	53.3	35.5	34.9	25.7	28.7	28.2	25.5	23.9	24.3	23.7	25.0	30	1.11	1.77	1.18	1.16	0.85	0.95	0.93	0.84	0.79
231	34.5	35.3	33.6	31.5	35.2	34.9	32.7	33.1	33.8	30.5	30.3	29.8	33	1.05	1.07	1.02	0.96	1.07	1.06	0.99	1.00	1.03
232	474.5	500.9	491.1	480.1	482.5	502.9	500.5	471.9	414.3	379.3	322.4	335.3	446	1.06	1.12	1.10	1.08	1.08	1.13	1.12	1.06	0.93
233	343.8	313.5	283.5	301.3	300.0	312.7	339.3	364.5	360.0	347.9	320.1	315.6	325	1.06	0.96	0.87	0.93	0.92	0.96	1.04	1.12	1.11
234	417.5	433.0	419.8	430.9	426.1	478.5	455.8	470.6	460.4	417.5	393.4	402.9	434	0.96	1.00	0.97	0.99	0.98	1.10	1.05	1.08	1.06
235	29.7	31.9	30.5	32.3	33.9	34.9	36.1	39.8	33.8	31.9	31.7	31.3	33	0.90	0.96	0.92	0.97	1.02	1.05	1.09	1.20	1.02
236	1277.3	1318.4	1360.1	1223.7	1262.4	1354.8	1453.2	1503.0	1440.1	1257.0	1182.5	1221.1	1,321	0.97	1.00	1.03	0.93	0.96	1.03	1.10	1.14	1.09
237	22.6	24.3	24.1	23.0	24.4	25.1	25.5	26.6	24.7	26.5	22.5	22.7	24	0.93	1.00	0.99	0.94	1.00	1.03	1.05	1.09	1.02
238	992.1	1173.1	1006.4	1193.4	1020.8	1321.5	1440.5	1410.9	1612.1	1223.6	1120.8	853.7	1,197	0.83	0.98	0.84	1.00	0.85	1.10	1.20	1.18	1.35
239	374.7	392.9	443.6	437.2	465.6	390.4	417.3	331.4	300.5	250.8	234.8	244.6	357	1.05	1.10	1.24	1.22	1.30	1.09	1.17	0.93	0.84
240	9166.8	9136.1	9013.8	10654.8	11470.7	14947.6	16733.7	19786.5	14790.3	10750.1	8781.3	8510.4	11,978	0.77	0.76	0.75	0.89	0.96	1.25	1.40	1.65	1.23
241	384.4	432.8	413.3	384.4	391.8	433.3	401.3	410.7	409.7	362.8	351.4	353.2	394	0.98	1.10	1.05	0.98	0.99	1.10	1.02	1.04	1.04
242	50.0	49.9	59.4	62.1	68.8	70.3	79.6	89.3	74.0	53.9	53.3	54.3	64	0.78	0.78	0.93	0.97	1.08	1.10	1.25	1.40	1.16
243	118.0	159.7	162.4	176.9	147.9	160.4	180.0	175.5	131.5	114.8	113.9	110.3	146	0.81	1.09	1.11	1.21	1.01	1.10	1.23	1.20	0.90

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
244	741.0	798.5	909.6	945.3	1183.3	1680.1	2071.1	2343.2	1160.0	873.8	765.8	728.9	1,183	0.63	0.67	0.77	0.80	1.00	1.42	1.75	1.98	0.98
245	1280.5	1294.3	1234.8	1142.5	1281.0	1462.8	1588.6	1720.8	1567.3	1239.2	1130.2	1144.9	1,341	0.96	0.97	0.92	0.85	0.96	1.09	1.19	1.28	1.17
246	354.7	368.0	365.5	379.2	433.2	542.7	645.5	623.7	499.0	414.8	313.2	333.2	439	0.81	0.84	0.83	0.86	0.99	1.24	1.47	1.42	1.14
247	754.7	795.5	789.4	765.5	781.2	845.0	862.2	924.4	830.2	764.5	678.8	675.3	789	0.96	1.01	1.00	0.97	0.99	1.07	1.09	1.17	1.05
248	656.3	645.5	665.5	748.2	786.1	876.7	901.0	1006.8	906.3	836.5	638.1	648.2	776	0.85	0.83	0.86	0.96	1.01	1.13	1.16	1.30	1.17
249	58.1	58.6	53.7	52.9	62.5	72.4	77.3	85.4	120.5	100.1	64.1	64.6	73	0.80	0.81	0.74	0.73	0.86	1.00	1.07	1.18	1.66
250	90.9	92.0	97.8	92.9	80.5	88.1	92.8	87.6	77.2	73.1	77.9	84.8	86	1.05	1.07	1.13	1.08	0.93	1.02	1.08	1.02	0.89
251	34.9	35.3	34.1	35.2	34.4	37.6	38.8	44.2	35.5	35.3	35.0	33.3	36	0.97	0.98	0.94	0.97	0.95	1.04	1.07	1.22	0.98
252	390.5	356.1	349.0	392.5	432.7	488.0	464.5	530.4	463.6	399.5	350.6	334.0	413	0.95	0.86	0.85	0.95	1.05	1.18	1.13	1.29	1.12
253	282.4	318.0	313.3	302.8	301.9	307.5	313.5	313.8	321.5	287.5	278.4	282.8	302	0.94	1.05	1.04	1.00	1.00	1.02	1.04	1.04	1.06
254	22.7	21.5	22.4	25.9	25.9	35.5	29.1	31.8	36.8	26.6	23.5	21.7	27	0.84	0.80	0.83	0.96	0.96	1.32	1.08	1.18	1.37
255	34.8	37.7	35.9	37.8	39.8	47.2	37.8	43.4	42.5	37.1	38.5	46.0	40	0.87	0.94	0.90	0.95	1.00	1.18	0.95	1.09	1.07
256	7.0	7.2	7.7	8.1	7.7	8.3	8.0	10.1	8.6	8.0	8.4	7.8	8	0.87	0.89	0.95	1.00	0.96	1.03	0.99	1.25	1.06
257	1192.0	1238.0	1352.3	1291.8	1310.3	1391.0	1411.0	1413.2	1343.4	1286.5	1167.0	1174.8	1,298	0.92	0.95	1.04	1.00	1.01	1.07	1.09	1.09	1.04
258	49.3	51.5	54.3	60.7	129.9	62.3	63.9	72.4	49.1	37.5	35.3	38.2	59	0.84	0.88	0.92	1.03	2.21	1.06	1.09	1.23	0.84
259	235.6	242.1	233.4	230.5	249.6	384.6	680.3	633.6	580.6	259.6	223.6	232.8	349	0.68	0.69	0.67	0.66	0.72	1.10	1.95	1.82	1.66
260	28.2	28.4	27.6	27.1	29.3	26.9	27.8	27.2	25.1	22.4	26.6	27.5	27	1.04	1.05	1.02	1.00	1.08	1.00	1.03	1.01	0.93
261	221.4	230.2	224.4	244.9	236.5	275.8	280.1	295.7	281.7	249.8	224.1	270.9	253	0.88	0.91	0.89	0.97	0.94	1.09	1.11	1.17	1.11
262	50.8	60.2	55.7	55.9	57.6	77.6	73.5	89.8	73.3	64.1	51.2	48.8	63	0.80	0.95	0.88	0.88	0.91	1.23	1.16	1.42	1.16
263	27.0	20.9	21.0	22.7	22.8	27.4	30.8	30.8	19.8	17.8	17.9	19.8	23	1.16	0.90	0.91	0.98	0.98	1.18	1.33	1.33	0.85
264	91.7	91.6	95.9	96.1	99.8	109.3	97.7	107.2	104.6	97.2	91.9	96.9	98	0.93	0.93	0.98	0.98	1.01	1.11	0.99	1.09	1.06
265	103.0	106.6	106.7	102.3	105.2	111.9	111.9	122.2	123.2	108.8	98.8	98.1	108	0.95	0.99	0.99	0.94	0.97	1.03	1.03	1.13	1.14
266	237.8	259.6	246.9	195.6	228.0	265.7	240.3	245.1	274.2	270.1	219.4	199.4	240	0.99	1.08	1.03	0.81	0.95	1.11	1.00	1.02	1.14
267	38.4	39.0	37.1	42.1	39.5	40.7	41.8	41.9	37.2	41.7	36.3	37.3	39	0.97	0.99	0.94	1.07	1.00	1.03	1.06	1.06	0.94
268	28596.7	30397.8	29044.0	30653.6	31388.5	35248.2	34997.8	42449.8	36976.1	31856.6	28140.6	26954.5	32,225	0.89	0.94	0.90	0.95	0.97	1.09	1.09	1.32	1.15
269	8.6	9.0	10.1	9.1	10.0	13.0	9.3	12.0	11.8	13.4	11.0	9.5	11	0.81	0.85	0.96	0.87	0.94	1.23	0.88	1.14	1.11
270	146.0	157.3	163.9	160.2	167.5	190.2	191.7	183.3	186.0	167.3	149.1	156.9	168	0.87	0.93	0.97	0.95	1.00	1.13	1.14	1.09	1.11
271	5.0	4.7	4.8	4.6	5.6	5.6	6.2	5.5	4.6	4.5	4.3	4.3	5	1.01	0.95	0.96	0.93	1.12	1.12	1.25	1.10	0.93
272	274.8	262.0	222.8	211.9	213.3	242.4	240.5	256.8	243.7	216.3	183.9	176.4	229	1.20	1.15	0.97	0.93	0.93	1.06	1.05	1.12	1.07
273	25.3	24.7	25.2	28.2	28.5	29.5	30.6	31.3	27.1	25.0	21.8	20.7	26	0.96	0.93	0.95	1.06	1.08	1.11	1.15	1.18	1.02
274	238.9	234.0	239.7	246.8	290.8	321.4	338.4	371.7	312.2	265.8	208.6	205.3	273	0.88	0.86	0.88	0.90	1.07	1.18	1.24	1.36	1.14
275	131.6	136.1	137.3	144.5	152.8	182.1	179.8	164.3	184.1	176.8	127.2	133.9	154	0.85	0.88	0.89	0.94	0.99	1.18	1.17	1.07	1.19
276	249.7	245.5	248.5	312.5	267.4	299.3	277.5	303.1	279.2	249.4	250.6	239.3	268	0.93	0.91	0.93	1.16	1.00	1.11	1.03	1.13	1.04
277	2041.0	2094.6	2156.3	2096.4	2112.0	2331.3	2384.1	2426.2	2290.7	2057.5	1968.6	2092.3	2,171	0.94	0.96	0.99	0.97	0.97	1.07	1.10	1.12	1.06
278	4.2	3.8	3.8	3.6	4.6	7.9	5.6	8.5	10.0	4.5	4.1	3.9	5	0.78	0.70	0.71	0.68	0.86	1.47	1.04	1.57	1.85
279	64.1	61.5	70.3	77.0	56.3	59.6	57.2	59.5	59.0	56.0	59.1	61.5	62	1.04	1.00	1.14	1.25	0.91	0.97	0.93	0.96	0.96
280	465.1	500.7	479.1	536.5	507.9	522.8	537.0	578.9	505.5	536.4	452.4	459.4	507	0.92	0.99	0.95	1.06	1.00	1.03	1.06	1.14	1.00
281	534.8	555.7	553.3	596.2	614.5	652.4	873.5	908.0	961.8	526.5	504.8	507.8	649	0.82	0.86	0.85	0.92	0.95	1.01	1.35	1.40	1.48
282	128.8	126.6	128.0	125.2	136.5	159.6	147.1	176.3	146.8	130.2	121.2	121.1	137	0.94	0.92	0.93	0.91	0.99	1.16	1.07	1.28	1.07
283	521.0	535.4	507.8	522.6	572.5	745.2	601.8	841.1	675.4	523.7	537.5	548.9	594	0.88	0.90	0.85	0.88	0.96	1.25	1.01	1.41	1.14
284	594.5	607.9	605.2	593.7	566.8	608.0	619.4	631.8	616.8	571.0	519.0	520.0	588	1.01	1.03	1.03	1.01	0.96	1.03	1.05	1.07	1.05
285	186.9	220.9	223.0	236.3	220.7	235.6	207.1	224.4	247.3	209.9	185.6	185.3	215	0.87	1.03	1.04	1.10	1.03	1.09	0.96	1.04	1.15
286	43.7	37.6	40.1	44.3	42.8	36.3	37.5	46.0	38.8	35.7	39.4	33.5	40	1.10	0.95	1.01	1.12	1.08	0.92	0.95	1.16	0.98
287	2632.8	2603.6	2554.3	2618.8	2721.9	3025.4	3269.3	3292.5	3225.3	2794.6	2787.0	2864.5	2,866	0.92	0.91	0.89	0.91	0.95	1.06	1.14	1.15	1.13
288	1706.5	1791.8	1751.9	1956.3	1934.2	2049.3	2128.1	2626.5	2425.0	2149.4	1751.7	1658.7	1,994	0.86	0.90	0.88	0.98	0.97	1.03	1.07	1.32	1.22
289	56.3	69.1	91.2	86.9	70.5	73.3	73.9	75.0	63.0	55.3	74.5	56.3	70	0.80	0.98	1.29	1.23	1.00	1.04	1.05	1.07	0.89
290	853.1	917.3	1034.8	987.7	1122.2	1022.8	942.4	876.7	966.0	783.4	752.3	803.1	922	0.93	1.00	1.12	1.07	1.22	1.11	1.02	0.95	1.05
291	29.4	30.4	29.5	28.0	32.1	30.9	33.6	31.1	32.2	28.2	30.8	28.2	30	0.97	1.00	0.97	0.92	1.06	1.02	1.11	1.02	1.06
292	26.7	26.8	30.5	27.6	34.4	33.7	34.7	36.5	30.6	30.2	26.4	29.4	31	0.87	0.88	1.00	0.90	1.12	1.10	1.13	1.19	1.00
293	1756.0	1895.4	1897.8	2088.0	2086.2	2591.1	2457.3	3376.5	2607.1	2082.2	1851.1	1868.2	2,213	0.79	0.86	0.86	0.94	0.94	1.17	1.11	1.53	1.18

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
294	17.2	15.0	13.9	15.0	14.4	23.8	35.9	14.7	13.8	13.4	13.2	14.1	17	1.01	0.88	0.82	0.88	0.84	1.40	2.11	0.87	0.81
295	75.4	76.9	78.9	74.9	76.0	87.6	82.5	85.4	88.8	76.1	72.5	82.1	80	0.95	0.96	0.99	0.94	0.95	1.10	1.03	1.07	1.11
296	452.7	421.8	431.9	459.0	460.5	550.1	480.6	587.4	536.7	494.7	439.6	447.5	480	0.94	0.88	0.90	0.96	0.96	1.15	1.00	1.22	1.12
297	34.9	35.6	34.6	35.8	37.8	42.9	39.7	42.2	36.8	36.0	35.8	32.8	37	0.94	0.96	0.93	0.96	1.02	1.16	1.07	1.14	0.99
298	339.7	369.4	283.8	300.8	270.8	282.7	294.4	318.6	289.5	282.5	276.5	265.4	298	1.14	1.24	0.95	1.01	0.91	0.95	0.99	1.07	0.97
299	73.7	91.7	116.8	125.8	128.5	145.5	135.2	146.9	125.0	101.9	111.3	111.9	118	0.63	0.78	0.99	1.07	1.09	1.23	1.15	1.25	1.06
300	119.5	120.4	122.6	120.5	136.9	185.7	179.3	180.0	171.2	128.5	121.2	120.0	142	0.84	0.85	0.86	0.85	0.96	1.31	1.26	1.27	1.20
301	219.6	299.1	241.4	236.8	269.0	284.0	326.1	495.1	321.9	246.5	248.9	244.1	286	0.77	1.05	0.84	0.83	0.94	0.99	1.14	1.73	1.13
302	801.7	788.2	738.2	767.1	840.8	897.9	875.9	1106.5	1029.3	784.6	713.8	730.0	839	0.95	0.94	0.88	0.91	1.00	1.07	1.04	1.32	1.23
303	1675.5	1792.4	1726.2	1857.2	1854.5	1900.5	2011.6	2104.9	1867.8	1719.9	1565.5	1676.2	1,813	0.92	0.99	0.95	1.02	1.02	1.05	1.11	1.16	1.03
304	144.6	164.0	146.0	144.7	152.8	163.4	175.3	187.8	162.0	148.2	156.6	150.6	158	0.92	1.04	0.92	0.92	0.97	1.03	1.11	1.19	1.03
305	63.4	71.8	73.1	72.7	69.5	63.0	68.0	70.6	68.4	57.5	54.6	63.7	66	0.96	1.08	1.10	1.09	1.05	0.95	1.03	1.06	1.03
306	93.2	92.4	88.6	89.0	107.8	119.7	104.5	104.4	95.9	89.8	90.9	92.3	97	0.96	0.95	0.91	0.91	1.11	1.23	1.07	1.07	0.98
307	115.1	113.3	142.4	117.5	105.5	104.2	106.6	101.0	98.5	81.1	82.2	82.9	104	1.10	1.09	1.37	1.13	1.01	1.00	1.02	0.97	0.95
308	51.0	62.1	64.0	50.0	58.6	78.6	84.4	95.2	42.4	28.3	25.3	24.9	55	0.92	1.12	1.16	0.90	1.06	1.42	1.52	1.72	0.76
309	525.6	560.3	560.6	560.8	567.5	640.3	731.1	684.3	677.6	584.3	527.9	557.5	598	0.88	0.94	0.94	0.94	0.95	1.07	1.22	1.14	1.13
310	42.3	50.0	44.5	45.5	45.0	45.9	39.7	48.9	47.5	49.7	43.9	42.6	45	0.93	1.10	0.98	1.00	0.99	1.01	0.87	1.08	1.04
311	24.7	26.3	27.6	26.9	26.6	29.6	29.5	33.2	28.8	26.7	26.6	26.4	28	0.89	0.95	1.00	0.97	0.96	1.07	1.06	1.20	1.04
312	578.6	588.1	555.5	560.8	615.4	721.5	581.0	759.9	543.7	469.3	471.8	494.7	578	1.00	1.02	0.96	0.97	1.06	1.25	1.00	1.31	0.94
313	14.3	19.4	15.0	15.2	15.7	16.8	16.5	19.6	16.0	17.2	15.7	12.9	16	0.88	1.20	0.93	0.94	0.97	1.04	1.02	1.21	0.99
314	636.9	666.4	642.6	665.4	644.0	759.5	761.5	867.1	848.4	667.3	628.5	650.9	703	0.91	0.95	0.91	0.95	0.92	1.08	1.08	1.23	1.21
315	183.1	182.3	183.6	180.7	206.2	264.8	265.3	292.3	246.1	200.2	183.2	192.9	215	0.85	0.85	0.85	0.84	0.96	1.23	1.23	1.36	1.14
316	547.0	588.7	572.3	642.0	664.6	821.3	838.7	936.0	924.2	806.3	662.6	641.8	720	0.76	0.82	0.79	0.89	0.92	1.14	1.16	1.30	1.28
317	122.9	106.4	106.5	93.2	100.7	126.1	114.6	133.3	97.9	92.0	88.6	78.9	105	1.17	1.01	1.01	0.89	0.96	1.20	1.09	1.27	0.93
318	319.6	315.0	345.8	279.1	269.6	269.3	276.3	288.0	315.7	271.5	262.2	263.2	290	1.10	1.09	1.19	0.96	0.93	0.93	0.95	0.99	1.09
319	275.8	258.8	250.4	267.5	300.7	311.9	343.9	362.0	325.8	255.4	246.6	294.1	291	0.95	0.89	0.86	0.92	1.03	1.07	1.18	1.24	1.12
320	45.7	48.5	51.7	50.3	55.0	69.3	66.9	89.0	58.9	53.1	53.2	53.7	58	0.79	0.84	0.89	0.87	0.95	1.20	1.15	1.54	1.02
321	33.8	32.9	31.5	30.6	31.0	32.9	34.5	37.5	33.8	31.8	29.5	33.0	33	1.03	1.00	0.96	0.93	0.95	1.00	1.06	1.14	1.03
322	2901.6	2941.7	2930.6	2933.0	3346.9	3751.1	3925.5	4330.5	4186.3	3178.5	3093.8	3157.4	3,390	0.86	0.87	0.86	0.87	0.99	1.11	1.16	1.28	1.23
323	177.6	212.5	169.7	188.3	190.4	223.8	225.3	240.7	249.4	200.0	209.2	182.0	206	0.86	1.03	0.82	0.92	0.93	1.09	1.09	1.17	1.21
324	423.4	574.0	463.3	471.2	459.0	609.1	516.0	583.1	603.6	543.1	457.8	465.8	514	0.82	1.12	0.90	0.92	0.89	1.18	1.00	1.13	1.17
325	120.5	135.0	132.7	129.7	155.8	153.9	159.6	161.6	136.1	139.5	122.3	115.9	139	0.87	0.97	0.96	0.94	1.12	1.11	1.15	1.17	0.98
326	2306.1	2292.5	2266.1	2316.1	2333.6	2441.1	2374.4	2361.4	2297.5	2271.5	2097.4	1879.4	2,270	1.02	1.01	1.00	1.02	1.03	1.08	1.05	1.04	1.01
327	743.6	724.4	795.9	873.6	969.6	1144.9	1324.3	2091.1	1884.9	1521.8	898.8	803.5	1,148	0.65	0.63	0.69	0.76	0.84	1.00	1.15	1.82	1.64
328	305.1	327.8	371.6	353.7	328.1	355.8	404.7	353.3	356.5	310.5	314.5	312.3	341	0.89	0.96	1.09	1.04	0.96	1.04	1.19	1.04	1.04
329	24.0	23.0	17.9	17.7	21.1	19.9	23.8	22.1	17.9	14.0	16.5	15.7	19	1.23	1.18	0.92	0.91	1.09	1.02	1.22	1.14	0.92
330	4.2	4.6	4.7	5.5	5.2	4.9	6.3	9.3	4.1	3.4	3.6	4.5	5	0.83	0.91	0.94	1.09	1.03	0.98	1.26	1.85	0.81
331	460.7	534.9	494.4	487.0	480.9	419.0	375.9	414.1	400.3	333.6	321.7	395.2	426	1.08	1.25	1.16	1.14	1.13	0.98	0.88	0.97	0.94
332	42.5	43.1	42.8	43.6	43.6	44.3	40.9	50.8	43.7	45.0	46.6	44.4	44	0.96	0.97	0.97	0.99	0.98	1.00	0.92	1.15	0.99
333	34.7	36.5	34.1	42.1	33.6	37.0	41.0	42.6	36.9	42.2	37.1	37.8	38	0.91	0.96	0.90	1.11	0.88	0.98	1.08	1.12	0.97
334	18.4	16.6	18.5	19.0	21.3	26.1	26.2	26.3	22.0	24.3	22.0	21.0	22	0.84	0.76	0.85	0.87	0.98	1.20	1.20	1.21	1.01
335	34.4	72.6	71.4	148.0	76.5	89.2	180.1	246.5	247.7	72.5	72.8	82.1	116	0.30	0.63	0.61	1.27	0.66	0.77	1.55	2.12	2.13
336	1473.2	1643.9	1577.1	1641.9	1795.4	1956.7	2076.6	2145.2	2123.4	1889.4	1578.1	1486.5	1,782	0.83	0.92	0.88	0.92	1.01	1.10	1.17	1.20	1.19
337	403.3	459.3	442.1	366.4	381.3	429.7	444.6	436.6	438.4	345.9	321.5	327.7	400	1.01	1.15	1.11	0.92	0.95	1.07	1.11	1.09	1.10
338	271.7	452.9	403.9	278.5	313.5	324.3	331.6	317.6	281.7	269.2	240.8	264.7	313	0.87	1.45	1.29	0.89	1.00	1.04	1.06	1.02	0.90
339	6.5	6.5	5.9	6.8	6.8	7.8	8.9	8.1	6.2	5.8	6.7	7.2	7	0.94	0.94	0.85	0.98	0.99	1.12	1.28	1.17	0.89
340	248.0	241.4	243.1	235.2	249.1	285.5	271.8	371.5	276.1	244.3	236.7	231.0	261	0.95	0.92	0.93	0.90	0.95	1.09	1.04	1.42	1.06
341	1434.4	1503.2	1476.3	1631.3	2104.6	3217.1	3837.1	4991.5	2816.1	1787.0	1458.1	1503.0	2,313	0.62	0.65	0.64	0.71	0.91	1.39	1.66	2.16	1.22

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
342	31.5	29.8	25.8	29.4	34.9	39.8	42.9	41.8	27.1	29.7	24.9	32.0	32	0.97	0.92	0.80	0.91	1.07	1.23	1.32	1.29	0.83
343	210.4	215.3	213.9	213.6	226.0	252.9	319.2	272.8	270.7	255.7	231.3	229.8	243	0.87	0.89	0.88	0.88	0.93	1.04	1.32	1.12	1.12
344	752.4	689.6	656.0	703.3	691.0	782.7	695.4	1014.1	954.2	787.7	551.3	688.3	747	1.01	0.92	0.88	0.94	0.92	1.05	0.93	1.36	1.28
345	91.5	110.7	86.9	97.1	97.7	100.8	108.5	117.8	166.2	124.7	99.3	91.4	108	0.85	1.03	0.81	0.90	0.91	0.94	1.01	1.09	1.54
346	261.5	271.0	272.7	270.5	335.0	353.0	375.9	417.3	401.2	294.3	241.8	232.6	311	0.84	0.87	0.88	0.87	1.08	1.14	1.21	1.34	1.29
347	146.5	169.4	163.6	163.4	165.9	181.8	180.9	190.4	177.1	169.0	163.9	157.6	169	0.87	1.00	0.97	0.97	0.98	1.07	1.07	1.13	1.05
348	61.6	70.0	73.8	62.4	76.2	81.1	83.9	91.0	82.2	66.1	63.3	63.2	73	0.85	0.96	1.01	0.86	1.05	1.11	1.15	1.25	1.13
349	150.2	153.6	155.5	154.1	188.0	221.8	218.7	258.3	250.9	221.5	195.7	193.0	197	0.76	0.78	0.79	0.78	0.96	1.13	1.11	1.31	1.27
350	201.5	216.7	211.7	181.6	205.1	195.8	197.5	203.5	203.4	180.0	182.9	193.5	198	1.02	1.10	1.07	0.92	1.04	0.99	1.00	1.03	1.03
351	614.5	625.2	635.2	658.7	633.2	839.8	977.1	1126.8	857.0	676.9	633.7	554.5	736	0.83	0.85	0.86	0.89	0.86	1.14	1.33	1.53	1.16
352	23.4	28.5	25.0	25.9	27.4	20.6	20.7	23.4	24.7	26.4	26.8	17.9	24	0.97	1.18	1.03	1.07	1.13	0.85	0.85	0.97	1.02
353	177.8	181.1	179.1	184.7	193.4	212.6	206.6	224.5	201.6	185.2	197.6	202.1	196	0.91	0.93	0.92	0.94	0.99	1.09	1.06	1.15	1.03
354	90.6	103.2	97.7	87.2	115.3	145.1	141.0	187.1	137.8	111.4	84.5	79.6	115	0.79	0.90	0.85	0.76	1.00	1.26	1.23	1.63	1.20
355	300.2	311.7	292.1	312.3	340.3	415.3	407.9	382.5	373.4	316.4	293.1	294.7	337	0.89	0.93	0.87	0.93	1.01	1.23	1.21	1.14	1.11
356	881.3	830.6	737.5	740.8	758.9	887.0	926.7	1031.8	1031.8	788.8	746.3	741.6	842	1.05	0.99	0.88	0.88	0.90	1.05	1.10	1.23	1.23
357	976.4	1028.8	1006.9	1142.2	1177.8	1463.6	1688.4	1944.8	1701.3	1168.7	1002.5	986.6	1,274	0.77	0.81	0.79	0.90	0.92	1.15	1.33	1.53	1.34
358	37.6	81.4	54.0	39.1	35.7	47.4	49.0	42.2	37.5	28.1	25.1	30.9	42	0.89	1.92	1.27	0.92	0.84	1.12	1.16	1.00	0.88
359	291.6	335.9	341.4	356.3	327.3	353.1	351.1	351.1	350.7	352.5	309.2	278.3	333	0.88	1.01	1.02	1.07	0.98	1.06	1.05	1.05	1.05
360	29.6	31.6	27.9	30.3	30.0	34.4	33.0	37.3	30.9	25.4	25.5	26.0	30	0.98	1.05	0.93	1.00	0.99	1.14	1.10	1.24	1.02
361	48.1	53.3	52.6	50.4	51.1	52.8	100.7	106.0	69.2	68.1	74.5	52.8	65	0.74	0.82	0.81	0.78	0.79	0.81	1.55	1.63	1.07
362	75.5	79.9	73.3	78.6	84.5	98.6	94.1	110.5	85.5	74.5	73.4	73.5	83	0.90	0.96	0.88	0.94	1.01	1.18	1.13	1.32	1.02
363	256.7	197.6	67.9	69.0	77.4	90.2	102.2	118.6	91.4	62.1	64.7	61.9	105	2.45	1.88	0.65	0.66	0.74	0.86	0.97	1.13	0.87
364	790.7	908.2	848.6	866.4	836.3	814.7	840.7	932.9	958.9	867.7	823.9	803.0	858	0.92	1.06	0.99	1.01	0.98	0.95	0.98	1.09	1.12
365	1648.2	1738.8	1575.2	1471.5	1499.8	1957.4	2003.0	2163.7	2268.4	1387.6	1301.4	1398.6	1,701	0.97	1.02	0.93	0.87	0.88	1.15	1.18	1.27	1.33
366	1002.5	1012.0	1025.7	1064.7	1213.3	1373.2	1323.8	1435.3	1329.7	1115.3	1115.6	1061.0	1,173	0.85	0.86	0.87	0.91	1.03	1.17	1.13	1.22	1.13
367	1488.0	1207.7	1247.7	1269.0	1242.7	1348.9	1417.5	1379.4	1352.8	1237.9	1154.4	1232.7	1,298	1.15	0.93	0.96	0.98	0.96	1.04	1.09	1.06	1.04
368	1472.8	1417.0	1341.9	1640.5	1515.8	1792.7	1755.2	1870.3	1653.1	2113.4	1295.1	1281.5	1,596	0.92	0.89	0.84	1.03	0.95	1.12	1.10	1.17	1.04
369	483.3	504.6	496.0	496.5	569.0	608.5	668.3	725.3	595.9	503.4	476.5	466.2	549	0.88	0.92	0.90	0.90	1.04	1.11	1.22	1.32	1.08
370	12.7	11.0	10.2	16.1	15.2	18.4	16.1	23.6	18.1	17.6	16.6	13.2	16	0.81	0.70	0.65	1.02	0.97	1.17	1.02	1.50	1.15
371	60.9	60.3	45.7	48.2	45.5	39.4	27.1	43.9	37.2	41.8	34.7	35.1	43	1.40	1.39	1.06	1.11	1.05	0.91	0.63	1.01	0.86
372	23.7	28.7	25.8	22.0	20.1	21.7	25.1	23.0	22.7	18.7	21.8	18.3	23	1.05	1.27	1.14	0.97	0.89	0.96	1.11	1.02	1.00
373	201.5	198.0	214.1	190.1	188.6	199.6	209.1	264.2	255.6	247.5	230.4	186.2	215	0.94	0.92	0.99	0.88	0.88	0.93	0.97	1.23	1.19
374	1171.0	1207.1	1251.6	1290.0	1393.5	1556.7	1706.5	1900.0	1636.7	1412.9	1270.0	1200.0	1,416	0.83	0.85	0.88	0.91	0.98	1.10	1.20	1.34	1.16
375	295.2	347.0	290.9	320.1	343.1	389.4	386.2	526.2	395.9	326.9	295.4	294.5	351	0.84	0.99	0.83	0.91	0.98	1.11	1.10	1.50	1.13
376	104.2	134.8	139.8	117.6	116.4	106.1	113.8	113.4	113.7	108.2	98.1	102.1	114	0.91	1.18	1.23	1.03	1.02	0.93	1.00	0.99	1.00
377	382.6	388.7	398.1	411.9	479.8	533.5	575.0	728.2	547.6	468.2	418.6	419.3	479	0.80	0.81	0.83	0.86	1.00	1.11	1.20	1.52	1.14
378	103.8	127.2	110.2	116.4	103.7	118.6	117.4	128.4	158.5	111.8	105.5	107.6	117	0.88	1.08	0.94	0.99	0.88	1.01	1.00	1.09	1.35
379	389.6	407.1	362.3	388.7	252.5	275.8	295.8	251.0	306.1	239.3	231.4	251.4	304	1.28	1.34	1.19	1.28	0.83	0.91	0.97	0.83	1.01
380	19.2	25.9	29.6	20.7	20.6	21.3	23.2	24.0	23.5	24.5	22.5	20.7	23	0.84	1.13	1.29	0.90	0.90	0.93	1.01	1.04	1.02
381	130.2	134.1	128.4	138.0	149.0	171.1	166.4	149.6	156.3	154.8	130.4	142.5	146	0.89	0.92	0.88	0.95	1.02	1.17	1.14	1.03	1.07
382	317.5	266.3	337.0	318.9	301.2	365.3	560.2	638.4	604.5	304.5	213.7	216.8	370	0.86	0.72	0.91	0.86	0.81	0.99	1.51	1.72	1.63
383	24.5	46.5	26.0	25.4	27.2	28.2	29.0	31.4	25.7	23.6	34.2	23.5	29	0.85	1.62	0.90	0.88	0.95	0.98	1.01	1.09	0.89
384	167.1	171.5	167.8	173.9	171.2	166.8	167.3	169.8	162.9	163.5	162.1	163.2	167	1.00	1.03	1.00	1.04	1.02	1.00	1.00	1.02	0.97
385	1593.5	1642.9	1638.7	1580.0	1693.5	2040.0	2261.3	2742.6	2660.0	1751.6	1542.4	1554.5	1,892	0.84	0.87	0.87	0.84	0.90	1.08	1.20	1.45	1.41
386	84.1	94.0	96.0	80.5	85.8	101.7	87.3	98.5	88.2	81.5	77.2	97.3	89	0.94	1.05	1.07	0.90	0.96	1.14	0.98	1.10	0.99
387	50.1	44.7	41.7	54.1	56.2	50.4	51.5	47.4	51.5	45.7	45.0	46.2	49	1.03	0.92	0.86	1.11	1.15	1.03	1.06	0.97	1.06
388	29.5	19.0	19.1	20.5	20.7	24.2	23.1	23.8	22.2	21.3	21.5	22.5	22	1.32	0.85	0.86	0.92	0.93	1.09	1.04	1.07	1.00

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
389	1449.2	1407.5	1502.2	1369.5	1329.7	1633.3	1739.5	1347.3	1448.9	1240.1	1294.3	1291.1	1,421	1.02	0.99	1.06	0.96	0.94	1.15	1.22	0.95	1.02
390	61.7	54.8	61.2	52.3	55.6	53.1	59.2	70.7	54.3	56.1	56.1	53.7	57	1.08	0.95	1.07	0.91	0.97	0.92	1.03	1.23	0.95
391	620.6	554.7	480.1	513.9	586.0	713.1	790.2	749.4	711.1	503.9	521.3	672.0	618	1.00	0.90	0.78	0.83	0.95	1.15	1.28	1.21	1.15
392	1563.1	1669.1	1644.0	1081.3	1594.0	1688.5	1755.6	1868.9	1712.1	1455.6	1363.5	1390.7	1,566	1.00	1.07	1.05	0.69	1.02	1.08	1.12	1.19	1.09
393	1355.6	1382.7	1369.2	1373.7	1468.5	1519.7	1506.4	1615.3	1552.8	1476.0	920.0	868.3	1,367	0.99	1.01	1.00	1.00	1.07	1.11	1.10	1.18	1.14
394	46.0	41.2	44.8	39.8	37.5	47.5	45.5	44.6	43.5	42.5	39.2	41.4	43	1.08	0.96	1.05	0.93	0.88	1.11	1.06	1.04	1.02
395	83.5	85.4	80.9	83.2	85.6	91.8	85.8	90.1	77.7	76.5	72.8	73.1	82	1.02	1.04	0.98	1.01	1.04	1.12	1.04	1.10	0.95
396	924.0	997.4	924.9	1053.3	1050.7	1160.5	1273.6	1775.1	1529.6	1193.4	989.6	950.1	1,152	0.80	0.87	0.80	0.91	0.91	1.01	1.11	1.54	1.33
397	67.1	84.9	87.7	92.2	103.3	120.1	102.7	143.6	145.1	110.1	98.0	100.4	105	0.64	0.81	0.84	0.88	0.99	1.15	0.98	1.37	1.39
398	36.1	39.7	41.2	42.2	45.0	56.5	58.2	44.3	44.4	40.0	35.2	35.1	43	0.84	0.92	0.95	0.98	1.04	1.31	1.35	1.03	1.03
399	42.7	46.2	43.9	42.9	41.2	36.3	31.6	37.1	32.8	31.0	30.5	31.5	37	1.15	1.24	1.18	1.15	1.10	0.97	0.85	1.00	0.88
400	635.0	607.5	606.3	539.3	574.7	643.2	681.6	663.9	600.8	549.4	725.8	566.1	616	1.03	0.99	0.98	0.88	0.93	1.04	1.11	1.08	0.98
401	35.3	35.5	35.0	34.5	31.8	35.4	34.2	33.2	34.4	29.3	31.0	30.7	33	1.06	1.06	1.05	1.03	0.95	1.06	1.02	1.00	1.03
402	250.1	297.6	275.3	268.8	279.5	306.1	301.2	320.1	294.5	260.3	252.8	263.8	281	0.89	1.06	0.98	0.96	1.00	1.09	1.07	1.14	1.05
403	33.4	35.0	35.0	37.7	36.6	42.2	44.7	56.4	37.0	38.4	34.1	40.8	39	0.85	0.89	0.89	0.96	0.93	1.08	1.14	1.43	0.94
404	59.8	55.3	54.9	59.0	80.5	78.7	91.0	70.7	70.0	59.7	61.4	60.7	67	0.89	0.83	0.82	0.88	1.20	1.18	1.36	1.06	1.05
405	328.0	346.7	359.2	370.3	369.4	433.2	438.1	605.0	461.9	363.4	343.2	335.2	396	0.83	0.88	0.91	0.93	0.93	1.09	1.11	1.53	1.17
406	1140.5	1226.7	1255.1	1212.4	1230.6	1332.8	1286.8	1567.7	1331.5	1385.8	1102.9	1168.3	1,270	0.90	0.97	0.99	0.95	0.97	1.05	1.01	1.23	1.05
407	557.5	617.0	690.7	664.0	730.7	789.7	772.1	842.9	742.9	636.9	554.6	560.4	680	0.82	0.91	1.02	0.98	1.07	1.16	1.14	1.24	1.09
408	117.0	108.0	101.4	100.6	134.5	147.1	152.4	123.1	130.1	102.8	98.8	103.5	118	0.99	0.91	0.86	0.85	1.14	1.24	1.29	1.04	1.10
409	28.1	21.4	21.4	21.1	26.2	20.7	21.8	30.9	25.1	20.5	20.2	20.2	23	1.22	0.93	0.92	0.91	1.13	0.89	0.94	1.34	1.09
410	29.4	29.3	28.5	29.7	34.7	43.3	40.7	50.5	34.3	29.5	52.7	30.5	36	0.81	0.81	0.79	0.82	0.96	1.20	1.13	1.40	0.95
411	318.4	335.4	357.8	350.6	335.6	362.7	389.5	354.4	377.7	383.9	349.7	400.5	360	0.89	0.93	0.99	0.97	0.93	1.01	1.08	0.99	1.05
412	110.5	120.8	113.5	114.6	113.2	124.7	121.1	127.6	118.6	113.2	111.2	110.0	117	0.95	1.04	0.97	0.98	0.97	1.07	1.04	1.09	1.02
413	1426.0	1379.3	1362.6	1348.4	1413.7	1511.7	1433.5	1483.2	1550.1	1309.7	1225.0	1230.4	1,389	1.03	0.99	0.98	0.97	1.02	1.09	1.03	1.07	1.12
414	352.1	444.4	369.5	358.1	459.6	485.8	552.3	549.3	455.1	370.5	364.0	338.0	425	0.83	1.05	0.87	0.84	1.08	1.14	1.30	1.29	1.07
415	261.0	302.0	303.1	313.1	337.5	437.0	556.9	528.2	451.8	302.5	261.2	279.6	361	0.72	0.84	0.84	0.87	0.93	1.21	1.54	1.46	1.25
416	1545.1	1454.4	1344.6	1502.3	1268.2	1155.3	2001.1	1939.6	2796.3	1664.1	1136.4	896.0	1,559	0.99	0.93	0.86	0.96	0.81	0.74	1.28	1.24	1.79
417	14.7	19.7	29.0	22.5	16.6	20.2	19.7	16.7	17.5	15.0	16.8	17.0	19	0.78	1.05	1.55	1.20	0.88	1.08	1.05	0.89	0.93
418	141.1	142.5	141.3	134.5	129.5	147.9	144.4	147.4	144.2	135.7	124.7	125.9	138	1.02	1.03	1.02	0.97	0.94	1.07	1.04	1.07	1.04
419	108.5	131.3	136.4	144.9	162.7	196.6	202.5	235.5	211.1	141.0	141.7	141.9	163	0.67	0.81	0.84	0.89	1.00	1.21	1.24	1.45	1.30
420	64.7	61.3	54.1	55.3	53.2	53.1	54.5	55.6	76.2	73.6	58.8	57.7	60	1.08	1.02	0.90	0.92	0.89	0.89	0.91	0.93	1.27
421	103.1	92.2	94.6	99.8	101.7	112.0	113.7	138.6	104.9	99.4	92.8	119.2	106	0.97	0.87	0.89	0.94	0.96	1.06	1.07	1.31	0.99
422	98.7	106.0	104.6	98.6	108.1	122.1	121.0	135.1	129.6	131.6	97.3	95.7	112	0.88	0.94	0.93	0.88	0.96	1.09	1.08	1.20	1.15
423	122.4	131.1	127.3	138.6	210.9	283.3	396.9	421.3	254.6	224.6	145.2	146.2	217	0.56	0.60	0.59	0.64	0.97	1.31	1.83	1.94	1.17
424	339.9	332.8	335.2	329.0	362.5	399.6	405.9	399.1	353.5	348.6	317.6	375.7	358	0.95	0.93	0.94	0.92	1.01	1.12	1.13	1.11	0.99
425	49.2	51.9	51.9	51.6	58.5	63.7	56.0	61.8	56.4	50.7	50.1	52.4	55	0.90	0.95	0.95	0.95	1.07	1.17	1.03	1.13	1.03
426	173.4	186.8	186.4	184.1	195.1	271.3	319.6	412.5	316.6	215.7	195.8	188.3	237	0.73	0.79	0.79	0.78	0.82	1.14	1.35	1.74	1.33
427	33.0	34.7	35.3	33.9	38.0	36.2	35.5	40.3	42.7	34.9	38.1	35.9	37	0.90	0.95	0.97	0.93	1.04	0.99	0.97	1.10	1.17
428	1038.8	1068.6	975.5	1157.2	1220.9	1533.3	1500.5	1832.7	1350.3	1223.7	1221.6	1063.6	1,266	0.82	0.84	0.77	0.91	0.96	1.21	1.19	1.45	1.07
429	143.8	123.1	123.2	149.1	126.6	128.1	130.5	126.9	126.0	122.1	128.4	122.2	129	1.11	0.95	0.95	1.15	0.98	0.99	1.01	0.98	0.98
430	384.0	489.6	465.7	436.1	473.8	487.5	486.8	499.0	418.2	366.5	365.3	377.4	438	0.88	1.12	1.06	1.00	1.08	1.11	1.11	1.14	0.96
431	256.3	258.7	266.1	237.2	270.6	323.9	312.3	499.8	305.1	233.2	220.8	207.3	283	0.91	0.92	0.94	0.84	0.96	1.15	1.11	1.77	1.08
432	92.1	84.4	89.4	99.1	109.4	115.4	113.2	133.9	121.5	108.8	97.2	97.9	105	0.88	0.80	0.85	0.94	1.04	1.10	1.08	1.27	1.16
433	411.5	466.6	497.3	527.2	500.0	552.9	555.3	560.6	541.6	515.2	508.1	497.0	511	0.81	0.91	0.97	1.03	0.98	1.08	1.09	1.10	1.06
434	86.7	87.5	87.9	87.0	80.2	91.5	89.2	109.5	97.2	76.9	76.3	78.2	87	0.99	1.00	1.01	1.00	0.92	1.05	1.02	1.25	1.11
435	6762.4	7179.4	6695.4	6006.4	7207.3	8388.3	9521.8	10043.8	9302.4	7201.0	6707.3	6504.0	7,627	0.89	0.94	0.88	0.79	0.95	1.10	1.25	1.32	1.22

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
436	14.0	20.3	14.6	15.2	18.5	20.0	15.5	16.7	14.1	15.6	14.7	14.2	16	0.87	1.26	0.90	0.94	1.15	1.24	0.96	1.03	0.88
437	42.5	34.2	33.4	37.8	41.5	45.1	46.9	43.5	44.4	43.7	53.9	32.4	42	1.02	0.82	0.80	0.91	1.00	1.08	1.13	1.05	1.07
438	53.6	52.3	52.2	53.1	58.1	78.1	74.6	137.1	70.2	129.9	58.8	54.9	73	0.74	0.72	0.72	0.73	0.80	1.07	1.03	1.88	0.97
439	14.8	14.6	16.8	16.3	20.5	20.4	22.5	17.1	17.4	14.3	12.8	13.5	17	0.89	0.87	1.00	0.98	1.22	1.22	1.34	1.02	1.04
440	1243.7	1222.4	1203.1	1260.5	1293.5	1406.2	1355.9	1481.8	1495.5	1366.6	1272.7	1225.6	1,319	0.94	0.93	0.91	0.96	0.98	1.07	1.03	1.12	1.13
441	95.5	97.6	93.9	95.7	100.4	97.1	96.2	98.9	96.1	100.4	87.0	94.5	96	0.99	1.02	0.98	1.00	1.04	1.01	1.00	1.03	1.00
442	81.3	79.8	74.4	75.9	86.5	114.3	112.6	137.7	119.4	109.4	89.1	79.6	97	0.84	0.83	0.77	0.78	0.90	1.18	1.17	1.42	1.24
443	1544.8	1611.0	1583.5	1267.8	1255.4	1500.8	1590.2	1448.3	1300.2	1198.5	1162.5	1171.3	1,386	1.11	1.16	1.14	0.91	0.91	1.08	1.15	1.04	0.94
444	129.9	128.0	129.2	130.5	138.6	171.0	188.2	153.7	170.6	135.3	139.5	144.5	147	0.89	0.87	0.88	0.89	0.95	1.17	1.28	1.05	1.16
445	2191.7	2171.1	2178.9	2238.0	2368.4	3020.1	2926.5	3870.7	2978.1	2314.7	2863.5	2152.6	2,606	0.84	0.83	0.84	0.86	0.91	1.16	1.12	1.49	1.14
446	49.4	51.1	46.2	45.5	49.2	49.8	46.3	47.9	47.1	49.6	51.5	48.2	48	1.02	1.05	0.95	0.94	1.01	1.03	0.96	0.99	0.97
447	1069.7	1174.0	1143.2	1198.4	1147.5	1337.3	1489.4	1572.9	1459.2	1298.6	1081.1	1036.5	1,251	0.86	0.94	0.91	0.96	0.92	1.07	1.19	1.26	1.17
448	27.8	33.8	37.8	33.1	26.8	29.6	24.6	27.4	23.1	24.7	23.6	24.0	28	0.99	1.21	1.35	1.18	0.96	1.06	0.88	0.98	0.82
449	25.1	28.4	27.7	28.5	27.3	26.1	35.5	31.7	31.3	39.2	26.2	27.8	30	0.85	0.96	0.94	0.96	0.92	0.88	1.20	1.07	1.06
450	85.3	105.9	96.2	85.6	84.2	86.2	90.7	118.8	107.4	91.1	76.8	75.9	92	0.93	1.15	1.05	0.93	0.91	0.94	0.99	1.29	1.17
451	144.0	158.3	136.0	126.7	133.3	137.9	137.1	136.5	136.3	130.0	127.1	131.1	136	1.06	1.16	1.00	0.93	0.98	1.01	1.01	1.00	1.00
452	88.2	111.7	111.4	78.1	67.5	73.9	91.8	73.5	67.0	53.7	52.1	74.2	79	1.12	1.42	1.42	0.99	0.86	0.94	1.17	0.93	0.85
453	82.6	89.3	87.3	81.4	79.9	73.9	48.3	48.0	48.2	51.0	51.6	45.3	66	1.26	1.36	1.33	1.24	1.22	1.13	0.74	0.73	0.74
454	50.9	41.0	44.9	45.9	53.7	51.7	58.4	57.8	74.4	45.0	49.8	35.5	51	1.00	0.81	0.88	0.91	1.06	1.02	1.15	1.14	1.47
455	982.8	1034.3	1040.5	1054.2	1108.0	1205.5	1194.7	1279.2	1108.7	1069.8	959.5	963.7	1,083	0.91	0.95	0.96	0.97	1.02	1.11	1.10	1.18	1.02
456	410.0	432.9	462.3	436.7	430.3	468.3	499.7	483.2	465.7	395.8	394.0	391.0	439	0.93	0.99	1.05	0.99	0.98	1.07	1.14	1.10	1.06
457	8.5	11.0	8.4	8.2	9.0	8.5	8.6	12.0	12.0	10.1	9.2	8.1	9	0.90	1.16	0.88	0.87	0.95	0.89	0.91	1.27	1.27
458	95.0	95.2	97.3	107.5	137.5	176.2	229.1	279.1	156.4	118.4	103.8	100.4	141	0.67	0.67	0.69	0.76	0.97	1.25	1.62	1.97	1.11
459	137.6	145.8	145.3	159.8	183.8	182.6	183.7	195.4	210.1	210.0	195.5	188.5	178	0.77	0.82	0.82	0.90	1.03	1.02	1.03	1.10	1.18
460	17.1	16.1	18.8	17.4	17.0	18.9	19.6	20.9	16.3	17.1	15.6	15.1	17	0.98	0.92	1.08	0.99	0.97	1.08	1.12	1.19	0.93
461	518.3	527.6	533.7	551.5	551.3	557.3	596.1	639.6	617.4	518.9	472.0	482.8	547	0.95	0.96	0.98	1.01	1.01	1.02	1.09	1.17	1.13
462	95.8	107.3	104.1	114.3	112.6	112.3	115.5	110.1	117.6	103.2	94.0	95.3	107	0.90	1.00	0.97	1.07	1.05	1.05	1.08	1.03	1.10
463	916.3	924.1	853.9	861.7	879.6	1133.5	1092.1	1475.2	1120.4	904.8	871.3	884.5	993	0.92	0.93	0.86	0.87	0.89	1.14	1.10	1.49	1.13
464	133.6	122.3	120.3	140.1	139.5	139.3	139.1	139.4	124.4	141.4	141.3	134.9	135	0.99	0.91	0.89	1.04	1.04	1.03	1.03	1.04	0.92
465	49.6	51.4	52.7	47.7	51.6	59.4	64.9	73.7	58.7	50.0	52.5	52.9	55	0.90	0.93	0.95	0.86	0.93	1.07	1.17	1.33	1.06
466	438.4	451.0	448.1	394.5	437.3	440.7	445.9	517.3	463.3	405.9	394.1	408.3	437	1.00	1.03	1.03	0.90	1.00	1.01	1.02	1.18	1.06
467	145.7	81.5	86.4	86.1	79.2	75.8	80.9	78.9	72.3	80.1	67.6	67.3	83	1.75	0.98	1.03	1.03	0.95	0.91	0.97	0.94	0.87
468	27.1	28.0	27.0	42.3	45.9	50.0	39.5	36.1	30.2	28.2	31.9	30.4	35	0.78	0.81	0.78	1.22	1.32	1.44	1.14	1.04	0.87
469	494.0	530.4	514.2	512.1	503.7	539.9	541.7	595.0	523.9	440.4	433.1	449.2	506	0.98	1.05	1.02	1.01	0.99	1.07	1.07	1.17	1.03
470	26.0	27.4	24.6	26.9	24.9	30.7	28.3	35.0	36.3	23.8	25.8	23.6	28	0.94	0.99	0.89	0.97	0.90	1.11	1.02	1.26	1.31
471	159.9	169.2	164.3	152.1	177.5	208.0	187.9	181.4	272.9	175.0	165.3	166.2	182	0.88	0.93	0.90	0.84	0.98	1.15	1.03	1.00	1.50
472	377.5	396.2	384.7	369.2	464.6	483.2	493.2	561.6	463.3	432.1	357.0	435.9	435	0.87	0.91	0.88	0.85	1.07	1.11	1.13	1.29	1.07
473	935.5	951.8	926.6	1089.4	1118.6	1235.1	1167.0	1073.3	1056.5	1006.2	850.6	835.6	1,021	0.92	0.93	0.91	1.07	1.10	1.21	1.14	1.05	1.04
474	2315.4	2589.3	2425.9	2481.0	2442.4	2678.8	2666.6	2867.5	2891.5	2412.9	2546.2	2569.2	2,574	0.90	1.01	0.94	0.96	0.95	1.04	1.04	1.11	1.12
475	7329.2	7285.2	7024.8	7165.0	7469.9	8094.1	8469.3	9422.3	8680.2	7361.9	6796.8	6786.8	7,657	0.96	0.95	0.92	0.94	0.98	1.06	1.11	1.23	1.13
476	927.5	938.3	930.5	954.2	953.2	1226.0	1210.8	1658.2	1254.3	1091.5	1077.8	1105.7	1,111	0.84	0.84	0.84	0.86	0.86	1.10	1.09	1.49	1.13
477	1934.6	2112.9	2146.0	2197.3	2124.4	2505.9	2413.1	2430.1	2403.5	2283.6	2009.1	2125.1	2,224	0.87	0.95	0.97	0.99	0.96	1.13	1.09	1.09	1.08
478	1017.2	1029.8	996.3	981.6	1025.1	1026.5	983.9	1044.6	1042.0	946.4	904.4	897.9	991	1.03	1.04	1.01	0.99	1.03	1.04	0.99	1.05	1.05
479	4315.8	4663.0	4689.3	4730.6	4839.5	5351.4	5674.6	5733.0	5564.3	4590.6	4458.4	4549.9	4,930	0.88	0.95	0.95	0.96	0.98	1.09	1.15	1.16	1.13
480	63.9	71.9	58.5	53.0	56.6	60.7	66.6	69.6	67.6	61.9	58.0	58.6	62	1.03	1.15	0.94	0.85	0.91	0.98	1.07	1.12	1.09
481	212.4	217.0	220.0	229.4	222.0	266.2	268.9	297.1	289.5	308.2	217.0	228.6	248	0.86	0.88	0.89	0.92	0.89	1.07	1.08	1.20	1.17
482	41.6	41.6	43.6	43.8	44.8	45.1	46.4	54.7	46.3	39.5	37.5	37.9	44	0.96	0.95	1.00	1.00	1.03	1.04	1.06	1.25	1.06

	Month Number																					
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand								
Point Number	January	February	March	April	May	June	July	August	September	October	November	December	Year Average Day Demand (1000 gal)	January: Ratio of Monthly Average to Average Day	February: Ratio of Monthly Average to Average Day	March: Ratio of Monthly Average to Average Day	April: Ratio of Monthly Average to Average Day	May: Ratio of Monthly Average to Average Day	June: Ratio of Monthly Average to Average Day	July: Ratio of Monthly Average to Average Day	August: Ratio of Monthly Average to Average Day	September: Ratio of Monthly Average to Average Day
483	218.7	211.6	227.8	222.7	245.6	572.2	310.5	362.0	335.1	267.0	219.3	369.6	297	0.74	0.71	0.77	0.75	0.83	1.93	1.05	1.22	1.13
484	55.0	59.9	59.5	57.7	62.3	62.5	64.6	77.2	66.8	52.1	49.7	52.5	60	0.92	1.00	0.99	0.96	1.04	1.04	1.08	1.29	1.11
485	7092.7	6698.0	6480.3	6498.6	6417.1	7955.0	7770.3	7849.5	8259.7	6214.5	5610.9	6572.0	6,952	1.02	0.96	0.93	0.93	0.92	1.14	1.12	1.13	1.19
486	2780.4	2860.8	2813.1	2685.8	2717.6	3275.0	3540.0	3382.8	3220.5	2917.9	2614.8	2683.7	2,958	0.94	0.97	0.95	0.91	0.92	1.11	1.20	1.14	1.09
487	13.6	12.6	12.8	14.1	14.2	13.0	15.0	13.9	6.6	12.8	13.7	12.4	13	1.05	0.98	1.00	1.10	1.10	1.01	1.16	1.08	0.51
488	833.9	847.7	848.5	874.9	933.4	1108.7	1198.0	1238.7	1175.1	947.1	853.0	857.7	976	0.85	0.87	0.87	0.90	0.96	1.14	1.23	1.27	1.20
489	198.8	212.3	207.3	203.0	224.2	230.9	253.3	261.2	231.5	218.1	206.5	206.7	221	0.90	0.96	0.94	0.92	1.01	1.04	1.15	1.18	1.05
490	1429.6	1467.7	1378.1	1330.1	1588.5	1870.5	1962.3	2021.1	1844.2	1525.7	1431.5	1322.9	1,598	0.89	0.92	0.86	0.83	0.99	1.17	1.23	1.26	1.15
491	413.7	423.1	419.0	450.2	460.5	536.7	581.0	716.2	546.7	456.4	415.2	414.7	486	0.85	0.87	0.86	0.93	0.95	1.10	1.20	1.47	1.12
492	80.9	84.6	101.5	100.7	107.0	183.5	168.6	257.3	189.6	136.5	90.8	95.8	133	0.61	0.64	0.76	0.76	0.80	1.38	1.27	1.93	1.42
493	588.9	625.4	664.3	749.3	683.3	728.2	784.4	788.8	698.8	624.1	698.8	552.7	682	0.86	0.92	0.97	1.10	1.00	1.07	1.15	1.16	1.02
494	16.6	16.0	17.9	18.2	19.3	21.7	21.5	41.7	20.8	20.3	17.8	16.3	21	0.80	0.77	0.86	0.88	0.93	1.05	1.04	2.02	1.01
495	22.0	19.3	18.0	19.3	21.3	23.4	22.7	22.8	18.2	17.6	18.0	18.8	20	1.09	0.96	0.89	0.96	1.06	1.16	1.13	1.13	0.90
496	217.4	218.1	231.4	255.4	235.9	254.3	242.0	270.3	252.2	251.4	225.3	201.1	238	0.91	0.92	0.97	1.07	0.99	1.07	1.02	1.14	1.06
497	30.8	33.7	44.4	35.6	26.3	27.4	30.1	31.4	25.8	24.3	23.2	21.5	30	1.04	1.14	1.50	1.20	0.89	0.93	1.02	1.06	0.87
498	47.7	47.2	47.8	49.7	56.2	65.4	74.0	68.7	63.7	54.6	55.1	57.0	57	0.83	0.82	0.84	0.87	0.98	1.14	1.29	1.20	1.11
499	1915.3	1844.3	1670.9	1772.8	1561.7	1624.0	2228.0	2562.2	2065.2	1935.2	1571.2	1521.5	1,856	1.03	0.99	0.90	0.96	0.84	0.87	1.20	1.38	1.11
500	1078.8	925.1	1179.2	1113.5	1118.5	1253.1	1096.6	1283.5	1724.1	1339.8	1214.0	1256.1	1,215	0.89	0.76	0.97	0.92	0.92	1.03	0.90	1.06	1.42
501	232.7	255.8	249.8	276.7	285.3	343.2	403.3	441.0	330.2	264.9	256.1	240.7	298	0.78	0.86	0.84	0.93	0.96	1.15	1.35	1.48	1.11
502	6.7	7.8	9.5	12.7	22.8	10.9	13.2	8.1	8.0	7.7	8.8	7.9	10	0.65	0.75	0.92	1.23	2.20	1.06	1.28	0.79	0.77
503	31.5	26.3	27.3	31.2	40.8	35.8	40.3	38.4	35.9	32.4	25.9	31.6	33	0.95	0.79	0.82	0.94	1.23	1.08	1.22	1.16	1.08
504	208.9	202.3	196.2	209.6	230.2	265.3	247.5	305.5	247.3	220.7	202.1	199.2	228	0.92	0.89	0.86	0.92	1.01	1.16	1.09	1.34	1.08
505	240.9	217.1	219.8	207.2	228.6	224.3	229.8	231.7	216.0	217.0	187.7	188.3	217	1.11	1.00	1.01	0.95	1.05	1.03	1.06	1.07	0.99
506	52.4	56.9	52.6	51.2	52.1	39.7	64.0	54.5	48.8	45.2	45.6	56.5	52	1.01	1.10	1.02	0.99	1.01	0.77	1.24	1.05	0.94
507	37.6	41.0	36.9	42.6	44.9	45.8	49.3	48.1	43.5	51.1	45.1	48.9	45	0.84	0.92	0.83	0.96	1.01	1.03	1.11	1.08	0.98
508	428.9	450.6	492.1	337.4	724.4	986.8	1181.6	1296.4	791.7	545.3	437.1	431.7	675	0.64	0.67	0.73	0.50	1.07	1.46	1.75	1.92	1.17
509	2547.1	2561.9	2321.1	2294.0	2440.9	2711.6	2779.5	3108.5	2491.8	2046.9	1859.9	2061.7	2,435	1.05	1.05	0.95	0.94	1.00	1.11	1.14	1.28	1.02
510	100.6	118.9	115.2	113.8	112.3	125.8	136.1	161.1	133.6	147.6	138.6	136.4	128	0.78	0.93	0.90	0.89	0.88	0.98	1.06	1.26	1.04
511	133.5	147.2	137.9	132.4	135.5	144.6	133.3	132.6	130.8	116.2	111.1	110.1	130	1.02	1.13	1.06	1.02	1.04	1.11	1.02	1.02	1.00
512	53.8	59.7	51.5	50.5	52.1	53.6	56.3	68.6	53.8	48.3	45.1	45.2	53	1.01	1.12	0.97	0.95	0.98	1.01	1.06	1.29	1.01
513	80.4	86.6	87.7	87.5	88.5	102.0	100.7	135.9	138.4	90.7	84.2	96.7	98	0.82	0.88	0.89	0.89	0.90	1.04	1.02	1.38	1.41
514	155.7	158.9	167.9	175.1	178.7	184.5	189.5	194.9	196.3	169.6	163.1	154.6	174	0.89	0.91	0.96	1.01	1.03	1.06	1.09	1.12	1.13
515	45.9	32.3	33.7	36.0	40.7	48.3	49.5	40.3	37.3	31.9	31.5	30.7	38	1.20	0.85	0.88	0.94	1.07	1.26	1.30	1.06	0.98
516	70.3	60.9	57.1	72.7	57.6	62.7	61.3	68.7	63.1	55.3	53.5	56.3	62	1.14	0.99	0.93	1.18	0.94	1.02	0.99	1.11	1.02
517	41.9	38.3	43.4	68.9	50.9	173.7	263.8	290.5	248.7	113.0	60.0	51.9	120	0.35	0.32	0.36	0.57	0.42	1.44	2.19	2.41	2.07
518	5.7	5.5	5.9	5.3	5.4	5.9	6.2	5.6	3.6	4.4	5.1	4.8	5	1.08	1.04	1.12	1.01	1.02	1.12	1.17	1.06	0.69

	Month Number																				
	1	2	3	4	5	6	7	8	9	10	11	12		Ratio of Monthly Average Day to Year Average Day Demand							
Point Number	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**	**Year Average Day Demand (1000 gal)**	**January: Ratio of Monthly Average to Average Day**	**February: Ratio of Monthly Average to Average Day**	**March: Ratio of Monthly Average to Average Day**	**April: Ratio of Monthly Average to Average Day**	**May: Ratio of Monthly Average to Average Day**	**June: Ratio of Monthly Average to Average Day**	**July: Ratio of Monthly Average to Average Day**	**August: Ratio of Monthly Average to Average Day**	**September: Ratio of Monthly Average to Average Day**
														Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave	Ave
														0.92	0.96	0.94	0.94	0.98	1.09	1.13	1.22	1.11
														Max	Max	Max	Max	Max	Max	Max	Max	Max
														2.45	2.08	2.27	1.60	2.21	3.08	2.29	3.17	3.46
														Median	Median	Median	Median	Median	Median	Median	Median	Median
														0.91	0.95	0.94	0.94	0.98	1.08	1.09	1.17	1.06
														Min	Min	Min	Min	Min	Min	Min	Min	Min
														0.22	0.20	0.21	0.18	0.13	0.07	0.36	0.57	0.46
													Min row	94	94	94	94	94	123	98	80	80
													Ave ≥ 1	121	157	129	124	198	428	437	470	394
													%	23%	30%	25%	24%	38%	83%	84%	91%	76%
													Total > 1	2,678	months							
													%	43%	of year							
														5.2	months / year average where average demand > average day demand							

													#N/A	
				Current Year Max Day						Historic 3 yr Max Day				
Point Number	October: Ratio of Monthly Average to Average Day	November: Ratio of Monthly Average to Average Day	December: Ratio of Monthly Average to Average Day	Current Year Maximum Day (1,000 gal)	Ratio Maximum Day to Maximum Monthly Average	Ratio of Maximum Average Monthly to Year Average Day	Ratio of Year Maximum Day to Year Average Day	Error Check, max day to ave day < 1	Ratio of Minimum Average Monthly to Year Average Day	Highest 3yr Maximum Day Demand (1000 gal)	Ratio of Current Highest Maximum Day to Year Average Day	Date of 3yr Largest Max Day Demand	Description of Max Demand	Cause of Max Day, 1=equipment_failure, 2=main break, 3=flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=multiple, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	0.90	0.79	0.82	512.0	1.43	1.17	1.67		0.79	618	2.01	4/25/2002	WATER MAIN BREAK	2
2	0.86	0.86	0.92	517.0	1.39	1.13	1.57		0.86	676	2.05	10/16/2001	WATER MAIN FLUSHING	3
3	1.07	0.85	0.89	103.0	2.91	1.21	3.51		0.85	116	3.95	10/9/2001	HYDRANT FLUSHING	3
4	0.80	0.75	0.75	210.0	1.90	1.29	2.45		0.75	210	2.45	7/14/2003	WATER MAIN BREAK	2
5	1.01	0.83	0.86	501.0	1.73	1.09	1.88		0.83	675	2.53	10/15/2001	FILLING OF TOWER, SWITCHING RABAS STREET TOWER ON LINE	9
6	1.11	0.86	0.83	206.0	2.35	1.11	2.62		0.83	206	2.62	10/14/2003	WATER MAIN BREAK	2
7	0.93	0.92	0.90	2660.0	1.48	1.16	1.72		0.90	2949	1.91	7/19/2001	HOT WEATHER WATERING	6
8	1.08	0.84	0.82	156.0	1.29	1.39	1.79		0.77	227	2.60	7/4/2002	FIRE HYDRANT FLUSHING	3
9	0.93	0.94	0.90	106.0	2.01	1.20	2.41		0.90	259	5.90	2/6/2001	PUMP SWITCH REMAINED IN OPEN POSITION.	1
10	0.89	0.88	0.94	113.0	1.84	1.20	2.20		0.88	113	2.20	8/28/2003	HYDRANT FLUSHING.	3
11	0.89	1.10	1.14	431.0	0.52	1.31	0.69	ERROR	0.77	915	1.45	7/25/2001	WATER BAN ENDED	6
12	0.96	0.84	0.86	614.0	1.63	1.22	1.99		0.84	614	1.99	8/12/2003	PUMP CONTROLS AND DRY CONDITIONS	1
13	0.85	0.79	0.81	252.0	2.72	1.17	3.20		0.79	252	3.20	1/21/2003	BROKEN WATER MAIN	2
14	0.93	0.88	0.88	1385.0	1.16	1.15	1.33		0.88	1500	1.45	7/16/2002	SEASONAL USE	6
15	1.00	0.85	0.95	1680.0	1.55	1.06	1.65		0.85	1720	1.69	9/10/2002	HIGH USAGE BROILER PLANT	8
16	0.97	0.82	0.85	502.0	5.61	1.45	8.15		0.82	502	8.15	6/16/2003	BAD SWITCH	1
17	0.91	0.95	0.92	198.0	2.55	1.19	3.03		0.91	237	3.62	8/7/2001	WATER GENERATION	6
18	0.92	1.40	0.87	373.0	5.35	1.40	7.47		0.87	373	7.47	11/4/2003	WATER TOWER REPAIR - RAN SYSTEM WITH PRESSURE RELIEF.	4
19	0.99	0.93	0.93	5574.0	1.29	1.18	1.52		0.89	6312.9	1.72	7/24/2002	HOT WEATHER, LAWN WATERING	6
20	0.92	0.88	0.90	260.0	2.64	1.33	3.50		0.88	260	3.50	3/21/2003	MAIN BREAK	2
21	1.04	1.02	0.87	551.0	1.63	1.11	1.81		0.87	551	1.81	11/20/2003	WATER LEAK BY SCHOOL.	2
22	0.81	0.84	0.93	136.0	1.67	1.11	1.85		0.81	159	2.17	1/30/2001	WATER LEAK	2
23	0.77	0.75	0.71	106.0	1.65	1.68	2.78		0.71	115	3.02	8/8/2001	FLUSHING HYDRANTS	3
24	0.98	0.86	0.84	649.0	1.35	1.41	1.89		0.81	772	2.25	5/14/2001	WATER MAIN BROKEN DURING CONSTRUCTION.	2
25	0.78	0.80	0.79	316.0	2.39	1.33	3.18		0.78	316	3.18	8/14/2003	FLUSHED WATER TOWERS	4
26	1.01	0.97	1.10	249.0	1.24	1.50	1.87		0.79	338	2.54	7/9/2001	FLUSHING	3
27	0.95	0.92	0.96	3899.0	1.49	1.18	1.76		0.91	3899	1.76	8/26/2003	HOT AND DRY WEATHER.	6
28	1.02	0.99	1.01	142.0	1.87	1.05	1.96		0.94	299	4.12	5/25/2001	WATER TOWER REPAINT PROJECT	4
29	1.03	0.90	0.90	2596.0	1.54	1.24	1.91		0.86	2679	1.97	7/18/2002	HOT AND DRY WEATHER	6
30	1.04	0.86	0.95	101.0	1.87	1.39	2.60		0.86	171	4.39	4/26/2001	FILLED TOWER	9
31	1.03	0.75	0.74	279.0	1.27	1.50	1.90		0.74	385	2.62	12/18/2002	WATER MAIN BREAK	2
32	0.94	0.78	0.72	177.0	3.97	1.60	6.34		0.72	193	6.91	6/1/2002	HYDRANT FLUSHING	3
33	1.02	0.96	0.94	2880.0	1.18	1.18	1.39		0.89	2880	1.39	7/29/2003	HOT/DRY WEATHER	6
34	1.53	0.98	0.61	507.0	1.30	1.62	2.10		0.61	1040	4.31	5/9/2002	WELL PUMP WAS RUNNING CONTINUOUSLY TO MAINTAIN PRISSURE FOR SIX WEEKS WHILE THE TOWER WAS DOWN FOR PAINTING, INTERIOR AND EXTERIOR.	4
35	0.97	0.91	0.92	339.0	1.42	1.30	1.85		0.87	405	2.21	9/17/2002	WATER TOWER INSPECTION	4
36	0.99	0.89	0.90	2424.0	1.66	1.19	1.98		0.84	3851	3.14	1/14/2002	CUSTOMERS FROM WELLS	10
37	0.98	0.94	0.91	278.0	1.26	1.47	1.85		0.77	278	1.85	8/19/2003	HIGHWAY CONSTRUCTION WAS HAULING HIGH AMOUNTS FROM FIRE HYDRANTS.	13
38	0.92	0.91	0.97	149.0	2.08	1.13	2.35		0.91	177	2.79	3/26/2001	WATER MAIN BREAK	2
39	0.98	0.81	0.83	1611.0	1.67	1.21	2.02		0.81	1654	2.08	7/11/2001	HYDRANT FLUSHING	3
40	0.90	0.92	0.90	82.0	1.27	1.10	1.40		0.90	143	2.43	1/23/2002	WATER MAIN BREAK	2
41	0.88	0.78	0.81	224.0	1.32	1.30	1.71		0.78	535	4.09	11/7/2001	MAJOR LEAK	2
42	1.04	0.97	0.99	585.0	1.24	1.07	1.33		0.96	796	1.81	6/25/2001	UNKNOWN	10
43	0.98	1.00	0.93	426.0	3.79	1.18	4.45		0.93	426	4.45	6/27/2003	POWER OUTAGE CONTROL PROBLEMS	1
44	1.06	0.83	0.94	925.0	1.29	1.33	1.71		0.78	925	1.71	8/21/2003	DUE TO DRY WEATHER	6
45	0.98	0.98	0.98	559.0	1.31	1.09	1.43		0.96	665	1.70	5/30/2001	FILLING POOL	8
46	0.94	0.91	0.93	146.0	1.73	1.13	1.95		0.91	175	2.34	1/11/2001	WATER MAIN BREAK	2
47	0.97	0.94	1.00	533.0	1.38	1.28	1.76		0.89	533	1.76	4/7/2003	PUMP MALFUNCTION	1
48	0.95	0.87	0.90	117.0	1.61	1.41	2.28		0.84	164	3.20	2/9/2001	WELL PUMP REPAIRED THE PREVIOUS DAY	1
49	0.94	0.95	1.13	115.0	2.05	1.17	2.40		0.85	269	5.61	8/2/2001	MONITORING SYSTEM FAILURE	1

													#N/A	
				Current Year Max Day						Historic 3 yr Max Day				
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50	0.89	0.95	1.02	82.0	1.86	1.29	2.40		0.86	103	3.02	1/26/2001	MAIN BREAK	2
51	0.99	0.93	0.99	190.0	1.77	1.07	1.89		0.93	319	3.17	5/18/2001	MAIN BREAK	2
52	0.97	0.88	0.94	492.0	1.38	1.22	1.68		0.88	629	2.15	5/3/2001	FILLING THE RESERVOIR AFTER INSPECTION AND CLEANING	4
53	0.97	0.92	0.87	54.0	1.79	1.14	2.04		0.87	113	4.27	11/21/2002	SERVICE BREAK	2
54	1.01	0.81	0.86	252.0	1.74	1.25	2.19		0.79	339	2.94	8/7/2002	FLUSHING WATER MAINS.	3
55	0.87	0.89	0.91	66.0	1.61	1.10	1.77		0.87	152	4.09	5/5/2001	RADIO CONTROL FAILURE AT TOWER.	1
56	0.91	0.90	0.91	100.0	1.13	1.18	1.33		0.90	107	1.43	6/29/2001	MAIN BREAK	2
57	1.05	0.94	0.91	1409.0	1.45	1.14	1.65		0.91	1511	1.77	9/9/2002	SEASONAL USE	6
58	0.97	0.83	0.83	423.0	1.69	1.19	2.02		0.83	553	2.64	9/10/2002	HYDRANT FLUSHING	3
59	0.93	0.87	0.86	429.0	1.50	1.26	1.88		0.86	429	1.88	10/6/2003	FLUSHING WATER MAINS	3
60	1.11	0.86	0.86	644.0	2.01	1.21	2.43		0.86	644	2.43	5/21/2003	HYDRANT FLUSHING	3
61	0.98	0.94	0.92	3828.0	1.10	1.13	1.24		0.92	4010	1.30	7/20/2002	PAPER MILL USAGE.	8
62	0.93	0.84	0.83	7055.0	1.17	1.50	1.76		0.82	8114	2.02	7/8/2002	HOT WEATHER, LAWN WATERING	6
63	0.92	0.92	0.82	178.0	1.90	1.33	2.52		0.82	256	3.63	7/19/2002	FLUSH NEW CONSTRUCTION.	11
64	0.92	0.79	0.61	3186.0	1.64	1.32	2.17		0.61	3702	2.52	7/17/2001	HOT, DRY WEATHER.	6
65	0.87	0.87	0.87	187.0	2.34	1.43	3.36		0.83	351	6.30	7/13/2002	QUAD GRAPHICS FIRE	5
66	0.79	0.87	0.81	62.0	2.45	1.28	3.13		0.79	62	3.13	2/2/2003	DATE.	1
67	0.97	0.99	0.92	82.0	1.18	1.22	1.43		0.92	228	3.98	12/29/2001	MAJOR FIRE ON MAIN STREET THAT DESTROYED THREE BUILDINGS.	5
68	1.01	0.91	0.90	58.0	3.47	1.21	4.19		0.85	62	4.48	4/12/2002	FLUSHING MAINS	3
69	0.91	0.87	0.85	3828.0	1.52	1.31	1.99		0.85	5453	2.83	8/1/2002	SUMMER DEMAND	6
70	0.96	0.86	0.96	588.0	1.50	1.10	1.65		0.86	610	1.71	7/17/2001	REFILLING WATER TOWER AFTER MAINTENANCE AND PAINTING	4
71	0.90	0.88	0.97	136.0	1.79	1.16	2.08		0.87	219	3.35	10/20/2001	NORMAL OPERATION	10
72	0.93	0.89	0.90	385.0	2.96	1.10	3.25		0.89	515	4.35	9/5/2002	PAINTING INSIDE OF NORTH WATER TOWER.	4
73	0.56	0.50	0.45	721.0	1.39	2.77	3.84		0.43	721	3.84	9/18/2003	CANNING FACTORY USAGE PEAK	8
74	1.06	1.07	1.06	400.0	1.74	1.29	2.25		0.76	533	3.00	1/5/2001	FILLED NEW WATER TOWER	9
75	0.87	0.88	0.83	465.0	1.41	1.54	2.16		0.83	465	2.16	4/6/2003	HYDRANT FLUSHING.	3
76	0.93	0.91	0.94	276.0	1.50	1.22	1.83		0.91	372	2.47	6/26/2002	CHAQUITA CANNING FACTORY HAULING WATER TO EDEN PLANT	8
77	0.97	0.96	0.93	168.0	2.19	1.31	2.86		0.85	168	2.86	8/19/2003	MAXIMUM DUE TO SYSTEM FLUSHING.	3
78	0.95	0.91	0.90	109.0	1.64	1.21	1.99		0.90	109	1.99	11/19/2003	FLUSHING ENTIRE SYSTEM	3
79	0.83	0.89	0.92	204.0	2.33	1.16	2.69		0.83	204	2.69	5/16/2003	HYDRANT FLUSHING	3
80	0.42	0.41	0.39	649.0	1.50	2.16	3.24		0.39	649	3.24	6/29/2003	WATER MAIN BREAK	2
81	0.95	0.90	0.97	58.0	2.32	1.20	2.79		0.90	65	3.13	3/18/2001	WATER MAIN BREAK MARCH 18, 2001	2
82	0.93	0.91	0.90	2459.0	1.35	1.24	1.67		0.90	2501	1.70	8/11/2002	LAWN SPRINKLING	6
83	0.92	0.84	0.90	465.0	1.96	1.16	2.28		0.84	619	3.04	3/27/2001	WATER MAIN BREAK	2
84	0.93	1.10	1.00	216.0	1.78	1.10	1.96		0.84	294	2.67	11/13/2001	FLUSHING FOR WATER QUALITY	3
85	1.00	1.10	1.21	142.0	2.13	1.21	2.57		0.82	142	2.57	10/10/2003	HYDRANT FLUSHING	3
86	0.81	0.79	0.83	319.5	1.00	1.19	1.19		0.79	640	2.39	7/1/2002	WATER TOWER OVERFLOW.	1
87	0.90	0.86	0.82	1092.0	1.21	1.27	1.54		0.82	1242	1.75	7/30/2002	MAIN FLUSHING/SEASONAL	3
88	0.97	0.89	0.90	7079.0	1.47	1.31	1.93		0.77	8565	2.33	4/26/2002	UNIDIRECTIONAL FLUSHING.	3
89	0.90	0.98	0.79	106.0	1.25	1.20	1.51		0.79	609	8.66	10/21/2002	FOREMOST FARMS, INC.'S WELL WAS OUT OF SERVICE, THEREFORE THEIR FULL REQUIREMENTS WERE PURCHASED FROM THE VILLAGE.	8
90	1.04	0.82	1.04	1185.0	1.48	1.18	1.75		0.75	1328	1.96	5/29/2002	INDUSTRIAL USE	8
91	1.26	1.27	1.05	347.0	2.03	1.34	2.72		0.70	524	4.11	5/17/2001	WATER MAIN BREAK	2
92	0.96	0.90	0.96	615.0	2.21	1.16	2.57		0.83	615	2.57	7/1/2003	WATER MAIN BREAK.	2
93	1.02	0.84	0.87	894.0	1.75	1.17	2.05		0.84	1004	2.30	5/30/2001	FLUSHING HYDRANTS	3
94	2.90	1.47	0.38	927.0	1.06	2.90	3.06		0.13	1014	3.35	10/22/2002	CANNING FACTORY OPERATION	8
95	0.90	0.82	0.98	194.0	4.62	1.30	5.99		0.78	194	5.99	12/29/2003	TOWER OVERFLOW	1
96	0.95	0.90	0.81	109.0	1.72	1.40	2.40		0.81	258	5.68	5/21/2002	SHUT OFF STANDPIPE TO RECONNECT MAIN	4
97	0.93	0.92	1.00	181.0	1.36	1.12	1.52		0.92	214	1.79	7/9/2002	WATER MAIN BREAK AT PACKAGING CORP OF AMERICA.	2
98	2.37	1.74	0.33	1234.0	1.29	3.23	4.16		0.26	1270	4.28	10/1/2002	SEASONAL CANNING COMPANY DEMAND	8

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99	1.03	0.98	1.06	244.0	1.72	1.19	2.06		0.82	369	3.11	10/11/2002	FAILURE OF WELL CONTROLS CAUSED CONTINUOUS PUMPING.	1
100	0.99	1.02	1.12	322.0	1.59	1.17	1.86		0.83	322	1.86	12/19/2003	4 INCH WATER MAIN LEAK	2
101	0.97	0.89	0.93	787.0	1.30	1.18	1.53		0.89	787	1.53	8/28/2003	NORMAL USAGE	6
102	1.02	0.89	0.93	229.0	2.96	1.29	3.81		0.89	262	4.36	10/10/2001	HYDRANT FLUSHING	3
103	1.03	0.94	1.11	451.0	3.83	1.11	4.24		0.92	615	5.78	10/15/2002	WATER TOWER WAS BEING PAINTED SO WATER WAS CONSTANTLY RUNNING.	4
104	0.99	1.01	0.90	792.0	1.59	1.35	2.15		0.87	792	2.15	6/24/2003	DRY, HOT WEATHER.	6
105	0.92	0.82	0.83	58.0	2.14	1.13	2.40		0.82	58	2.40	3/17/2003	WATER MAIN BREAK	2
106	0.84	0.79	0.79	434.0	2.37	1.18	2.79		0.79	580	3.73	10/28/2002	OVERFLOWED RESERVOIR PRESSURE SHUT OFF GAGE VALVE LEAKED.	1
107	0.84	0.76	0.76	312.0	1.65	1.42	2.35		0.76	320	2.41	7/21/2001	DRY YEAR HIGH USAGE	6
108	1.07	0.94	0.97	856.0	1.74	1.10	1.91		0.86	856	1.91	10/9/2003	ELECTRICAL FAILURE AT WELL #2	1
109	0.91	0.93	0.95	338.0	1.61	1.13	1.82		0.91	365	1.97	3/22/2001	FLUSHING MAINS	3
110	0.62	0.41	0.48	1933.0	1.22	2.66	3.24		0.41	1933	3.24	8/19/2003	SENECA FOODS CANNING FACTORY	8
111	0.93	0.85	0.96	180.0	1.78	1.18	2.10		0.85	219	2.56	9/13/2002	2 FIRES WITHIN VILLAGE	5
112	0.88	0.96	0.90	98.0	3.19	1.19	3.81		0.81	113	4.40	11/6/2002	FLUSHING HYDRANTS	3
113	0.36	1.26	0.31	66.9	2.40	1.26	3.03		0.31	66.9	3.03	11/20/2003	WE HAD LARGE BARN FIRE (3 FIRE DEPARTMENTS)	5
114	1.15	0.85	0.85	205.0	2.34	1.39	3.25		0.84	268	4.25	8/9/2001	FIRE	5
115	0.93	0.87	0.89	1483.0	1.49	1.25	1.87		0.85	1810	2.28	7/16/2001	NEW LAWNS	6
116	0.95	0.91	0.91	232.0	1.84	1.22	2.24		0.88	282	2.73	1/9/2002	FLUSHED HYDRANTS ON ALL THE DEAD END LINES IN THE VILLAGE	3
117	0.93	0.91	0.85	521.0	1.53	1.16	1.77		0.85	705	2.39	3/1/2001	2 BIG LEAKS ON EAST AND WEST RIVER STREETS	2
118	0.94	0.87	0.85	317.0	1.56	1.19	1.85		0.85	405	2.37	2/11/2002	INTERPANE'S PUMP WAS BEING WORKED ON	8
119	1.00	0.91	0.93	1378.0	1.35	1.20	1.61		0.87	1454	1.70	7/9/2001	HOT WEATHER/SYSTEM LEAKS	6
120	0.98	0.89	0.94	1967.0	1.63	1.20	1.96		0.83	1967	1.96	11/10/2003	14 HYDRANTS OPENED BY VANDALS IN P.M.	12
121	0.92	0.85	0.86	444.0	1.80	1.11	2.00		0.85	444	2.00	4/8/2003	POWER OUTAGE DUE TO ICE STORM.	6
122	0.87	0.86	0.81	4937.0	1.05	1.29	1.37		0.81	6795	1.88	7/15/2002	WARM WEATHER	6
123	1.90	1.85	2.00	1805.0	1.66	2.00	3.33		0.07	1805	3.33	7/16/2003	PUMPING FOR THE CITY OF DE PERE	8
124	0.99	0.97	0.97	299.0	3.57	1.12	4.01		0.92	364	4.88	7/4/2002	CONTROL FAILURE DURING FILLING OF NEW WATER TOWER.	1
125	0.94	0.81	0.83	79.0	4.80	1.71	8.19		0.81	79	8.19	8/19/2003	WATER USED FOR A FIRE	5
126	0.94	0.90	0.92	790.0	1.36	1.20	1.64		0.90	790	1.64	1/27/2003	TWO BROKEN WATER MAINS	2
127	1.04	0.87	0.96	294.0	3.44	1.14	3.94		0.87	294	3.94	3/16/2003	SEAL IN TOWER CAME LOOSE	1
128	0.97	0.83	0.85	441.0	1.81	1.33	2.41		0.82	441	2.41	8/21/2003	DUE TO DRY WEATHER CONDITIONS BOTH EXISTING HOMEOWNERS AND RESIDENTS OF A NEWLY DEVELOPED VILLAGE SUBDIVISION WERE WATERING THEIR LAWNS.	6
129	1.08	0.78	0.76	104.0	2.38	1.56	3.70		0.76	111	3.95	3/31/2001	FLUSHED WATER TOWER.	4
130	0.95	0.81	0.83	279.0	1.50	1.35	2.03		0.81	572	4.16	10/7/2001	TANK INSPECTION	4
131	0.95	0.86	0.84	118.0	2.10	2.04	4.27		0.58	266.7	9.66	7/2/2001	WATER TOWER PROJECT	4
132	0.87	0.82	0.81	660.0	1.97	1.52	2.99		0.81	660	2.99	8/18/2003	DRY SUMMER & TOWER OVERFLOW	1
133	0.97	0.78	1.08	369.0	1.91	1.23	2.36		0.78	491	3.13	7/11/2001	HOT WEATHER AND NEW SUBDIVISIONS (NEW LAWNS)	6
134	0.91	0.67	0.90	741.0	2.30	1.32	3.03		0.67	754	3.09	6/12/2002	SYSTEM FLUSHING	3
135	1.00	0.93	0.87	50.0	1.31	1.25	1.63		0.85	51	1.67	7/17/2001	FLUSHING HYDRANTS	3
136	0.94	0.83	0.80	1129.0	1.41	1.28	1.81		0.80	1262	2.02	7/8/2001	TEMPERATURE RELATED	6
137	0.93	0.82	0.82	17230.0	1.25	1.48	1.85		0.82	18602	2.00	7/10/2001	LAWN WATERING.	6
138	0.86	0.96	0.95	314.0	2.84	1.20	3.42		0.86	338	3.68	4/2/2002	CLEAN TOWER	4
139	0.97	0.86	0.87	652.0	1.41	1.16	1.63		0.86	767	1.92	3/11/2002	WATER MAIN BREAK	2
140	0.72	0.66	0.67	130.8	1.23	2.27	2.79		0.66	130.8	2.79	2/28/2003	WATER MAIN BREAK	2
141	0.93	0.92	0.96	81.6	1.64	1.20	1.96		0.90	95	2.28	11/3/2001	WATER MAIN BREAK	2
142	0.89	0.72	0.75	371.0	1.50	1.57	2.35		0.72	374	2.37	6/27/2001	SUMMER POPULATION, HOT DAY	6
143	0.92	0.93	0.93	2052.0	1.41	1.20	1.69		0.92	2251	1.85	8/10/2002	HOT SUMMER DAY	6
144	1.00	0.87	0.86	178.0	2.01	1.38	2.77		0.86	178	2.77	8/12/2003	HOT WEATHER.	6
145	0.95	0.87	0.91	348.0	0.95	1.24	1.18		0.87	463	1.57	11/30/2001	THE INCREASE IN WATER PUMPED RELATES TO A MAIN BREAK AT THE CREAMERY.	2
146	1.00	0.96	1.03	182.0	2.43	1.17	2.83		0.90	215	3.35	5/9/2002	FLUSHING MAINS	3
147	1.06	0.86	0.92	311.0	2.20	1.11	2.44		0.86	448	3.52	1/7/2001	BROKEN 2 LINE AT VALLEY INN*	2

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148	1.01	1.11	0.91	56.0	1.24	1.11	1.38		0.91	109	2.68	4/18/2001	FLUSHING HYDRANTS	3
149	1.00	0.93	0.93	116.0	2.54	1.35	3.44		0.84	134	3.98	6/4/2002	CLEANING OF RESERVOIR	4
150	0.93	0.82	0.84	748.0	1.54	1.24	1.90		0.82	748	1.90	8/30/2003	LINCOLN ST. REBUILD	13
151	1.02	0.93	1.04	63.0	2.44	1.26	3.08		0.86	63	3.08	2/23/2003	FIRE DEPARTMENT USAGE.	5
152	0.68	0.62	0.56	293.0	2.20	3.08	6.78		0.56	293	6.78	6/17/2003	TOWER WAS DOWN	4
153	0.45	0.43	0.86	727.0	2.33	3.46	8.06		0.35	727	8.06	8/20/2003	CANNING FACTORY	8
154	0.98	0.99	1.02	234.3	2.25	1.18	2.66		0.91	234.3	2.66	11/9/2003	WATER TOWER OVERFLOW.	1
155	0.93	1.02	0.83	537.0	1.80	1.24	2.23		0.83	656	2.73	7/18/2001	HYDRANT FLUSHING	3
156	1.01	0.91	0.90	124.0	5.36	1.46	7.83		0.74	142	8.97	4/19/2002	FILL TOWER AFTER REPAIR	4
157	0.95	0.84	0.83	3435.0	1.29	1.32	1.70		0.83	4123	2.04	7/14/2002	PEAK SUMMER USAGE	6
158	0.63	0.64	0.60	515.0	1.75	1.64	2.88		0.56	532	2.97	6/7/2002	FLUSHING WATER MAINS	3
159	0.97	0.91	0.91	8100.0	1.29	1.13	1.46		0.91	8175	1.47	7/12/2001	HOT, DRY CONDITIONS DURING SUMMER	6
160	0.95	0.83	0.83	1453.0	1.42	1.66	2.37		0.53	1453	2.37	7/6/2003	HOT SUMMER DAY	6
161	0.93	0.88	0.89	85.0	1.33	1.14	1.52		0.88	167	2.98	6/4/2001	DO TO DEWATERING CREW LEAVING A HYDRANT OPEN ALL NIGHT. THEY USED WATER FROM HYDRANT TO DRILL AND SET THE PUMPS FOR DEWATERING SO THE GROUND WATER WOULDN'T BE MUDDY WHEN STARTING THE PUMP.	8
162	0.86	0.86	0.85	98.0	1.93	1.26	2.44		0.82	207	5.15	7/25/2002	PUMP CONTROL MALFUNCTION	1
163	1.02	0.90	0.86	3284.0	1.37	1.24	1.70		0.86	3284	1.70	9/9/2003	HOT TEMPERATURES/DRY	6
164	0.96	0.96	0.93	129.0	2.71	1.12	3.03		0.93	129	3.03	5/10/2003	FLUSHING	3
165	1.08	0.84	0.84	464.0	2.33	1.28	2.99		0.84	464	2.99	6/12/2003	HYDRANT FLUSHING	3
166	0.75	0.62	0.62	2211.0	1.82	1.56	2.85		0.62	2690	3.47	7/15/2001	WEATHER AND LAWN WATERING	6
167	0.94	0.79	0.79	635.0	2.46	1.33	3.27		0.79	635	3.27	8/18/2003	FLUSHED ALL HYDRANTS AND WATERED GOLF COURSE AND FOOTBALL FIELDS	3
168	0.96	0.91	0.91	411.0	1.59	1.33	2.12		0.85	502	2.59	9/30/2001	DISCHARGE OF TWO HYDRANTS DURING PAINTING OF WATER TOWER.	4
169	0.92	0.87	0.79	62.0	2.13	1.39	2.97		0.79	130	6.24	4/24/2002	WATER MAIN BREAK	2
170	0.90	0.77	0.86	341.0	1.32	1.34	1.77		0.77	608	3.15	6/22/2002	HOT SUMMER DAY AND FILLED HIGH SCHOOL SWIMMING POOL.	8
171	0.92	0.81	0.79	152.0	2.51	1.13	2.84		0.79	256	4.78	8/22/2001	MALFUNCTION OF RESERVOIR LEVEL CONTROL.	1
172	1.00	0.75	0.74	92.0	2.08	1.59	3.31		0.74	92	3.31	8/16/2003	FLUSHING OF HYDRANTS.	3
173	0.88	0.66	0.86	466.0	1.73	1.25	2.18		0.66	512	2.39	3/2/2001	2 MAJOR FIRES IN THE VILLAGE ON THE SAME DAY	5
174	0.99	0.88	0.73	3352.0	1.53	1.34	2.05		0.73	3601	2.20	7/8/2001	HOT WEATHER, CONSTRUCTION	6
175	0.47	0.45	0.45	940.0	1.18	3.17	3.75		0.44	940	3.75	8/21/2003	SEASONAL CANNING FACTORY	8
176	0.93	0.91	0.85	93.0	2.01	1.35	2.72		0.85	93	2.72	8/20/2003	SCHOOL INSTALLED NEW ATHLETIC FIELD AND THEY WERE WATERING IT HEAVILY.	8
177	0.91	1.01	1.06	194.0	4.92	1.10	5.40		0.91	245	6.82	7/12/2002	FLUSH NEW SUBDIVISION	11
178	0.92	0.87	0.92	226.0	1.83	1.27	2.32		0.86	226	2.32	4/25/2003	FLUSHING WATER MAINS	3
179	0.91	1.36	0.75	63.0	3.63	1.36	4.96		0.75	63	4.96	11/8/2003	TOWER CONTROL REPAIRS.	1
180	0.89	0.93	0.92	106.0	1.20	1.19	1.43		0.89	106	1.43	4/1/2003	WATER MAIN REPAIRS	2
181	0.77	0.80	0.90	323.0	4.09	1.76	7.22		0.71	323	7.22	3/2/2003	WATER MAIN BREAK	2
182	0.96	0.87	0.90	2410.0	1.37	1.24	1.71		0.87	2494	1.77	8/7/2001	DRY WEATHER/SUMMER SPRINKLING	6
183	1.00	0.97	0.95	3392.0	1.38	1.22	1.69		0.84	3392	1.69	9/24/2003	FLUSHING HYDRANTS	3
184	1.11	0.95	1.01	47.0	1.76	1.11	1.95		0.90	64	2.66	8/20/2002	FLUSHING HYDRANTS	3
185	1.19	0.80	0.78	485.0	2.20	1.40	3.08		0.78	742	4.71	3/1/2001	WATER MAIN BREAK	2
186	0.98	0.77	0.82	25.0	1.02	1.22	1.24		0.77	53	2.63	5/12/2001	FLUSHING OF HYDRANTS	3
187	0.85	0.69	0.89	5320.0	2.36	1.46	3.44		0.69	5320	3.44	9/8/2003	DROUGHT	6
188	0.88	0.80	0.77	569.0	2.68	1.41	3.77		0.77	878	5.81	6/22/2001	CONTROLS ON WATER TOWER WERE BAD. TOWER KEPT CALLING FOR WATER EVEN THOUGH TOWER WAS FULL. THIS MADE PUMPS RUN CONSTANTLY.	1
189	0.98	0.90	0.91	749.0	1.37	1.20	1.64		0.88	764	1.68	7/13/2001	LAWN WATERING	6
190	0.94	0.86	0.94	386.0	2.49	1.16	2.89		0.86	444	3.33	9/3/2001	FLUSHING HYDRANTS	3
191	0.91	0.86	1.03	72.0	1.40	1.23	1.73		0.86	99	2.37	10/18/2002	UNKNOWN	10
192	0.95	0.75	0.77	543.0	1.48	1.86	2.75		0.62	658	3.33	7/4/2002	CONSTRUCTION & CHLORINATION FLUSHING	11
193	0.92	0.84	0.82	325.0	1.56	1.55	2.43		0.80	487	3.64	5/31/2002	RUNNING WELL CONTINUOUSLY TO PAINT INSIDE OF WATER TOWER	4
194	0.61	0.63	0.61	115.0	1.52	1.65	2.50		0.61	253	5.51	4/20/2001	TANK DRAINED AND INSPECTED ON 4-17-01. TANK REFILLED AND ISOLATED PENDING 2 SAFE WATER SAMPLES. FINAL SAFE SAMPLE RECEIVED ON 4-23-01. HYDRANT WAS LEFT OPEN DURING THIS 7-DAY PERIOD. TOWER PUT BACK ONLINE ON 4-23-01.	4

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195	0.82	0.76	0.77	301.0	1.50	1.70	2.56		0.76	301	2.56	7/27/2003	EXCESSIVELY DRY.	6
196	0.97	0.92	0.92	2850.0	1.49	1.12	1.67		0.92	2850	1.67	8/21/2003	WATERING LAWNS	6
197	0.89	0.85	0.78	1935.0	1.51	1.31	1.97		0.78	2308	2.35	7/19/2002	DRY WEATHER	6
198	0.98	0.88	0.92	56.0	1.46	1.17	1.70		0.88	138	4.20	7/15/2002	FILLING WATER TOWER.	9
199	0.98	0.89	0.89	49.0	2.12	1.26	2.66		0.89	58.7	3.19	5/16/2001	WATER MAIN BREAK.	2
200	1.03	0.92	1.02	104.0	2.17	1.49	3.22		0.82	104	3.22	2/21/2003	BROKEN WATER MAIN	2
201	0.87	0.87	0.94	664.0	1.20	1.39	1.66		0.87	737	1.84	7/19/2002	FILL TOWER AFTER PUMP MOTOR HAD BURNT OUT.	1
202	0.99	0.89	0.93	104.0	0.93	1.26	1.17		0.89	128	1.43	10/12/2001	HYDRANTS FLUSHED	3
203	0.92	0.95	0.99	113.0	1.56	1.32	2.06		0.84	157	2.86	4/18/2002	CHURCH FIRE	5
204	1.07	0.91	1.00	363.0	3.36	1.20	4.03		0.89	363	4.03	12/13/2003	WATER MAIN BREAK	2
205	0.68	0.68	0.68	690.0	2.67	1.39	3.71		0.68	690	3.71	1/28/2003	FLUSHING OF MAINS AND HYDRANTS.	3
206	0.97	0.88	1.02	174.0	3.00	1.17	3.53		0.88	174	3.53	12/29/2003	VALVE STUCK	1
207	0.95	0.73	0.81	840.0	2.88	1.27	3.65		0.73	961	4.18	12/29/2002	VANDALISM	12
208	1.01	0.97	0.96	144.0	1.67	1.21	2.02		0.84	187	2.63	12/19/2002	UNKNOWN	10
209	0.85	0.93	0.93	118.0	5.77	1.10	6.33		0.85	142	7.62	8/8/2001	WATER MAIN BREAK	2
210	0.78	0.61	0.60	2604.0	1.45	2.21	3.19		0.59	2604	3.19	7/27/2003	HIGH TEMPERATURE	6
211	0.81	0.77	0.88	1261.0	1.91	1.20	2.29		0.77	1523	2.77	3/27/2002	WATER MAIN BREAK	2
212	0.89	0.86	0.88	378.0	1.62	1.25	2.02		0.86	381	2.03	7/3/2002	WELL LEFT IN HAND CAUSING TOWER TO OVERFLOW.	1
213	0.95	0.89	0.87	2907.0	1.34	1.20	1.60		0.87	3418	1.88	7/15/2002	HOT & DRY CONDITIONS	6
214	1.08	0.75	0.74	4755.0	1.43	1.74	2.48		0.67	4755	2.48	8/14/2003	HOT & DRY	6
215	0.91	0.86	0.84	301.0	1.77	1.76	3.11		0.84	301	3.11	8/28/2003	SEASONAL	6
216	0.99	1.04	1.06	32.0	1.70	1.27	2.17		0.83	32.5	2.20	10/30/2001	CLEANED WATER RESERVOIR	4
217	1.04	1.04	0.87	320.0	2.17	1.28	2.78		0.87	376	3.26	5/16/2001	FLUSHING HYDRANTS AND A 1 WATER SERVICE LEAK AT THE LAUNDROMAT."	3
218	0.75	0.80	0.83	350.0	1.78	1.40	2.48		0.73	489	3.47	7/11/2002	SUMMER LAWN WATERING	6
219	0.82	0.76	0.76	117.0	5.46	1.38	7.55		0.76	117	7.55	8/7/2004	BREAK IN MAIN	2
220	1.05	1.00	1.03	110.0	1.43	1.10	1.58		0.89	135	1.94	8/6/2001	FIRE AT WOODLAND	5
221	0.93	0.93	0.86	98.0	1.40	1.27	1.77		0.80	535	9.66	7/21/2002	PUMPS RUNNING CONTINUOUSLY WHILE WORK WAS BEING DONE ON THE INTERIOR OF THE WATER TOWER.	4
222	0.83	0.83	0.75	34.0	1.80	1.23	2.20		0.75	36	2.33	6/29/2001	LIGHTNING STRIKE ON RESERVOIR CONTROL	1
223	1.02	0.93	0.96	1353.0	1.38	1.28	1.78		0.78	1353	1.78	7/14/2003	GENERAL USAGE/HASSMER LAKE WATER LATERAL LEAK OF APPROX 200,000 GALLONS/DAY PER ESTIMATE.	6
224	0.95	0.87	0.87	20180.0	1.15	1.30	1.50		0.87	21726	1.61	7/15/2002	SUMMER USAGE	6
225	1.05	0.92	0.91	1968.0	1.35	1.22	1.65		0.81	2459	2.06	8/7/2002	WEATHER	6
226	1.01	0.85	0.95	352.0	1.43	1.25	1.79		0.82	553	2.82	7/10/2001	HIGH DEMAND	6
227	1.03	0.94	0.95	121.0	2.45	1.16	2.84		0.90	121	2.84	10/28/2003	WATER MAIN BREAK	2
228	0.90	0.91	0.86	469.0	1.37	1.41	1.93		0.82	965	3.97	7/6/2001	WATER TOWER WAS DOWN FOR MAINTENANCE.	4
229	1.02	0.95	0.91	2204.0	1.37	1.09	1.50		0.91	2204	1.50	5/14/2003	LAWN WATERING AND NORMAL USAGE	6
230	0.80	0.79	0.83	104.0	1.95	1.77	3.45		0.79	367	12.16	7/13/2002	WASTED WATER WHILE WATER TOWER WAS PAINTED	4
231	0.93	0.92	0.90	81.0	2.30	1.07	2.46		0.90	81	2.46	5/8/2003	USED WATER FOR A FIRE	5
232	0.85	0.72	0.75	769.0	1.53	1.13	1.72		0.72	1143	2.56	2/15/2001	WATER MAIN BREAK	2
233	1.07	0.98	0.97	489.0	1.34	1.12	1.50		0.87	627	1.93	12/13/2002	FILL NEW ELEVATED STORAGE TANK	9
234	0.96	0.91	0.93	674.0	1.41	1.10	1.55		0.91	700	1.61	11/11/2002	LAND O LAKES ON LINE	8
235	0.96	0.96	0.94	67.0	1.68	1.20	2.02		0.90	129	3.89	6/23/2001	ADDING & REMOVING WATER MAINS	11
236	0.95	0.90	0.92	2374.0	1.58	1.14	1.80		0.90	2570	1.95	7/17/2002	DEMAND	6
237	1.09	0.93	0.93	52.9	1.99	1.09	2.17		0.93	70	2.88	10/5/2002	FIRE	5
238	1.02	0.94	0.71	1304.0	0.81	1.35	1.09		0.71	2530	2.11	7/24/2002	DRY WEATHER	6
239	0.70	0.66	0.69	604.0	1.30	1.30	1.69		0.66	604	1.69	8/25/2004		10
240	0.90	0.73	0.71	25625.0	1.30	1.65	2.14		0.71	27252	2.28	6/16/2001	DRY, HOT CONDITIONS	6
241	0.92	0.89	0.90	754.0	1.74	1.10	1.91		0.89	754	1.91	3/16/2003	MAIN BREAK.	2
242	0.85	0.84	0.85	266.0	2.98	1.40	4.17		0.78	317	4.97	2/6/2001	6 AND 8" MAIN BREAK SAME DAY."	2
243	0.79	0.78	0.76	262.0	1.46	1.23	1.80		0.76	330	2.26	1/4/2001	EXTENSIVE HYDRANT FLUSHING FOR IRON REMOVAL	3

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244	0.74	0.65	0.62	2764.0	1.18	1.98	2.34		0.62	2764	2.34	8/10/2003	TOURISM	6
245	0.92	0.84	0.85	2286.0	1.33	1.28	1.71		0.84	2862	2.13	8/12/2002	SUMMER DEMAND	6
246	0.94	0.71	0.76	840.0	1.30	1.47	1.91		0.71	985	2.24	7/15/2002	PEAK TIME FOR TOURISTS IN AREA	6
247	0.97	0.86	0.86	1375.0	1.49	1.17	1.74		0.86	1375	1.74	9/15/2003	HOT WEATHER	6
248	1.08	0.82	0.83	1698.0	1.69	1.30	2.19		0.82	1698	2.19	10/1/2003	WATER MAIN BREAK	2
249	1.38	0.88	0.89	327.0	2.71	1.66	4.51		0.73	327	4.51	10/7/2003	WATER MAIN CONSTRUCTION - FLUSHING SYSTEM	11
250	0.85	0.90	0.98	213.0	2.18	1.13	2.47		0.85	236	2.73	4/7/2001	FLUSHING WATER THROUGH MAINS	3
251	0.98	0.97	0.92	75.0	1.70	1.22	2.08		0.92	81	2.24	1/18/2002	WATER MAIN BREAK	2
252	0.97	0.85	0.81	699.0	1.32	1.29	1.69		0.81	703	1.70	10/19/2002	ASHWAUBENON WELL #6 DOWN FOR REPAIRS.	8
253	0.95	0.92	0.94	483.0	1.50	1.06	1.60		0.92	498	1.65	6/19/2001	USE BY SAPUTO CHEESE	8
254	0.99	0.87	0.81	148.0	4.03	1.37	5.50		0.80	430	15.97	6/7/2001	WATER PUMPED AND SOLD TO GRANDE CHEESE CO.	8
255	0.93	0.97	1.15	142.0	3.01	1.18	3.56		0.87	142	3.56	9/11/2003	FLUSHED HYDRANTS	3
256	0.99	1.04	0.97	37.0	3.68	1.25	4.59		0.87	37	4.59	4/26/2003	FIRE TRUCK REFILLING-HAY FIRE	5
257	0.99	0.90	0.91	1850.0	1.31	1.09	1.43		0.90	2224	1.71	7/12/2001	HYDRANT BREAK DURING SUMMER HEAT	1
258	0.64	0.60	0.65	358.0	2.76	2.21	6.10		0.60	358	6.10	5/17/2003	WATER TOWER LEAK	1
259	0.74	0.64	0.67	1114.0	1.64	1.95	3.19		0.64	1179	3.38	7/13/2001	LODI CANNING COMPANY	8
260	0.83	0.99	1.02	54.0	1.84	1.08	2.00		0.83	54	2.00	6/18/2003	HIGH USAGE DAY.	6
261	0.99	0.89	1.07	520.0	1.76	1.17	2.06		0.88	520	2.06	8/20/2003	DRY WEATHER - WATERING LAWNS	6
262	1.01	0.81	0.77	140.0	1.56	1.42	2.22		0.77	151	2.39	7/15/2001	HEAT AND HUMIDITY	6
263	0.77	0.77	0.85	98.0	3.18	1.33	4.22		0.77	98	4.22	8/10/2003	WATER LEAK	2
264	0.99	0.94	0.99	139.0	1.27	1.11	1.41		0.93	223	2.27	6/23/2001	LEAK AT HIGH SCHOOL	2
265	1.01	0.91	0.91	212.0	1.72	1.14	1.96		0.91	223	2.06	7/9/2001	DRY WEATHER	6
266	1.12	0.91	0.83	386.0	1.41	1.14	1.61		0.81	433	1.80	7/15/2002	LAWN WATERING DUE TO DRY PERIOD.	6
267	1.06	0.92	0.95	107.0	2.54	1.07	2.71		0.92	255	6.47	12/2/2002	WATER MAIN BREAK	2
268	0.99	0.87	0.84	52887.0	1.25	1.32	1.64		0.84	54208	1.68	7/12/2001	SPRINKLING & AIR CONDITIONING	6
269	1.27	1.04	0.90	48.0	3.59	1.27	4.55		0.81	48	4.55	10/26/2003	WATER USED FOR COUNTY ROAD WORK.	13
270	0.99	0.89	0.93	284.0	1.48	1.14	1.69		0.87	313	1.86	7/14/2001	FILLING WATER TOWER.	9
271	0.91	0.86	0.86	13.0	2.09	1.25	2.62		0.86	13	2.62	7/6/2003	FLUSHING HYDRANTS	3
272	0.95	0.80	0.77	504.0	1.83	1.20	2.20		0.77	504	2.20	1/26/2003	MAIN BREAK	2
273	0.94	0.82	0.78	112.0	3.58	1.18	4.23		0.78	120	4.53	2/3/2001	FIRE	5
274	0.97	0.76	0.75	600.0	1.61	1.36	2.20		0.75	600	2.20	5/29/2003	CONTRACTOR TORE LATERAL OFF	2
275	1.15	0.83	0.87	288.0	1.56	1.19	1.87		0.83	336	2.18	9/28/2001	MAIN BREAK	2
276	0.93	0.93	0.89	651.0	2.08	1.16	2.42		0.89	697	2.60	7/2/2002	HIGH USAGE	6
277	0.95	0.91	0.96	2991.0	1.23	1.12	1.38		0.91	3323	1.53	9/9/2002	THERE WERE 2 16 MAIN BREAKS ON THIS DAY "	2
278	0.85	0.77	0.73	89.1	8.94	1.85	16.57		0.68	89.13	16.57	6/18/2003	CLEANED RESERVOIR	4
279	0.91	0.96	1.00	132.0	1.71	1.25	2.14		0.91	154	2.49	9/6/2002	FLUSHING	3
280	1.06	0.89	0.91	1253.0	2.16	1.14	2.47		0.89	1253	2.47	4/29/2003	FLUSHING HYDRANTS.	3
281	0.81	0.78	0.78	1275.0	1.33	1.48	1.96		0.78	1275	1.96	8/21/2003	CANNING SEASON	8
282	0.95	0.88	0.88	278.0	1.58	1.28	2.02		0.88	361	2.63	3/3/2002	PUMP CONTROL MALFUNCTION.	1
283	0.88	0.90	0.92	1210.0	1.44	1.41	2.04		0.85	1602	2.70	8/28/2001	EXCESS WATERING OF LAWNS/SHRUBS.	6
284	0.97	0.88	0.88	1481.0	2.34	1.07	2.52		0.88	1832	3.12	1/9/2002	MAIN BREAK	2
285	0.98	0.86	0.86	361.0	1.46	1.15	1.68		0.86	361	1.68	6/10/2003	FILLING TOWERS UP	9
286	0.90	0.99	0.85	233.0	5.07	1.16	5.88		0.85	233	5.88	1/16/2003	WELL #3 DID NOT SHUT OFF	1
287	0.98	0.97	1.00	4115.1	1.25	1.15	1.44		0.89	4762	1.66	7/15/2001	DRY WEATHER	6
288	1.08	0.88	0.83	3260.0	1.24	1.32	1.63		0.83	3760	1.89	7/13/2001	WATERING	6
289	0.78	1.06	0.80	234.0	2.57	1.29	3.32		0.78	285	4.05	10/6/2002	FLUSHING HYDRANTS	3
290	0.85	0.82	0.87	2366.0	2.11	1.22	2.57		0.82	2366	2.57	5/13/2003	FLUSHING MAINS AND HYDRANTS	3
291	0.93	1.02	0.93	81.0	2.41	1.11	2.67		0.92	81	2.67	7/15/2003	WATER LEAK	2
292	0.99	0.86	0.96	76.0	2.08	1.19	2.48		0.86	189	6.17	11/11/2002	MAIN BREAK	2
293	0.94	0.84	0.84	4516.0	1.34	1.53	2.04		0.79	4516	2.04	8/18/2003	LAWN SPRINKLING	6

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294	0.79	0.77	0.83	101.0	2.81	2.11	5.93		0.77	101	5.93	6/27/2003	SYSTEM FLUSHING	3
295	0.95	0.91	1.03	178.0	2.00	1.11	2.23		0.91	178	2.23	12/12/2003	BROKEN WATER MAIN	2
296	1.03	0.92	0.93	774.0	1.32	1.22	1.61		0.88	872	1.82	7/17/2002	HIGH TEMPS IN MID 90'S FOR SEVERAL DAYS, NEW CONSTRUCTION, FLUSHING	11
297	0.97	0.97	0.89	73.0	1.70	1.16	1.97		0.89	85	2.29	10/30/2001	EXCESSIVE WATER USE	6
298	0.95	0.93	0.89	527.0	1.43	1.24	1.77		0.89	617	2.07	10/26/2001	WATER MAIN BREAK AND LEAK	2
299	0.86	0.94	0.95	198.0	1.35	1.25	1.68		0.63	343	2.91	10/7/2002	WATER TOWER CONTROLS MALFUNCTION	1
300	0.90	0.85	0.84	405.0	2.18	1.31	2.85		0.84	446	3.14	4/24/2001	WATER MAIN BREAK	2
301	0.86	0.87	0.85	614.0	1.24	1.73	2.15		0.77	882	3.08	8/15/2001	CANNING COMPANY IN THE CITY IS VERY SEASONAL AND USAGE IS MUCH GREATER DURING THE SUMMER.	8
302	0.93	0.85	0.87	1618.0	1.46	1.32	1.93		0.85	2800	3.34	6/10/2002	FLUSHING MAINS	3
303	0.95	0.86	0.92	2504.0	1.19	1.16	1.38		0.86	2740	1.51	7/10/2001	HOT DRY SEASON, HOME WATERING, INDUSTRIES IN FULL PRODUCTION	6
304	0.94	0.99	0.95	267.0	1.42	1.19	1.69		0.92	504	3.19	10/16/2001	WATER TOWER PAINTING/REFILL TOWER. RELIEF VALVE USED DURING PAINTING.	4
305	0.87	0.82	0.96	147.0	2.01	1.10	2.21		0.82	208	3.13	6/6/2001	FILL POOL	8
306	0.92	0.93	0.95	281.0	2.35	1.23	2.89		0.91	347	3.56	5/28/2002	FILLED MUNICIPAL SWIMMING POOL.	8
307	0.78	0.79	0.80	521.0	3.66	1.37	5.00		0.78	521	5.00	3/20/2003	PUMPING TEST	1
308	0.51	0.46	0.45	140.0	1.47	1.72	2.53		0.45	152	2.74	10/20/2002	MAIN BREAK	2
309	0.98	0.88	0.93	1268.0	1.73	1.22	2.12		0.88	1268	2.12	12/8/2003	MALFUNCTION WITH SYSTEM CONTROLS (WAS CORRECTED)	1
310	1.09	0.97	0.94	127.0	2.54	1.10	2.79		0.87	164	3.61	4/27/2001	HYDRANT FLUSHING	3
311	0.96	0.96	0.95	83.0	2.50	1.20	2.99		0.89	231	8.33	11/13/2002	CLEANING OF TOWER (2 DAYS)	4
312	0.81	0.82	0.86	1219.0	1.60	1.31	2.11		0.81	1219	2.11	5/27/2003	MAIN BREAK	2
313	1.06	0.97	0.80	38.0	1.94	1.21	2.35		0.80	38	2.35	8/12/2003	FLUSHING	3
314	0.95	0.89	0.93	1213.0	1.40	1.23	1.72		0.89	1213	1.72	9/15/2003	HOT WEATHER	6
315	0.93	0.85	0.90	398.0	1.36	1.36	1.85		0.84	635	2.95	3/30/2001	MAIN FLUSHING	3
316	1.12	0.92	0.89	1577.0	1.68	1.30	2.19		0.76	1775	2.46	7/16/2002	DROUGHT	6
317	0.88	0.84	0.75	274.0	2.06	1.27	2.61		0.75	628	5.98	7/10/2001	9TH STREET MAIN BREAK, RIVER CROSSING MAIN BREAK	2
318	0.94	0.91	0.91	643.0	1.86	1.19	2.22		0.91	643	2.22	3/17/2003	NEW TOWER RECIRCULATING 3 PIPE SPLIT OPEN"	1
319	0.88	0.85	1.01	589.0	1.63	1.24	2.02		0.85	681	2.34	7/14/2001	SUMMER PEAK	6
320	0.92	0.92	0.93	237.0	2.66	1.54	4.09		0.79	237	4.09	6/18/2003	FLUSHING THE RESERVOIR	4
321	0.97	0.90	1.01	79.0	2.11	1.14	2.41		0.90	187	5.71	12/26/2001	WATER MAIN BREAK.	2
322	0.94	0.91	0.93	6592.0	1.52	1.28	1.94		0.86	6794	2.00	7/9/2001	USAGE/SPRINKLING	6
323	0.97	1.02	0.88	335.0	1.34	1.21	1.63		0.82	375	1.82	7/12/2001	NORMAL USAGE	6
324	1.06	0.89	0.91	794.0	1.30	1.18	1.54		0.82	906	1.76	7/15/2002	FLUSHING SEWERS	8
325	1.01	0.88	0.84	286.0	1.77	1.17	2.06		0.84	409	2.95	10/24/2001	DRAIN AND CLEAN TOWER FOR TOWER INSPECTION. HAD SYSTEM ON PRESSURE RELIEF VALVES FOR TWO DAYS.	4
326	1.00	0.92	0.83	3298.0	1.35	1.08	1.45		0.83	3334	1.47	5/8/2002	HEAVY INDUSTRIAL USAGE	8
327	1.33	0.78	0.70	2764.0	1.32	1.82	2.41		0.63	3356	2.92	10/1/2001	CANNING COMPANY OPERATIONS	8
328	0.91	0.92	0.92	526.0	1.30	1.19	1.54		0.89	561	1.64	8/8/2001	UNKNOWN	10
329	0.72	0.85	0.81	78.0	3.25	1.23	4.01		0.72	78	4.01	2/10/2003	RAN WATER IN EXTREMELY WEATHER TO PREVENT FREEZING	6
330	0.68	0.73	0.90	31.0	3.35	1.85	6.19		0.68	31	6.19	8/11/2003	BULK WATER SALES	8
331	0.78	0.75	0.93	913.0	1.71	1.25	2.14		0.75	913	2.14	12/31/2003	WATER MAIN BREAK	2
332	1.02	1.05	1.00	109.0	2.15	1.15	2.46		0.92	109	2.46	11/10/2003	LARGE FIRE IN VILLAGE.	5
333	1.11	0.98	1.00	143.0	3.36	1.12	3.77		0.88	162	4.27	5/9/2001	FLUSHING OF HYDRANTS	3
334	1.11	1.01	0.96	89.0	3.39	1.21	4.08		0.76	450	20.64	6/2/2001	TOWER OUT OF SERVICE DUE FOR CLEANING AND INSPECTION	4
335	0.62	0.63	0.71	450.0	1.82	2.13	3.87		0.30	900	7.75	8/12/2001	CORN PACKING	8
336	1.06	0.89	0.83	3113.0	1.45	1.20	1.75		0.83	3666	2.06	7/13/2001	HOT, DRY WEATHER	6
337	0.87	0.80	0.82	910.0	1.98	1.15	2.28		0.80	910	2.28	9/22/2003	FLUSHING HYDRANTS	3
338	0.86	0.77	0.85	922.0	2.04	1.45	2.95		0.77	922	2.95	2/27/2003	SEVERAL WATER MAIN BREAKS.	2
339	0.83	0.97	1.03	18.0	2.03	1.28	2.60		0.83	18	2.60	7/21/2003	UNKNOWN	10
340	0.94	0.91	0.88	601.0	1.62	1.42	2.30		0.88	601	2.30	10/13/2003	TOWER CONTROLS MALFUNCTIONED AND DID NOT SHUT OFF PUMPS	1
341	0.77	0.63	0.65	7576.0	1.52	2.16	3.27		0.62	7838	3.39	7/15/2001	VERY DRY-HEAVY SPRINKLING	6

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342	0.91	0.77	0.99	161.0	3.75	1.32	4.96		0.77	178	5.48	10/3/2001	FLUSHING OCCURRED	3
343	1.05	0.95	0.95	542.0	1.70	1.32	2.23		0.87	542	2.23	7/7/2003	DRY PERIOD, LAWN SPRINKLING HEAVY USAGE	6
344	1.05	0.74	0.92	1656.0	1.63	1.36	2.22		0.74	1656	2.22	9/8/2003	DRY WEATHER LAWN WATERING	6
345	1.16	0.92	0.85	245.0	1.47	1.54	2.27		0.81	375	3.48	5/28/2002	REFILL WATER TOWER AFTER PAINTING	4
346	0.95	0.78	0.75	642.0	1.54	1.34	2.07		0.75	805	2.59	7/9/2001	TELEMETRY FAILED WELL DID NOT SHUT DOWN	1
347	1.00	0.97	0.93	289.0	1.52	1.13	1.71		0.87	289	1.71	8/14/2003	HAD TO REFILL WATER TOWER DUE TO MALFUNCTION IN THE SYSTEM.	1
348	0.91	0.87	0.87	147.0	1.62	1.25	2.02		0.85	257	3.53	7/16/2001	DROUGHT	6
349	1.13	0.99	0.98	567.0	2.19	1.31	2.88		0.76	1168	5.94	7/17/2002	FLUSHING MAINS, CLEANING WATER TOWER.	3
350	0.91	0.92	0.98	290.0	1.34	1.10	1.47		0.91	571	2.89	4/1/2001	WELL #3 SPEC. GRAVITY LOSS & HYDRANT FLUSHING.	3
351	0.92	0.86	0.75	1480.0	1.31	1.53	2.01		0.75	1520	2.07	6/30/2001	HIGH DEMAND	6
352	1.09	1.11	0.74	134.0	4.71	1.18	5.54		0.74	160	6.61	11/6/2001	DRAINED FOR INSPECTION AND CLEANING	4
353	0.95	1.01	1.03	360.0	1.60	1.15	1.84		0.91	378	1.93	6/1/2002	SUMMER DEMAND	6
354	0.97	0.73	0.69	227.0	1.21	1.63	1.97		0.69	227	1.97	8/16/2003	HOT WEATHER/ LAWN WATERING.	6
355	0.94	0.87	0.88	547.0	1.32	1.23	1.62		0.87	644	1.91	8/8/2001	DEMANDS	8
356	0.94	0.89	0.88	1527.0	1.48	1.23	1.81		0.88	1550	1.84	7/14/2002	HOT WEATHER	6
357	0.92	0.79	0.77	2724.0	1.40	1.53	2.14		0.77	3370	2.65	7/6/2001	LARGE WATER MAIN BREAK	2
358	0.66	0.59	0.73	71.6	0.88	1.92	1.69		0.59	79	1.87	7/15/2002	FOUND AND REPAIRED 2 LATERAL LEAKS	2
359	1.06	0.93	0.84	1237.0	3.47	1.07	3.71		0.84	1237	3.71	4/28/2003	UNKNOWN	10
360	0.84	0.85	0.86	80.0	2.15	1.24	2.65		0.84	117	3.88	4/6/2001	FIRE	5
361	1.05	1.15	0.81	189.0	1.78	1.63	2.91		0.74	189	2.91	7/31/2003	WATER TOWER RECOATING - WAS PUMPED THROUGH A RELIEF VALVE.	4
362	0.89	0.88	0.88	164.0	1.48	1.32	1.96		0.88	220	2.64	8/10/2001	HOT WEATHER-WATERING LAWNS AND GOLF COURSE.	6
363	0.59	0.62	0.59	304.0	1.18	2.45	2.90		0.59	376	3.58	10/21/2001	REPAIRS AND MAINTENANCE	1
364	1.01	0.96	0.94	1206.0	1.26	1.12	1.41		0.92	1325	1.54	9/22/2002	CITY-WIDE FLUSH OF THE WATER SYSTEM	3
365	0.82	0.77	0.82	2000.0	0.88	1.33	1.18		0.77	3082	1.81	7/22/2002	LAWN SPRINKLERS	6
366	0.95	0.95	0.90	1943.0	1.35	1.22	1.66		0.85	2403	2.05	7/19/2002	SPRINKLING, WASHING, AND NORMAL USE	6
367	0.95	0.89	0.95	2003.1	1.35	1.15	1.54		0.89	2003.1	1.54	1/14/2003	MAJOR 2 SERVICE LEAK WAS DETECTED AT A LOSS OF APPROXIMATELY	2
368	1.32	0.81	0.80	2200.0	1.04	1.32	1.38		0.80	2200	1.38	8/3/2003	LAWN SPRINKLING - ELEVATED TANK FILLING	6
369	0.92	0.87	0.85	1233.0	1.70	1.32	2.24		0.85	1233	2.24	7/25/2003	ONE WELL DID NOT SHUT OFF	1
370	1.12	1.05	0.84	78.0	3.30	1.50	4.95		0.65	95	6.03	7/16/2002	WE USED THE POLY PIGGING METHOD TO CLEAN OUT ALL THE LINES	3
371	0.96	0.80	0.81	119.0	1.95	1.40	2.75		0.63	173	3.99	4/13/2001	MAIN BREAK	2
372	0.83	0.96	0.81	45.0	1.57	1.27	1.99		0.81	74	3.27	9/27/2002	FIRE HYDRANT FLUSHING	3
373	1.15	1.07	0.86	447.0	1.69	1.23	2.08		0.86	485	2.25	9/3/2001	FIRE AT CANNING FACTORY	5
374	1.00	0.90	0.85	2300.0	1.21	1.34	1.62		0.83	2300	1.62	9/9/2003	HOT WEATHER AND WATERING LAWNS	6
375	0.93	0.84	0.84	638.0	1.21	1.50	1.82		0.83	726	2.07	7/9/2001	HOT DRY WEATHER	6
376	0.95	0.86	0.90	352.0	2.52	1.23	3.09		0.86	352	3.09	2/4/2003	UNKNOWN	10
377	0.98	0.87	0.87	1100.0	1.51	1.52	2.29		0.80	1365	2.85	10/1/2001	TRAILER COURT MAIN BREAK. IT WAS NOT REPORTED UNTIL ONE DAY AFTER IT HAPPENED.	2
378	0.95	0.90	0.92	340.0	2.15	1.35	2.90		0.88	672	5.72	4/11/2002	DRAIN TOWER FOR MAINTENANCE	4
379	0.79	0.76	0.83	1033.0	2.54	1.34	3.40		0.76	1036	3.41	10/15/2002	FALL FIRE HYDRANT FLUSHING	3
380	1.07	0.98	0.90	70.0	2.36	1.29	3.05		0.84	70	3.05	10/15/2003	FLUSHING HYDRANTS	3
381	1.06	0.89	0.98	361.0	2.11	1.17	2.47		0.88	361	2.47	12/20/2003	MAIN BREAK	2
382	0.82	0.58	0.59	944.0	1.48	1.72	2.55		0.58	1098	2.96	7/11/2001	CANNING AND BOTTLING SEASON	8
383	0.82	1.19	0.82	164.0	3.52	1.62	5.70		0.82	232	8.06	11/14/2001	LANE TANK DRAINED RESERVOIR FOR MANDATORY 5 YEAR CLEANING & INSPECTION. HAD TO LET WELL RUN CONTINUOUSLY FOR TWO DAYS BECAUSE RESERVOIR HAD TO BE KEPT OFF LINE UNTIL WE GOT TWO SAFE WATER SAMPLES. IT TOOK TWO DAYS TO GET SAMPLES TAKEN & RESULTS BACK.	4
384	0.98	0.97	0.98	222.0	1.28	1.04	1.33		0.97	251	1.50	10/11/2002	HYDRANT FLUSHING	3
385	0.93	0.82	0.82	3500.0	1.28	1.45	1.85		0.82	3500	1.85	8/26/2003	CANNING FACTORIES RUNNING-HOT DRY WEATHER, LAWN WATERING	6
386	0.91	0.86	1.09	374.0	3.68	1.14	4.19		0.86	743	8.32	7/9/2001	WATER MAIN BREAK	2
387	0.94	0.92	0.95	150.0	2.67	1.15	3.08		0.86	151	3.10	10/16/2002	FLUSHING HYDRANTS	3
388	0.96	0.96	1.01	31.2	1.06	1.32	1.40		0.85	50	2.24	10/15/2001	WATER MAIN BREAK	2

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389	0.87	0.91	0.91	2212.0	1.27	1.22	1.56		0.87	3039	2.14	7/17/2001	FIRE	5
390	0.98	0.98	0.94	252.0	3.56	1.23	4.39		0.91	309	5.38	6/6/2002	WATER MAIN FLUSHING	3
391	0.82	0.84	1.09	1560.0	1.97	1.28	2.52		0.78	1560	2.52	12/13/2003	WATER FOR SNOW MAKING	8
392	0.93	0.87	0.89	2437.0	1.30	1.19	1.56		0.69	2437	1.56	8/13/2003	FLUSHED NEW WATER MAIN ON SOUTH SIDE OF TOWN AND FLUSHED NEW WATER MAIN ON WEST SIDE OF TOWN AT SAME TIME ON THIS DAY. ALSO THE WEATHER WAS VERY DRY AT THIS TIME SO THERE ALSO WAS A LOT OF WATERING GOING ON..	11
393	1.08	0.67	0.63	2106.0	1.30	1.18	1.54		0.63	2256	1.65	5/14/2002	FLUSHING MAINS	3
394	0.99	0.92	0.97	158.0	3.33	1.11	3.69		0.88	216	5.05	8/16/2001	FLUSHING HYDRANTS	3
395	0.93	0.89	0.89	144.0	1.57	1.12	1.75		0.89	603	7.34	4/22/2002	PAINTING OF WATER TOWER	4
396	1.04	0.86	0.82	2786.0	1.57	1.54	2.42		0.80	2957	2.57	9/29/2001	HYDRANT FLUSHING	3
397	1.05	0.94	0.96	275.0	1.90	1.39	2.63		0.64	275	2.63	8/18/2003	LAWN WATERING AND CONSTRUCTION	6
398	0.93	0.82	0.81	125.0	2.15	1.35	2.90		0.81	125	2.90	8/25/2003	HOT WEATHER	6
399	0.83	0.82	0.84	79.0	1.71	1.24	2.12		0.82	178	4.77	10/3/2001	WATER MAIN BREAK	2
400	0.89	1.18	0.92	1435.0	1.98	1.18	2.33		0.88	1435	2.33	11/19/2003	SALE OF WATER TO WESTON FOR FOREMOST DAIRIES.	8
401	0.88	0.93	0.92	93.0	2.62	1.06	2.79		0.88	115	3.45	4/5/2001	FLUSHING HYDRANTS	3
402	0.93	0.90	0.94	525.0	1.64	1.14	1.87		0.89	547	1.95	6/29/2001	WATER MAIN BREAK ON BLANDING WOODS ROAD, ALSO RESIDENTIAL FIRE INCIDENT	5
403	0.98	0.87	1.04	181.0	3.21	1.43	4.61		0.85	239	6.09	8/8/2002	WATER LEAK	2
404	0.89	0.92	0.91	576.0	6.33	1.36	8.62		0.82	576	8.62	7/19/2003	END CAP BRAKE ON 6 DEAD END PIPE AT 209 N 4TH AVE"	2
405	0.92	0.87	0.85	962.0	1.59	1.53	2.43		0.83	962	2.43	3/31/2003	HYDRANT FLUSHING.	3
406	1.09	0.87	0.92	1937.0	1.24	1.23	1.53		0.87	1937	1.53	8/5/2003	WARM WEATHER AND INDUSTRIAL USE	6
407	0.94	0.82	0.82	1371.0	1.63	1.24	2.02		0.82	1371	2.02	9/5/2003	PUMP FAILURE AT WELL #3.	1
408	0.87	0.84	0.87	229.0	1.50	1.29	1.94		0.84	363	3.07	7/11/2002	HEAT AND FLUSHING	3
409	0.89	0.87	0.87	237.0	7.66	1.34	10.25		0.87	237	10.25	1/31/2003	BREAK AND FROZEN PIPES AS AFORE MENTIONED 3 MAJOR BREAKS THIS YEAR	2
410	0.82	1.46	0.85	353.0	6.70	1.46	9.78		0.79	353	9.78	11/11/2003	RESERVOIR EMPTIED FOR CLEANING THEN FLUSHED OUT BEFORE FILLING FOR USE.	4
411	1.07	0.97	1.11	867.0	2.16	1.11	2.41		0.89	1007	2.80	10/2/2001	FLUSHING WATER MAINS	3
412	0.97	0.95	0.94	304.0	2.38	1.09	2.61		0.94	304	2.61	2/5/2003	WATER MAIN BREAK	2
413	0.94	0.88	0.89	2685.0	1.73	1.12	1.93		0.88	2692	1.94	8/8/2001	WATERING OF LAWNS AND DOMESTIC USE	6
414	0.87	0.86	0.80	1064.0	1.93	1.30	2.50		0.80	1085	2.55	7/15/2001	HEAVY TOURIST INFLUX DURING SUMMER PERIOD	6
415	0.84	0.72	0.77	915.0	1.64	1.54	2.53		0.72	915	2.53	7/27/2003	HYDRANT FLUSHING	3
416	1.07	0.73	0.57	3290.0	1.18	1.79	2.11		0.57	3990	2.56	1/16/2002	WATER MAIN BREAK	2
417	0.80	0.89	0.90	84.0	2.89	1.55	4.47		0.78	175	9.32	10/7/2002	CONTINUOUS PUMPING DURING TANK INSPECTION, DISINFECTION, AND CLEAN-SAMPLI PROCEDURES.	4
418	0.98	0.90	0.91	341.0	2.31	1.07	2.47		0.90	656	4.74	7/15/2001	DRAIN, FLUSH AND FILL TOWERS	4
419	0.87	0.87	0.87	494.0	2.10	1.45	3.03		0.67	494	3.03	8/30/2003	DRY, HOT DAY CAUSED INCREASED LAWN WATERING.	6
420	1.23	0.98	0.96	146.0	1.92	1.27	2.44		0.89	146	2.44	1/12/2003	MAIN BREAK	2
421	0.94	0.88	1.12	210.0	1.51	1.31	1.98		0.87	368	3.47	11/8/2002	FILLING A POND FOR A TOWN RESIDENT.	8
422	1.17	0.87	0.85	210.0	1.55	1.20	1.87		0.85	274	2.44	6/19/2001	DAY AFTER TORNADO - MANY WATER LEAKS	2
423	1.04	0.67	0.67	595.0	1.41	1.94	2.74		0.56	614	2.83	8/6/2001	HOT SUMMER - LAWN WATERING	6
424	0.97	0.89	1.05	782.0	1.93	1.13	2.18		0.89	782	2.18	7/27/2003	BACKWASHER IRON FILTER AND WATER MAIN DAMAGE ON OAK ST DURING RECONSTRUCTION	2
425	0.93	0.92	0.96	94.0	1.48	1.17	1.72		0.90	115	2.11	8/4/2001	FLUSHING HYDRANTS	3
426	0.91	0.83	0.79	526.0	1.28	1.74	2.22		0.73	622	2.62	9/25/2001	WATER TOWER CLEANING	4
427	0.96	1.04	0.98	125.0	2.93	1.17	3.42		0.90	197	5.39	5/10/2001	THE WATER RAN ALL DAY DUE TO THE WATER TOWER HAVING TO BE EMPTIED FOR PAINTING.	4
428	0.97	0.97	0.84	2409.0	1.31	1.45	1.90		0.77	2409	1.90	8/20/2003	WEATHER	6
429	0.95	0.99	0.95	245.0	1.64	1.15	1.90		0.95	320	2.48	7/9/2002	PUMPED MORE WATER TO SUPPLY LAND O' LAKES.	8
430	0.84	0.84	0.86	678.0	1.36	1.14	1.55		0.84	678	1.55	3/15/2003	BACTERIAL FLUSHING.	3
431	0.83	0.78	0.73	1125.0	2.25	1.77	3.98		0.73	1125	3.98	8/20/2003	WELL WAS ON CONTINUOUSLY TO BECAUSE OF THE NEED TO DRAIN THE TOWER FOR PAINTING.	4
432	1.03	0.92	0.93	256.0	1.91	1.27	2.43		0.80	256	2.43	9/3/2003	FLUSHING SYSTEM	3
433	1.01	0.99	0.97	730.0	1.30	1.10	1.43		0.81	730	1.43	6/17/2003	DRAINED DOWN AND REFILLED UTS UNITS.	10
434	0.88	0.87	0.90	228.0	2.08	1.25	2.61		0.87	228	2.61	8/13/2003	SERVICE LINE BRAKE.	2
435	0.94	0.88	0.85	12491.0	1.24	1.32	1.64		0.79	13672	1.79	7/16/2002	HOT, DRY DAY WITH SPRINKLING.	6

													#N/A	
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436	0.97	0.91	0.88	46.0	2.26	1.26	2.85		0.87	314	19.48	11/28/2001	WATER MAIN BREAK	2
437	1.05	1.30	0.78	233.0	4.32	1.30	5.60		0.78	236	5.67	7/12/2001	STANDPIPE BEING INSPECTED	4
438	1.79	0.81	0.75	209.0	1.52	1.88	2.87		0.72	209	2.87	10/2/2003	RESERVOIR RAN OVER	1
439	0.86	0.76	0.81	38.0	1.69	1.34	2.27		0.76	70	4.18	6/5/2001	MAIN FLUSHING	3
440	1.04	0.96	0.93	1862.0	1.25	1.13	1.41		0.91	2051	1.56	7/16/2002	HOT WEATHER	6
441	1.04	0.91	0.98	251.0	2.50	1.04	2.61		0.91	251	2.61	10/16/2003	FLUSHING MAINS AND HYDRANTS PLUS WATER MAIN BREAK	3
442	1.13	0.92	0.82	188.0	1.37	1.42	1.94		0.77	192	1.99	11/14/2002	FLUSHING HYDRANTS.	3
443	0.86	0.84	0.84	2086.0	1.29	1.16	1.50		0.84	2601	1.88	7/17/2001	NEW CONSTRUCTION-LOAD MAIN , FLUSHING, AND SAMPLING NEW CONSTRUCTION	11
444	0.92	0.95	0.99	338.0	1.80	1.28	2.31		0.87	430	2.93	7/15/2001	FLUSHING NEW WATER MAINS	11
445	0.89	1.10	0.83	5066.0	1.31	1.49	1.94		0.83	5066	1.94	8/23/2003	SUMMER PEAK	6
446	1.02	1.06	0.99	116.0	2.25	1.06	2.39		0.94	160	3.30	10/21/2001	DRAINED RESERVOIR	4
447	1.04	0.86	0.83	2411.0	1.53	1.26	1.93		0.83	2411	1.93	9/7/2003	HOLIDAY WEEKEND - PEOPLE HOME DOING YARD WORK	6
448	0.88	0.84	0.86	68.0	1.80	1.35	2.43		0.82	116	4.14	4/15/2002	FLUSHING OF HYDRANTS	3
449	1.33	0.89	0.94	83.0	2.12	1.33	2.81		0.85	349	11.80	5/9/2001	MAIN BREAK	2
450	0.99	0.83	0.83	221.0	1.86	1.29	2.40		0.83	710	7.72	8/14/2002	PUMP TEST WELL #2	1
451	0.95	0.93	0.96	220.0	1.39	1.16	1.62		0.93	240	1.76	11/7/2002	INSPECTION OF WATER TOWER	4
452	0.68	0.66	0.94	312.0	2.79	1.42	3.97		0.66	312	3.97	2/24/2003	NORMAL OPERATION	10
453	0.78	0.79	0.69	98.0	1.10	1.36	1.49		0.69	194	2.96	11/5/2002	BROKEN WATER MAIN	2
454	0.89	0.98	0.70	290.0	3.90	1.47	5.71		0.70	290	5.71	9/8/2003	HIGH USAGE	6
455	0.99	0.89	0.89	1968.0	1.54	1.18	1.82		0.89	2144	1.98	2/27/2001	NORMAL USAGE	10
456	0.90	0.90	0.89	690.0	1.38	1.14	1.57		0.89	800	1.82	8/5/2002	FLUSHING NEW MAIN KAPHSAW ROAD & MERRILL AVENUE	11
457	1.06	0.97	0.85	48.0	3.99	1.27	5.07		0.85	87	9.19	4/20/2001	UNKNOWN	10
458	0.84	0.73	0.71	711.0	2.55	1.97	5.03		0.67	711	5.03	8/20/2003	THE VILLAGE COMPLETELY DRAINED AND CLEANED THE RESERVOIR.	4
459	1.18	1.10	1.06	380.0	1.81	1.18	2.13		0.77	486	2.73	10/8/2001	FLUSHING WATER MAINS	3
460	0.98	0.89	0.86	38.0	1.82	1.19	2.17		0.86	60	3.43	3/21/2002	NO UNUSUAL REASONS	10
461	0.95	0.86	0.88	1003.0	1.57	1.17	1.83		0.86	1298	2.37	3/7/2002	THE UTILITY WAS NOT ABLE TO DETERMINE THE CAUSE.	10
462	0.97	0.88	0.89	246.0	2.09	1.10	2.30		0.88	273	2.56	8/7/2002	MAIN BREAK	2
463	0.91	0.88	0.89	2273.0	1.54	1.49	2.29		0.86	3994	4.02	2/23/2001	HYDRANT BLEW OFF	1
464	1.05	1.05	1.00	244.0	1.73	1.05	1.81		0.89	249	1.85	5/10/2002	HYDRANT FLUSHING	3
465	0.90	0.95	0.95	116.0	1.57	1.33	2.09		0.86	276	4.98	7/31/2001	MAIN BREAK	2
466	0.93	0.90	0.93	733.0	1.42	1.18	1.68		0.90	767	1.75	5/29/2001	FILLING POOL IN MAY USED 250,000 GALLONS.	8
467	0.96	0.81	0.81	322.0	2.21	1.75	3.86		0.81	322	3.86	1/28/2003	WATER MAIN BREAKS THE MONTH OF JANUARY WERE EXTREME BECAUSE THERE WERE MANY WATER MAIN BREAKS DUE TO THE COLD WEATHER AND FROST. THREE MILLION MORE GALLONS WERE PUMPED THAN NORMAL BECAUSE OF THIS. THIS ALSO CREATED A LOT OF REPAIR EXPENSE FOR THE YEAR.	2
468	0.81	0.92	0.88	115.0	2.30	1.44	3.31		0.78	115	3.31	6/17/2003	FLUSHING	3
469	0.87	0.86	0.89	775.0	1.30	1.17	1.53		0.86	911	1.80	9/5/2002	LAWN WATERING	6
470	0.86	0.93	0.85	53.0	1.46	1.31	1.91		0.85	159.3	5.74	1/2/2001	FLUSH HYDRANTS AND HOLDING TANK	3
471	0.96	0.91	0.91	502.0	1.84	1.50	2.76		0.84	502	2.76	9/14/2003	REFILLED RESERVOIR AFTER DRAINING	4
472	0.99	0.82	1.00	792.0	1.41	1.29	1.82		0.82	1075	2.47	7/9/2001	FLUSHING NEW WATER MAIN	11
473	0.99	0.83	0.82	1655.0	1.34	1.21	1.62		0.82	1688	1.65	8/7/2001	SUMMER USAGE	6
474	0.94	0.99	1.00	4946.0	1.71	1.12	1.92		0.90	4946	1.92	9/9/2003	HYDRANT FLUSHING	3
475	0.96	0.89	0.89	11674.0	1.24	1.23	1.52		0.89	12781	1.67	7/17/2002	HOT & DRY	6
476	0.98	0.97	1.00	2471.0	1.49	1.49	2.22		0.84	2690	2.42	7/15/2002	RESIDENTIAL LAWN SPRINKLING	6
477	1.03	0.90	0.96	3433.3	1.37	1.13	1.54		0.87	3784	1.70	7/4/2001	HOT WEATHER.	6
478	0.95	0.91	0.91	1472.0	1.41	1.05	1.48		0.91	1528	1.54	2/23/2001	WATER USED IN FIGHTING FIRE AT LOCAL BUSINESS WHICH WAS COMPLETELY DESTROYED.	5
479	0.93	0.90	0.92	8771.0	1.53	1.16	1.78		0.88	8771	1.78	9/10/2003	EXTREMELY WARM DAY, EXTENDED PERIOD WITH NO RAIN	6
480	0.99	0.93	0.94	278.8	3.88	1.15	4.48		0.85	1132	18.19	3/2/2001	USAGE HIGH	6
481	1.24	0.87	0.92	544.0	1.77	1.24	2.19		0.86	544	2.19	8/18/2003	WATER MAIN BREAK/LEAKS	2
482	0.91	0.86	0.87	68.0	1.24	1.25	1.56		0.86	269	6.17	1/9/2002	8 MAIN BREAK*	2

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483	0.90	0.74	1.25	748.0	1.31	1.93	2.52		0.71	748	2.52	6/24/2003	WATER MAIN BREAK	2
484	0.87	0.83	0.88	117.0	1.52	1.29	1.95		0.83	262	4.37	11/1/2001	BROKEN WATER MAIN	2
485	0.89	0.81	0.95	10144.0	1.23	1.19	1.46		0.81	11043	1.59	7/16/2001	HIGH USAGE DAY--JULY WAS A DRY MONTH IN TERMS OF PRECIPITATION	6
486	0.99	0.88	0.91	4690.0	1.32	1.20	1.59		0.88	4690	1.59	8/22/2003	SPRINKLING	6
487	0.99	1.06	0.96	48.0	3.20	1.16	3.72		0.51	48	3.72	4/11/2003	EXTRA AMOUNT USED TO PUT OUT FIRE.	5
488	0.97	0.87	0.88	1502.0	1.21	1.27	1.54		0.85	1754	1.80	7/14/2001	HOT WEATHER, SPRINKLING	6
489	0.99	0.93	0.93	463.0	1.77	1.18	2.09		0.90	748	3.38	10/25/2001	CLEANING FLUSHING OF MAINS	3
490	0.95	0.90	0.83	2722.0	1.35	1.26	1.70		0.83	2722	1.70	8/26/2003	LAWN WATERING	6
491	0.94	0.85	0.85	749.0	1.05	1.47	1.54		0.85	1330	2.74	7/16/2001	HOT WEATHER	6
492	1.03	0.68	0.72	484.0	1.88	1.93	3.64		0.61	508	3.82	7/9/2001	HOT DRY SUMMER	6
493	0.91	1.02	0.81	915.0	1.16	1.16	1.34		0.81	915	1.34	8/29/2003	WEATHER RELATED - LAWN SPRINKLERS AND ROAD CONSTRUCTION WATERING.	13
494	0.98	0.86	0.79	108.0	2.59	2.02	5.22		0.77	108	5.22	8/18/2003	FLUSHING MAINS	3
495	0.88	0.90	0.94	62.0	2.65	1.16	3.08		0.88	127	6.31	3/15/2001	MAIN BREAK	2
496	1.06	0.95	0.85	494.0	1.83	1.14	2.08		0.85	598	2.51	1/7/2002	MAIN BREAK	2
497	0.82	0.78	0.73	186.0	4.19	1.50	6.29		0.73	269	9.10	8/3/2002	PUMP WAS RUNNING 24 HOURS/DAY TO MAINTAIN CONSTANT LINE PRESSURE WHILE WATER TOWER WAS BEING PAINTED	4
498	0.95	0.96	1.00	128.0	1.73	1.29	2.24		0.82	161	2.81	9/27/2002	FLUSH NEW WATER MAIN AFTER CONSTRUCTION	11
499	1.04	0.85	0.82	3869.0	1.51	1.38	2.08		0.82	3869	2.08	8/21/2003	WATER USED FOR ELECTRIC PRODUCTION-HIGH TEMPERATURES-HIGH DEMAND OF ELECTRICITY	8
500	1.10	1.00	1.03	611.0	0.35	1.42	0.50	ERROR	0.76	611	0.50	6/16/2003	SPRINKLING LAWNS	6
501	0.89	0.86	0.81	637.0	1.44	1.48	2.14		0.78	738	2.47	7/7/2002	HOT SUMMER DAY	6
502	0.75	0.85	0.77	87.0	3.81	2.20	8.41		0.65	128	12.37	2/22/2001	COMPLETE DRAIN AND REFILL OF WATER TOWER TO PREVENT FREEZE UP.	4
503	0.98	0.78	0.96	166.0	4.07	1.23	5.01		0.78	274	8.27	11/19/2002	CLEANING WATER RESERVOIR	4
504	0.97	0.89	0.87	457.0	1.50	1.34	2.01		0.86	774	3.40	11/3/2002	MAIN BREAK	2
505	1.00	0.86	0.87	669.0	2.78	1.11	3.08		0.86	669	3.08	1/19/2003	WATER MAIN BREAK	2
506	0.87	0.88	1.09	100.0	1.56	1.24	1.94		0.77	110	2.13	9/14/2002	OPERATING HYDRANTS.	3
507	1.15	1.01	1.10	84.0	1.64	1.15	1.88		0.83	92	2.06	9/3/2002	TOWER OVERFLOW	1
508	0.81	0.65	0.64	1700.0	1.31	1.92	2.52		0.50	1700	2.52	8/12/2003	TOURISM	6
509	0.84	0.76	0.85	4526.0	1.46	1.28	1.86		0.76	4526	1.86	8/5/2003	DRY WEATHER - LAWN SPRINKLING	6
510	1.15	1.08	1.06	244.0	1.51	1.26	1.90		0.78	244	1.90	11/12/2003	LEAK	2
511	0.89	0.85	0.84	235.0	1.60	1.13	1.80		0.84	235	1.80	6/11/2003	FILLED HIGH SCHOOL SWIMMING POOL	8
512	0.91	0.85	0.85	168.0	2.45	1.29	3.16		0.85	168	3.16	5/27/2003	FILLING SWIMMING POOL	8
513	0.92	0.86	0.98	226.0	1.63	1.41	2.30		0.82	226	2.30	12/14/2003	WATER LEAK	2
514	0.97	0.94	0.89	370.0	1.88	1.13	2.13		0.89	386	2.22	10/16/2001	FLUSHING DISTRIBUTION MAINS	3
515	0.84	0.82	0.80	149.0	3.01	1.30	3.90		0.80	172	4.51	1/4/2002	FILLING NEW WATER MAINS THAT WERE PUT IN IN 2001	11
516	0.90	0.87	0.91	176.0	2.42	1.18	2.86		0.87	189	3.07	5/30/2002	HYDRANT FLUSHING	3
517	0.94	0.50	0.43	892.0	3.07	2.41	7.41		0.32	1238.1	10.28	8/11/2001	GOLF COURSE IRRIGATION	8
518	0.83	0.96	0.91	14.1	2.28	1.17	2.66		0.69	18	3.40	7/20/2002	EXTRA WATER PUMPED TO CHECK INDIVIDUAL NEW SEPTIC TANKS AND PUMPS	8

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	Ave	Ave	Ave	Ave	Ave	Ave	Ave	2	Ave	Ave	Ave			
	0.95	0.88	0.88	1,126.63	1.96	1.33	2.61		0.81	1,256.88	3.35			
	Max	Max	Max	Max	Max	Max	Max		Max	Max	Max			
	2.90	1.85	2.00	52,887.00	8.94	3.46	16.57		0.97	54,208.00	20.64			
	Median	Median	Median	Median	Median	Median	Median		Median	Median	Median			
	0.95	0.88	0.89	360.50	1.66	1.25	2.18		0.84	486.50	2.62			
	Min	Min	Min	Min	Min	Min	Min		Min	Min	Min			
	0.36	0.41	0.31	13.00	0.35	1.04	0.50		0.07	13.00	0.50			
	113	110	113	271										
	126	44	50											
	24%	8%	10%											

APPENDIX D: ANALYSIS 1 RESULTS

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	2,291,520	1,404,720	1,891,520	486,800	1,097,523	786,720		2.38		
2	2,859,640	1,624,140	2,459,640	835,500	1,294,599	948,140		1.24		
3	749,290	413,145	674,290	261,145	383,812	297,145		0.98		
4	1,178,640	518,040	1,028,640	510,600	432,339	308,040		1.13		
5	2,529,600	1,720,800	2,229,600	508,800	1,454,058	1,045,800		1.96		
6	1,417,440	739,440	1,117,440	378,000	660,674	533,440		1.14		
7	13,294,000	10,647,000	12,194,000	1,547,000	9,102,380	7,698,000		3.82		
8	916,005	504,149	757,440	253,292	416,988	277,149		0.77		
9	436,440	68,940	361,440	292,500	25,019	-190,060	381.99	-0.53	NEGATIVE	1
10	492,240	201,240	462,240	261,000	149,945	88,240		0.51		
11	1,833,440	1,351,440	1,333,440	(18,000)	722,422	436,440		1.60		
12	1,787,720	869,940	1,487,720	617,780	561,966	255,940		0.47		
13	1,746,240	948,240	1,686,240	738,000	869,439	696,240		1.18		
14	3,931,600	2,910,600	3,431,600	521,000	1,872,583	1,410,600		1.87		
15	5,619,840	3,669,840	4,619,840	950,000	2,651,788	1,949,840		2.26		
16	483,440	46,440	433,440	387,000	(15,148)	-455,560	616.36	-1.05	NEGATIVE	1
17	1,454,240	685,440	1,254,240	568,800	620,018	448,440		1.04		
18	752,540	243,270	502,540	259,270	193,347	-129,730	425.09	-0.27	NEGATIVE	4
19	14,460,000	11,610,000	13,460,000	1,850,000	7,941,604	5,297,100		2.94		
20	783,840	653,040	633,840	(19,200)	578,840	393,040		4.55		
21	2,158,240	1,614,240	1,758,240	144,000	1,309,796	1,063,240		2.11		
22	649,440	131,040	505,440	374,400	57,688	-27,960	369.42	-0.06	NEGATIVE	2
23	1,007,040	509,040	923,040	414,000	470,930	394,040		0.91		
24	3,092,000	1,530,000	2,792,000	1,262,000	1,187,172	758,000		0.70		
25	1,306,440	851,940	1,131,440	279,500	752,690	535,940		1.24		
26	1,071,040	522,000	1,052,640	530,640	388,781	184,000		0.37		
27	8,065,000	5,955,300	6,815,000	859,700	3,740,635	2,056,300		1.30		
28	1,438,720	850,320	938,720	88,400	777,779	551,320		2.52		
29	5,505,600	3,747,600	5,205,600	1,458,000	2,387,685	1,068,600		0.91		
30	570,080	181,440	370,080	188,640	142,531	10,440	256.00	0.03		
31	1,811,160	984,060	1,651,160	667,100	836,843	599,060		0.75		
32	796,440	356,940	721,440	364,500	329,020	163,940		0.57		
33	8,956,000	6,750,000	7,956,000	1,206,000	4,680,286	3,870,000		1.92		
34	3,044,440	1,868,940	2,944,440	1,075,500	1,627,800	828,940		0.89		
35	1,417,440	667,440	1,117,440	450,000	484,403	262,440		0.66		
36	6,271,200	4,741,200	5,771,200	1,030,000	3,516,677	890,200		0.62		
37	1,015,040	563,040	815,040	252,000	413,124	285,040		0.75		
38	1,087,640	461,340	937,640	476,300	397,874	284,340		1.07		
39	5,745,000	3,658,500	5,232,000	1,573,500	2,861,889	2,004,500		1.27		
40	724,040	243,540	599,040	355,500	184,796	100,540		0.78		
41	1,691,440	946,440	1,441,440	495,000	815,747	411,440		0.57		
42	2,057,440	1,081,440	1,657,440	576,000	640,850	285,440		0.40		
43	1,425,440	685,440	1,225,440	540,000	589,660	259,440		0.51		
44	3,060,000	2,106,000	2,560,000	454,000	1,565,725	1,181,000		2.34		
45	2,049,040	1,216,440	1,649,040	432,600	825,282	551,440		0.77		
46	1,261,240	645,660	961,240	315,580	570,926	470,660		1.63		
47	2,076,560	1,605,960	1,576,560	(29,400)	1,303,794	1,072,960		6.37		
48	475,840	91,440	375,840	284,400	40,206	-72,560	310.39	-0.19	NEGATIVE	1
49	1,310,734	689,485	1,146,240	456,755	641,574	420,485		0.78		
50	533,440	91,440	433,440	342,000	57,293	-11,560	308.03	-0.03	NEGATIVE	2
51	1,806,240	1,056,240	1,556,240	500,000	955,574	737,240		1.38		
52	3,765,440	2,575,440	3,265,440	690,000	2,283,402	1,946,440		2.25		
53	367,440	136,440	267,440	131,000	109,946	23,440	150.00	0.11		
54	726,640	226,440	476,640	250,200	111,129	-112,560	408.17	-0.24	NEGATIVE	3
55	478,640	230,040	368,640	138,600	192,842	78,040		0.60		
56	985,990	544,815	934,240	389,425	469,757	437,815		1.38		
57	2,875,760	1,730,520	2,675,760	945,240	877,616	219,520	771.00	0.20		
58	1,757,440	1,113,840	1,657,440	543,600	904,214	560,840		0.89		
59	1,267,840	595,440	1,167,840	572,400	367,267	166,440		0.33		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
60	2,367,040	1,416,240	1,867,040	450,800	1,151,174	772,240		0.86		
61	5,452,190	3,143,115	5,402,190	2,259,075	60,731	-866,885	2340.93	-0.46	**NEGATIVE**	8
62	23,064,340	18,055,890	22,064,340	4,008,450	14,045,986	9,941,890		7.27		
63	1,267,040	570,240	1,067,040	496,800	499,706	314,240		0.81		
64	16,688,000	13,752,000	14,688,000	936,000	12,281,919	10,050,000		3.67		
65	843,440	334,440	793,440	459,000	278,739	-16,560	370.13	-0.06	**NEGATIVE**	5
66	291,378	93,904	188,640	94,736	74,087	31,904	130.00	0.17		
67	574,760	311,940	509,760	197,820	254,702	83,940		0.33		
68	614,540	229,230	364,540	135,310	215,395	167,230		0.46		
69	9,520,000	7,452,000	7,320,000	(132,000)	5,523,644	1,999,000		1.26		
70	1,781,440	1,171,440	1,381,440	210,000	815,508	561,440		1.04		
71	922,440	196,740	865,440	668,700	131,405	-22,260	577.29	-0.15	**NEGATIVE**	10
72	2,267,440	1,666,440	2,117,440	451,000	1,548,057	1,151,440		2.00		
73	3,090,440	1,629,540	2,881,440	1,251,900	1,442,008	908,540		0.63		
74	1,409,440	793,440	1,009,440	216,000	615,928	260,440		0.60		
75	1,700,640	973,440	1,400,640	427,200	758,442	508,440		0.78		
76	1,447,440	690,840	1,147,440	456,600	540,407	318,840		0.89		
77	398,240	73,440	318,240	244,800	14,716	-94,560	285.67	-0.30	**NEGATIVE**	3
78	562,240	91,440	462,240	370,800	36,722	-17,560	332.19	-0.04	**NEGATIVE**	3
79	945,440	505,440	865,440	360,000	429,713	301,440		0.70		
80	1,843,440	874,440	1,543,440	669,000	674,400	225,440		0.39		
81	737,440	368,640	649,440	280,800	347,869	303,640		1.05		
82	6,484,400	4,955,400	5,484,400	529,000	3,485,977	2,454,400		2.27		
83	1,888,440	1,274,940	1,588,440	313,500	1,071,028	655,940		1.30		
84	911,640	184,140	836,640	652,500	74,058	-109,860	976.82	-0.95	**NEGATIVE**	3
85	419,200	80,640	331,200	250,560	25,299	-61,360	271.61	-0.19	**NEGATIVE**	3
86	1,941,440	1,171,440	1,441,440	270,000	903,571	531,440		0.74		
87	3,404,000	2,286,000	2,904,000	618,000	1,578,030	1,044,000		1.45		
88	14,454,000	12,393,000	13,454,000	1,061,000	8,717,064	3,828,000		2.13		
89	1,307,240	488,340	1,182,240	693,900	418,025	-120,660	740.47	-0.32	**NEGATIVE**	8
90	1,785,440	901,440	1,585,440	684,000	222,725	-426,560	955.47	-0.59	**NEGATIVE**	8
91	1,873,440	991,440	1,773,440	782,000	864,020	467,440		0.56		
92	3,325,440	1,063,440	3,025,440	1,962,000	824,043	448,440		0.57		
93	5,063,600	3,270,600	4,663,600	1,393,000	2,833,777	2,266,600		3.15		
94	3,534,640	2,098,440	3,284,640	1,186,200	1,795,909	1,084,440		1.00		
95	821,440	91,440	721,440	630,000	59,037	-102,560	571.22	-0.14	**NEGATIVE**	1
96	661,240	180,540	462,240	281,700	135,128	-77,460	373.79	-0.17	**NEGATIVE**	4
97	647,040	523,440	447,040	(76,400)	404,092	309,440		3.58		
98	1,885,440	991,440	1,585,440	594,000	694,924	-278,560	832.13	-0.39	**NEGATIVE**	8
99	1,325,040	842,040	1,175,040	333,000	723,540	473,040		1.31		
100	895,040	314,640	851,040	536,400	141,859	-7,360	410.76	-0.03	**NEGATIVE**	2
101	3,454,000	2,151,000	3,154,000	1,003,000	1,635,375	1,364,000		1.89		
102	1,353,440	613,440	1,153,440	540,000	553,294	351,440		0.81		
103	1,021,440	415,440	721,440	306,000	309,072	-199,560	954.33	-1.39	**NEGATIVE**	4
104	3,441,200	1,798,200	2,891,200	1,093,000	1,430,311	1,006,200		0.93		
105	627,440	46,440	577,440	531,000	22,317	-11,560	408.03	-0.02	**NEGATIVE**	2
106	1,408,440	662,940	1,208,440	545,500	507,442	82,940	500.00	0.19		
107	1,259,440	658,440	1,009,440	351,000	525,911	338,440		0.78		
108	2,003,840	1,085,040	1,503,840	418,800	637,660	229,040		0.39		
109	2,691,040	1,628,640	2,391,040	762,400	1,442,924	1,263,640		1.35		
110	3,541,440	2,431,440	3,241,440	810,000	1,834,997	498,440		0.48		
111	468,240	309,240	318,240	9,000	223,662	90,240		2.09		
112	590,440	293,940	505,440	211,500	268,249	180,940		0.84		
113	872,940	368,190	865,440	497,250	346,134	301,290		0.84		
114	1,930,240	732,240	1,780,240	1,048,000	669,112	464,240		0.81		
115	3,602,400	2,466,000	3,122,400	656,400	1,671,673	656,000		0.63		
116	1,325,440	595,440	1,225,440	630,000	491,988	313,440		0.62		
117	2,084,640	1,261,440	1,784,640	523,200	966,727	556,440		0.77		
118	2,394,440	1,607,940	1,734,440	126,500	1,436,807	1,202,940		2.39		

	Analysis 1									
	firm well or firm storage control				firm capacity					
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119	4,860,000	2,466,000	4,260,000	1,794,000	1,611,688	1,012,000		0.83		
120	6,872,000	4,518,000	5,872,000	1,354,000	3,513,380	2,551,000		2.95		
121	1,914,240	1,077,840	1,714,240	636,400	855,943	633,840		0.79		
122	9,604,800	7,660,800	9,104,800	1,444,000	4,045,869	865,800		0.60		
123	1,450,000	9,000	1,440,000	1,431,000	(532,512)	-1,796,000	2247.22	-1.25	NEGATIVE	8
124	913,840	492,840	663,840	171,000	418,323	128,840		0.48		
125	463,440	93,240	361,440	268,200	83,596	14,240	250.00	0.04		
126	2,242,400	1,558,800	1,742,400	183,600	1,076,183	768,800		1.67		
127	769,840	456,840	519,840	63,000	382,136	162,840		0.71		
128	1,238,880	674,640	938,880	264,240	491,291	233,640		0.58		
129	322,160	173,160	272,160	99,000	145,077	62,160		0.49		
130	957,440	541,440	757,440	216,000	403,956	-30,560	298.34	-0.08	NEGATIVE	4
131	482,240	181,440	282,240	100,800	153,834	-85,260	254.21	-0.30	NEGATIVE	4
132	2,973,440	1,193,040	2,549,440	1,356,400	972,448	533,040		0.74		
133	1,309,040	705,240	1,159,040	453,800	548,562	214,240		0.55		
134	2,461,440	1,063,440	2,161,440	1,098,000	819,037	309,440		0.61		
135	211,840	48,240	159,840	111,600	17,658	-2,760	111.92	-0.02	NEGATIVE	3
136	3,053,200	1,921,320	2,403,200	481,880	1,297,154	659,320		1.13		
137	47,873,920	39,895,920	42,873,920	2,978,000	30,576,068	21,293,920		7.78		
138	907,040	649,440	707,040	57,600	557,710	311,440		1.73		
139	4,264,000	2,790,000	3,864,000	1,074,000	2,391,072	2,023,000		1.65		
140	877,440	415,440	687,440	272,000	368,608	284,640		1.98		
141	468,240	280,440	318,240	37,800	238,773	185,440		1.29		
142	3,588,240	2,084,040	3,288,240	1,204,200	1,926,496	1,710,040		1.95		
143	5,284,000	3,700,800	4,784,000	1,083,200	2,483,455	1,449,800		1.26		
144	880,640	325,440	800,640	475,200	261,141	147,440		0.59		
145	1,409,440	721,440	1,009,440	288,000	426,805	258,440		0.72		
146	2,316,640	1,427,040	2,060,640	633,600	1,362,772	1,212,040		1.40		
147	2,196,440	1,084,140	1,961,440	877,300	956,804	636,140		0.80		
148	267,440	46,440	217,440	171,000	5,756	-62,560	193.44	-0.29	NEGATIVE	3
149	718,440	401,940	518,440	116,500	368,230	267,940		1.86		
150	2,557,600	1,422,000	2,157,600	735,600	1,028,522	674,000		0.85		
151	253,040	46,440	203,040	156,600	25,999	-16,560	151.50	-0.08	NEGATIVE	5
152	685,640	383,940	548,640	164,700	340,701	90,940		0.35		
153	807,440	46,440	757,440	711,000	(43,771)	-680,560	997.61	-0.90	NEGATIVE	8
154	741,040	471,240	491,040	19,800	383,172	236,940		0.97		
155	2,561,440	1,081,440	2,261,440	1,180,000	840,846	425,440		0.59		
156	292,440	176,940	217,440	40,500	161,112	34,940		0.32		
157	9,420,000	7,542,000	8,920,000	1,378,000	5,523,632	3,419,000		1.98		
158	2,977,640	1,150,740	2,777,640	1,626,900	971,747	618,740		1.01		
159	23,969,800	20,013,300	20,969,800	956,500	14,451,897	11,838,300		10.28		
160	3,462,560	2,266,560	2,502,560	236,000	1,652,490	813,560		1.26		
161	1,591,640	850,140	1,391,640	541,500	794,150	683,140		1.04		
162	447,440	46,440	397,440	351,000	6,256	-160,560	386.50	-0.41	NEGATIVE	1
163	9,051,000	7,159,500	8,466,000	1,306,500	5,230,771	3,875,500		2.24		
164	309,840	136,440	159,840	23,400	93,916	7,440	110.00	0.05		
165	1,921,840	1,061,640	1,671,840	610,200	906,398	597,640		0.72		
166	4,380,000	2,790,000	2,880,000	90,000	2,014,638	100,000	1000.00	0.07		
167	2,463,440	1,792,440	2,263,440	471,000	1,597,957	1,157,440		2.01		
168	1,677,440	991,440	1,377,440	386,000	797,696	489,440		0.76		
169	1,094,040	569,340	1,031,040	461,700	548,496	439,340		0.86		
170	1,731,440	1,018,440	1,231,440	213,000	825,520	410,440		0.95		
171	1,088,440	137,340	937,440	800,100	83,772	-118,660	732.40	-0.13	NEGATIVE	1
172	333,440	73,440	253,440	180,000	45,635	-18,560	187.89	-0.07	NEGATIVE	3
173	1,525,440	1,027,440	1,025,440	(2,000)	813,224	515,440		1.19		
174	7,320,800	5,392,800	6,320,800	928,000	3,759,481	1,791,800		1.51		
175	3,716,440	2,372,940	3,416,440	1,043,500	2,122,221	1,432,940		1.33		
176	767,440	402,840	721,440	318,600	368,670	309,840		0.86		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
177	563,440	118,440	433,440	315,000	82,500	-126,560	387.89	-0.29	NEGATIVE	11
178	2,561,440	541,440	2,521,440	1,980,000	444,048	315,440		0.63		
179	137,840	46,440	87,840	41,400	33,736	-16,560	71.50	-0.19	NEGATIVE	1
180	627,440	334,440	577,440	243,000	260,432	228,440		0.79		
181	571,440	341,640	471,440	129,800	296,886	18,640	150.00	0.09		
182	7,559,280	6,034,680	7,259,280	1,224,600	4,622,844	3,540,680		2.52		
183	9,140,000	6,786,000	8,640,000	1,854,000	4,774,516	3,394,000		1.47		
184	559,840	296,640	519,840	223,200	272,585	232,640		0.90		
185	1,165,440	789,840	965,440	175,600	632,363	47,840	240.00	0.17		
186	593,440	264,240	541,440	277,200	244,101	211,240		0.98		
187	12,234,000	8,919,000	10,734,000	1,815,000	7,372,964	3,599,000		1.19		
188	1,475,440	802,440	1,225,440	423,000	651,378	-75,560	509.03	-0.13	NEGATIVE	1
189	2,644,800	1,576,800	2,344,800	768,000	1,121,109	812,800		1.57		
190	1,143,440	964,440	793,440	(171,000)	830,971	520,440		7.23		
191	373,600	241,200	273,600	32,400	199,493	142,200		1.23		
192	1,664,240	1,137,240	944,240	(193,000)	939,920	479,240		1.70		
193	1,252,640	627,840	1,052,640	424,800	493,892	140,840		0.32		
194	483,440	46,440	433,440	387,000	519	-206,560	443.44	-0.48	NEGATIVE	4
195	1,161,440	635,040	1,006,440	371,400	517,322	334,040		0.77		
196	6,376,400	4,451,400	5,876,400	1,425,000	2,741,361	1,601,400		1.57		
197	6,609,800	4,691,700	6,059,800	1,368,100	3,711,238	2,383,700		1.50		
198	498,440	59,940	433,440	373,500	27,083	-78,060	354.21	-0.18	NEGATIVE	9
199	2,211,440	46,440	2,161,440	2,115,000	28,029	-12,260	1508.51	-0.01	NEGATIVE	2
200	353,840	132,840	303,840	171,000	100,560	28,840		0.33		
201	2,598,440	1,807,380	2,088,440	281,060	1,407,177	1,070,380		1.86		
202	1,259,840	613,440	1,059,840	446,400	524,217	485,440		1.12		
203	849,440	325,440	649,440	324,000	270,629	168,440		1.17		
204	814,720	301,680	731,720	430,040	211,539	-61,320	473.02	-0.37	NEGATIVE	2
205	1,711,040	1,056,240	1,211,040	154,800	870,356	366,240		0.61		
206	335,940	75,690	253,440	177,750	26,340	-98,310	243.27	-0.39	NEGATIVE	1
207	1,741,440	271,440	1,441,440	1,170,000	41,573	-689,560	1478.86	-0.48	NEGATIVE	12
208	910,840	497,340	735,840	238,500	426,102	310,340		0.92		
209	1,098,920	372,420	1,033,920	661,500	353,784	230,420		0.74		
210	5,745,800	3,856,500	5,445,800	1,589,300	3,041,093	1,252,500		0.72		
211	3,583,700	2,289,330	3,183,700	894,370	1,739,544	766,330		0.97		
212	1,136,640	674,640	836,640	162,000	487,310	293,640		0.73		
213	7,861,200	5,344,200	6,861,200	1,517,000	3,529,616	1,926,200		0.89		
214	9,950,000	8,379,000	8,950,000	571,000	6,463,933	3,624,000		2.80		
215	1,092,640	678,240	892,640	214,400	581,575	377,240		1.19		
216	516,040	23,940	491,040	467,100	9,180	-8,560	345.94	-0.02	NEGATIVE	4
217	1,452,640	836,640	1,052,640	216,000	721,440	460,640		0.97		
218	1,249,440	660,240	1,117,440	457,200	519,207	171,240		0.32		
219	322,440	175,140	289,440	114,300	159,638	58,140		0.40		
220	1,039,640	608,940	764,640	155,700	539,206	473,940		1.32		
221	972,240	453,240	822,240	369,000	397,848	-81,760	440.33	-0.26	NEGATIVE	4
222	823,440	28,440	793,440	765,000	12,996	-7,560	555.25	-0.01	NEGATIVE	1
223	4,235,200	2,581,200	3,735,200	1,154,000	1,819,814	1,228,200		1.00		
224	40,632,000	32,832,000	31,632,000	(1,200,000)	19,353,007	11,106,000		1.84		
225	7,927,000	5,708,700	7,177,000	1,468,300	4,515,664	3,249,700		2.38		
226	1,618,240	822,240	1,218,240	396,000	625,968	269,240		0.58		
227	274,640	168,840	224,640	55,800	126,252	47,840		0.74		
228	3,056,640	2,085,840	2,556,640	470,800	1,842,729	1,120,840		2.78		
229	5,899,000	4,013,100	5,399,000	1,385,900	2,543,535	1,809,100		2.09		
230	436,440	68,940	361,440	292,500	38,762	-298,060	456.99	-0.83	NEGATIVE	4
231	951,040	437,040	851,040	414,000	404,098	356,040		1.03		
232	3,575,400	2,470,500	3,275,400	804,900	2,024,190	1,327,500		2.05		
233	3,677,440	2,413,440	3,477,440	1,064,000	2,088,253	1,786,440		1.46		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
234	4,972,000	3,276,000	4,772,000	1,496,000	2,842,131	2,576,000		1.79		
235	902,240	462,240	822,240	360,000	429,083	333,240		0.86		
236	6,408,640	4,274,640	6,108,640	1,834,000	2,953,497	1,704,640		0.89		
237	952,040	439,380	865,440	426,060	415,049	369,380		1.03		
238	2,195,440	226,440	1,945,440	1,719,000	(970,961)	-2,303,560	2949.69	-1.18	NEGATIVE	6
239	2,100,000	990,000	1,800,000	810,000	633,012	386,000		0.54		
240	52,013,760	42,471,360	47,013,760	4,542,400	30,492,862	15,219,360		4.31		
241	2,919,200	1,717,200	2,419,200	702,000	1,323,122	963,200		1.34		
242	1,101,440	476,640	973,440	496,800	412,903	159,640		0.44		
243	1,825,760	987,840	1,625,760	637,920	841,889	657,840		0.82		
244	5,331,840	3,831,840	4,931,840	1,100,000	2,648,476	1,067,840		0.85		
245	8,249,650	6,151,725	6,749,650	597,925	4,811,151	3,289,725		2.28		
246	3,040,440	1,670,940	2,740,440	1,069,500	1,231,550	685,940		0.51		
247	7,192,000	4,644,000	6,692,000	2,048,000	3,855,100	3,269,000		1.75		
248	4,536,400	2,867,400	4,036,400	1,169,000	2,091,148	1,169,400		0.94		
249	545,440	37,440	505,440	468,000	(35,075)	-289,560	551.08	-0.57	NEGATIVE	11
250	619,040	181,440	419,040	237,600	95,125	-54,560	327.89	-0.13	NEGATIVE	3
251	347,840	73,440	267,840	194,400	37,322	-7,560	190.25	-0.03	NEGATIVE	2
252	1,243,440	4,680	1,239,840	1,235,160	(407,933)	-698,320	1344.94	-0.56	NEGATIVE	8
253	1,604,640	667,440	1,304,640	637,200	365,488	169,440		0.43		
254	339,440	46,440	289,440	243,000	19,507	-383,560	466.36	-1.33	NEGATIVE	8
255	630,440	113,940	505,440	391,500	74,066	-28,060	369.49	-0.06	NEGATIVE	3
256	357,640	23,940	332,640	308,700	15,876	-13,060	239.07	-0.04	NEGATIVE	5
257	7,072,000	4,896,000	6,572,000	1,676,000	3,598,403	2,672,000		1.43		
258	558,440	113,940	433,440	319,500	55,247	-244,060	469.49	-0.56	NEGATIVE	1
259	3,988,840	2,495,700	3,788,840	1,293,140	2,146,846	1,316,700		0.91		
260	398,240	73,440	318,240	244,800	46,413	19,440	220.00	0.06		
261	1,255,440	784,440	955,440	171,000	531,483	264,440		0.61		
262	1,109,440	595,440	1,059,440	464,000	532,251	444,440		0.88		
263	699,440	46,440	649,440	603,000	23,216	-51,560	485.81	-0.08	NEGATIVE	2
264	568,640	419,040	368,640	(50,400)	320,724	196,040		2.72		
265	1,371,440	622,440	1,121,440	499,000	514,214	399,440		1.11		
266	1,011,740	657,990	761,740	103,750	417,816	224,990		1.04		
267	797,440	347,040	757,440	410,400	307,625	92,040		0.30		
268	98,064,400	84,645,000	92,064,400	7,419,400	52,419,654	30,437,000		9.19		
269	580,440	68,940	505,440	436,500	58,387	20,940	350.00	0.04		
270	3,009,640	2,353,140	2,809,640	456,500	2,184,873	2,040,140		3.50		
271	290,440	146,340	289,440	143,100	141,374	133,340		0.93		
272	1,878,040	1,256,940	1,578,040	321,100	1,028,196	752,940		1.69		
273	627,440	46,440	577,440	531,000	19,955	-73,560	451.08	-0.13	NEGATIVE	5
274	1,431,440	748,440	1,181,440	433,000	475,644	148,440		0.34		
275	1,353,440	757,440	1,153,440	396,000	603,238	421,440		0.73		
276	1,884,000	990,000	1,584,000	594,000	721,510	293,000		0.41		
277	10,124,344	8,445,622	7,124,344	(1,321,278)	6,274,700	5,122,622		8.47		
278	98,440	43,380	53,440	10,060	38,001	-45,750	66.77	-0.91	NEGATIVE	4
279	735,040	293,040	635,040	342,000	231,281	139,040		0.69		
280	4,298,400	2,912,400	3,798,400	886,000	2,405,593	1,659,400		1.28		
281	4,609,600	3,445,200	4,109,600	664,400	2,796,097	2,170,200		2.30		
282	1,933,520	1,168,920	1,583,520	414,600	1,031,636	807,920		1.12		
283	5,498,000	3,933,000	4,748,000	815,000	3,338,600	2,331,000		1.62		
284	2,462,400	1,983,600	1,962,400	(21,200)	1,395,777	151,600		0.47		
285	865,040	388,440	715,040	326,600	173,202	27,440	315.00	0.15		
286	310,640	161,640	260,640	99,000	122,010	-71,360	161.94	-0.62	NEGATIVE	1
287	9,400,800	6,922,800	8,400,800	1,478,000	4,056,955	2,160,800		1.50		
288	9,132,000	6,332,400	8,382,000	2,049,600	4,338,293	2,572,400		1.37		
289	1,051,440	568,440	901,440	333,000	497,991	283,440		0.66		
290	8,086,720	5,378,400	7,886,720	2,508,320	4,456,584	3,012,400		1.69		
291	511,440	294,840	361,440	66,600	264,485	213,840		1.35		
292	724,440	68,940	649,440	580,500	38,295	-120,060	533.38	-0.19	NEGATIVE	2

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
293	10,248,400	7,781,400	9,248,400	1,467,000	5,568,329	3,265,400		1.71		
294	195,440	118,440	145,440	27,000	101,403	17,440	50.00	0.24		
295	911,640	472,140	836,640	364,500	392,392	294,140		0.73		
296	5,063,200	3,366,000	4,563,200	1,197,200	2,885,796	2,494,000		1.73		
297	303,440	46,440	253,440	207,000	9,359	-38,560	201.78	-0.15	NEGATIVE	6
298	2,561,440	1,441,440	2,161,440	720,000	1,143,594	824,440		0.76		
299	1,433,640	761,940	1,268,640	506,700	644,094	418,940		0.68		
300	1,570,440	833,940	1,495,440	661,500	691,787	387,940		0.57		
301	2,489,520	1,756,440	1,739,520	(16,920)	1,470,403	874,440		1.35		
302	6,946,000	4,509,000	6,446,000	1,937,000	3,669,509	1,709,000		0.91		
303	8,999,400	7,139,700	8,499,400	1,359,700	5,327,019	4,399,700		3.07		
304	1,093,840	622,440	843,840	221,400	464,438	118,440		0.30		
305	885,840	309,240	735,840	426,600	242,874	101,240		0.59		
306	1,623,240	693,540	1,390,240	696,700	596,170	346,540		0.96		
307	1,183,120	511,560	933,120	421,560	407,366	-9,440	463.87	-0.03	NEGATIVE	1
308	1,300,440	572,940	1,250,440	677,500	517,551	420,940		0.84		
309	3,549,800	2,870,100	3,099,800	229,700	2,271,942	1,602,100		3.27		
310	1,757,440	739,440	1,657,440	918,000	693,984	575,440		0.89		
311	263,040	55,440	203,040	147,600	27,704	-175,560	261.92	-0.87	NEGATIVE	4
312	3,538,880	2,196,000	3,238,880	1,042,880	1,617,650	977,000		1.29		
313	435,240	106,740	318,240	211,500	90,547	68,740	220.00	0.22		
314	5,146,000	3,789,000	4,646,000	857,000	3,085,796	2,576,000		2.24		
315	2,331,440	784,440	2,031,440	1,247,000	569,379	149,440		0.32		
316	4,816,000	3,679,200	4,066,000	386,800	2,958,745	1,904,200		1.84		
317	1,731,640	994,140	1,556,640	562,500	889,046	366,140		0.85		
318	2,330,240	1,675,440	2,080,240	404,800	1,385,821	1,032,440		1.79		
319	3,319,440	2,303,640	2,719,440	415,800	2,012,575	1,622,640		2.05		
320	448,040	79,380	361,440	282,060	21,444	-157,620	359.46	-0.44	NEGATIVE	4
321	361,040	46,440	311,040	264,600	13,699	-140,560	312.61	-0.45	NEGATIVE	2
322	12,556,985	10,676,327	11,556,985	880,659	7,286,600	3,882,327		3.00		
323	1,590,240	1,056,240	1,290,240	234,000	850,500	681,240		1.48		
324	4,123,800	2,616,300	3,873,800	1,257,500	2,102,169	1,710,300		1.45		
325	1,137,440	649,440	937,440	288,000	510,886	240,440		0.83		
326	5,767,520	4,511,520	5,267,520	756,000	2,241,769	1,177,520		1.23		
327	5,215,600	3,576,600	4,915,600	1,339,000	2,428,561	220,600	1100.00	0.19		
328	1,903,332	987,383	1,703,332	715,949	646,227	426,383		0.82		
329	245,440	91,440	145,440	54,000	71,975	13,440	100.00	0.09		
330	114,840	68,940	87,840	18,900	63,930	37,940		0.88		
331	2,824,000	1,638,000	2,324,000	686,000	1,211,522	725,000		1.44		
332	592,240	118,440	462,240	343,800	74,162	9,440	320.00	0.02		
333	972,240	496,440	822,240	325,800	458,471	334,440		0.93		
334	976,440	68,940	901,440	832,500	47,136	-381,060	889.63	-0.42	NEGATIVE	4
335	2,659,640	1,876,140	2,159,640	283,500	1,760,009	976,140		1.36		
336	12,046,200	9,729,900	11,546,200	1,816,300	7,947,612	6,063,900		2.90		
337	4,285,600	2,991,600	3,785,600	794,000	2,591,870	2,081,600		1.72		
338	2,561,440	1,801,440	2,261,440	460,000	1,488,911	879,440		1.22		
339	160,740	2,250	159,840	157,590	(4,683)	-15,750	120.94	-0.10	NEGATIVE	10
340	1,035,040	663,840	635,040	(28,800)	402,695	62,840	230.00	0.21		
341	15,126,200	10,838,700	14,026,200	3,187,500	8,525,393	3,000,700		0.87		
342	283,040	73,440	203,040	129,600	40,965	-104,560	212.61	-0.52	NEGATIVE	3
343	2,082,640	1,432,440	1,832,640	400,200	1,189,810	890,440		1.55		
344	4,906,000	3,364,200	4,456,000	1,091,800	2,617,046	1,708,200		1.40		
345	2,259,840	933,840	1,959,840	1,026,000	826,121	558,840		0.84		
346	1,825,440	829,440	1,325,440	496,000	518,877	24,440	650.00	0.08		
347	761,840	510,840	511,840	1,000	341,718	221,840		4.40		
348	789,040	269,640	779,040	509,400	196,737	12,640	360.00	0.05		
349	1,416,800	728,640	1,216,800	488,160	531,854	-439,360	836.56	-0.80	NEGATIVE	3
350	1,998,640	1,313,640	1,698,640	385,000	1,115,866	742,640		1.43		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
351	2,807,640	1,674,540	2,507,640	833,100	938,492	154,540	740.00	0.24		
352	483,440	46,440	433,440	387,000	22,235	-113,560	378.86	-0.26	**NEGATIVE**	4
353	1,452,000	846,000	1,152,000	306,000	650,479	468,000		0.81		
354	837,440	289,440	757,440	468,000	174,396	62,440		0.29		
355	1,818,000	1,053,000	1,568,000	515,000	716,336	409,000		0.63		
356	5,272,640	4,005,360	4,272,640	267,280	3,163,436	2,455,360		2.44		
357	7,196,600	5,766,300	6,546,600	780,300	4,492,308	2,396,300		2.87		
358	1,069,440	487,440	1,009,440	522,000	445,098	408,440		0.95		
359	1,784,240	1,252,440	1,534,240	281,800	919,238	15,440	345.00	0.03		
360	461,440	91,440	361,440	270,000	61,276	-25,560	267.75	-0.07	**NEGATIVE**	5
361	561,840	388,440	411,840	23,400	323,475	199,440		1.39		
362	1,353,440	613,440	1,153,440	540,000	529,951	393,440		0.91		
363	1,268,240	543,240	1,218,240	675,000	438,253	167,240		0.34		
364	6,620,000	5,112,000	6,120,000	1,008,000	4,254,332	3,787,000		2.77		
365	18,248,000	14,580,000	13,248,000	(1,332,000)	12,878,852	11,498,000		4.70		
366	8,952,000	5,922,000	7,952,000	2,030,000	4,749,325	3,519,000		1.53		
367	3,997,280	3,128,400	3,397,280	268,880	1,830,166	1,125,300		1.90		
368	10,606,000	7,335,000	9,856,000	2,521,000	5,739,236	5,135,000		2.38		
369	2,181,440	1,679,040	1,681,440	2,400	1,129,585	446,040		1.03		
370	287,040	181,440	167,040	(14,400)	165,697	86,440		1.20		
371	733,240	246,060	670,240	424,180	202,733	73,060		0.75		
372	709,440	55,440	649,440	594,000	32,810	-18,560	462.89	-0.03	**NEGATIVE**	3
373	2,658,440	1,183,140	2,408,440	1,225,300	967,738	698,140		0.81		
374	10,535,200	8,125,200	9,535,200	1,410,000	6,708,870	5,825,200		2.89		
375	3,281,440	1,081,440	2,881,440	1,800,000	730,540	355,440		0.49		
376	1,691,440	946,440	1,491,440	545,000	832,422	594,440		0.83		
377	4,100,000	2,610,000	3,850,000	1,240,000	2,130,697	1,245,000		0.86		
378	1,799,040	919,440	1,599,040	679,600	802,008	247,440		0.38		
379	2,623,440	1,108,440	2,123,440	1,015,000	804,192	72,440	1000.00	0.17		
380	434,640	107,640	404,640	297,000	84,662	37,640		0.48		
381	2,018,440	1,373,940	1,768,440	394,500	1,228,042	1,012,940		1.76		
382	1,813,440	991,440	1,513,440	522,000	621,087	-106,560	631.40	-0.15	**NEGATIVE**	8
383	393,240	68,940	318,240	249,300	40,157	-163,060	333.24	-0.51	**NEGATIVE**	4
384	1,748,440	932,940	1,648,440	715,500	765,681	681,940		0.95		
385	8,060,800	6,112,800	7,560,800	1,448,000	4,221,047	2,612,800		1.71		
386	1,145,040	626,040	1,045,040	419,000	536,694	-116,960	433.61	-0.24	**NEGATIVE**	2
387	1,022,240	555,840	822,240	266,400	507,122	404,840		1.08		
388	641,840	262,440	591,840	329,400	240,167	212,440		0.98		
389	9,074,000	6,237,000	7,824,000	1,587,000	4,815,970	3,198,000		1.23		
390	471,441	251,641	433,440	181,799	194,234	-57,359	189.83	-0.27	**NEGATIVE**	3
391	2,898,000	2,205,000	2,448,000	243,000	1,586,975	645,000		1.00		
392	5,402,000	3,897,000	5,152,000	1,255,000	2,331,460	1,460,000		1.13		
393	3,160,000	1,620,000	2,660,000	1,040,000	252,661	-636,000	1883.33	-0.88	**NEGATIVE**	3
394	648,240	309,240	498,240	189,000	266,456	93,240		0.54		
395	1,440,240	770,040	1,290,240	520,200	687,834	167,040		0.26		
396	8,413,600	6,051,600	7,663,600	1,612,000	4,899,755	3,094,600		1.79		
397	1,547,440	658,440	1,297,440	639,000	553,835	383,440		0.89		
398	303,440	46,440	253,440	207,000	3,302	-78,560	229.56	-0.31	**NEGATIVE**	6
399	380,440	115,740	253,440	137,700	78,436	-62,260	218.24	-0.25	**NEGATIVE**	2
400	3,425,440	1,873,440	3,125,440	1,252,000	1,257,306	438,440		0.51		
401	1,196,240	478,440	1,146,240	667,800	445,067	363,440		0.84		
402	1,359,560	1,011,060	1,159,560	148,500	730,221	464,060		2.58		
403	547,440	172,440	447,440	275,000	133,163	-66,560	712.22	-1.85	**NEGATIVE**	2
404	1,469,440	523,440	1,369,440	846,000	456,628	-52,560	729.08	-0.12	**NEGATIVE**	2
405	3,757,740	1,999,710	3,457,740	1,458,030	1,603,587	1,037,710		0.60		
406	5,654,800	3,997,800	5,154,800	1,157,000	2,727,712	2,060,800		1.81		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
407	3,838,440	2,561,940	3,588,440	1,026,500	1,881,988	1,190,940		1.10		
408	655,440	136,440	505,440	369,000	18,164	-226,560	507.33	-0.45	**NEGATIVE**	3
409	320,990	133,515	174,240	40,725	110,382	-103,485	191.86	-0.60	**NEGATIVE**	2
410	310,640	46,440	260,640	214,200	10,351	-306,560	392.89	-1.18	**NEGATIVE**	4
411	2,194,000	1,251,000	1,894,000	643,000	891,312	244,000		0.28		
412	1,691,440	802,440	1,441,440	639,000	685,853	498,440		0.87		
413	6,570,000	4,905,000	4,570,000	(335,000)	3,515,538	2,213,000		2.20		
414	3,348,000	1,890,000	2,848,000	958,000	1,465,096	805,000		1.40		
415	1,810,400	1,054,800	1,510,400	455,600	693,639	139,800	490.00	0.23		
416	14,308,800	11,383,200	12,308,800	925,600	9,824,581	7,393,200		2.95		
417	925,440	487,440	865,440	378,000	468,658	312,440		0.72		
418	1,691,440	910,440	1,541,440	631,000	772,169	254,440		0.37		
419	1,481,140	729,090	1,281,140	552,050	566,248	235,090		0.54		
420	1,789,440	919,440	1,729,440	810,000	859,587	773,440		0.90		
421	1,051,040	599,040	851,040	252,000	493,035	231,040		0.55		
422	1,123,940	568,890	973,440	404,550	456,531	294,890		0.68		
423	2,353,840	1,608,840	2,203,840	595,000	1,391,974	994,840		1.38		
424	1,793,200	826,200	1,543,200	717,000	467,926	44,200	650.00	0.09		
425	1,106,880	437,040	1,006,880	569,840	382,531	322,040		1.02		
426	3,081,440	1,621,440	2,881,440	1,260,000	1,384,308	999,440		0.69		
427	842,640	482,040	692,640	210,600	445,500	285,040		0.82		
428	7,006,200	5,582,700	6,406,200	823,500	4,317,132	3,173,700		2.75		
429	827,440	586,440	627,440	41,000	457,274	266,440		1.23		
430	2,821,440	1,207,440	2,671,440	1,464,000	769,938	529,440		0.57		
431	1,925,440	739,440	1,675,440	936,000	456,857	-385,560	1514.00	-0.89	**NEGATIVE**	4
432	872,040	452,340	772,040	319,700	347,142	196,340		0.65		
433	1,687,600	1,128,600	1,387,600	259,000	617,497	398,600		0.81		
434	647,840	181,440	447,840	266,400	94,106	-46,560	342.33	-0.10	**NEGATIVE**	2
435	24,288,400	20,939,400	22,038,400	1,099,000	13,312,775	7,267,400		2.40		
436	411,440	46,440	361,440	315,000	30,322	-267,560	435.81	-0.74	**NEGATIVE**	2
437	685,040	406,440	535,040	128,600	364,833	170,440		0.74		
438	1,289,440	541,440	1,089,440	548,000	468,709	332,440		1.15		
439	204,240	28,440	174,240	145,800	11,691	-41,560	148.86	-0.24	**NEGATIVE**	3
440	7,883,600	6,060,600	7,483,600	1,423,000	4,741,637	4,009,600		2.68		
441	705,520	535,320	555,520	20,200	439,199	284,320		2.47		
442	454,560	311,040	304,560	(6,480)	214,376	119,040		1.97		
443	8,485,200	6,316,200	7,485,200	1,169,000	4,930,017	3,715,200		2.93		
444	1,516,440	745,740	1,016,440	270,700	599,152	315,740		1.10		
445	11,244,000	9,018,000	10,744,000	1,726,000	6,411,798	3,952,000		2.03		
446	971,240	491,940	871,240	379,300	443,469	331,940		1.02		
447	6,394,880	4,907,520	5,394,880	487,360	3,656,883	2,496,520		2.36		
448	968,440	583,740	721,440	137,700	555,719	467,740		1.30		
449	532,440	90,540	433,440	342,900	60,964	-258,460	479.49	-0.60	**NEGATIVE**	2
450	1,785,440	685,440	1,585,440	900,000	593,441	-24,560	786.55	-0.05	**NEGATIVE**	1
451	414,960	306,360	264,960	(41,400)	170,173	66,360		1.05		
452	972,240	453,240	822,240	369,000	374,643	141,240		0.45		
453	1,249,440	631,440	1,189,440	558,000	565,870	437,440		0.76		
454	1,367,840	181,440	1,167,840	986,400	130,685	-108,560	885.39	-0.09	**NEGATIVE**	6
455	6,828,000	4,662,000	5,828,000	1,166,000	3,578,581	2,518,000		2.19		
456	2,912,800	1,575,360	2,512,800	937,440	1,136,212	775,360		0.64		
457	339,440	46,440	289,440	243,000	36,978	-40,560	228.17	-0.14	**NEGATIVE**	10
458	1,381,440	789,840	1,081,440	291,600	648,508	78,840	390.00	0.15		
459	1,323,600	516,600	1,173,600	657,000	338,427	30,600	550.00	0.08		
460	616,240	75,240	534,240	459,000	57,744	15,240	370.00	0.03		
461	4,246,800	2,730,600	3,746,800	1,016,200	2,183,393	1,432,600		1.23		
462	1,979,440	946,440	1,729,440	783,000	839,604	673,440		0.94		
463	6,892,800	4,672,800	6,592,800	1,920,000	3,679,686	678,800		0.31		
464	655,440	352,440	555,440	203,000	217,814	103,440		0.72		

	Analysis 1									
	firm well or firm storage control				firm capacity					
Point Number	Total Capacity (gallons)	Total Firm Capacity (gallons)	Total Firm Capacity based on largest storage out of service (gallons)	Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls	Spare firm capacity for average day demand, no fire demand or reserve (gallons)	Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available Well	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
465	1,149,440	415,440	1,009,440	594,000	360,014	139,440		0.48		
466	1,868,000	1,314,000	1,618,000	304,000	876,936	547,000		1.09		
467	1,043,040	570,240	923,040	352,800	486,769	248,240		0.54		
468	483,440	46,440	433,440	387,000	11,732	-68,560	347.61	-0.16	NEGATIVE	3
469	1,754,240	955,440	1,254,240	298,800	448,985	44,440	520.00	0.09		
470	340,640	73,440	260,640	187,200	45,674	-85,860	239.63	-0.33	NEGATIVE	3
471	1,511,440	838,440	1,261,440	423,000	656,798	336,440		0.55		
472	2,097,600	1,317,600	1,697,600	380,000	882,726	242,600		0.48		
473	3,555,200	2,437,200	2,555,200	118,000	1,416,668	749,200		0.98		
474	17,456,000	14,367,600	16,956,000	2,588,400	11,793,701	9,421,600		4.36		
475	30,754,880	25,564,320	25,754,880	190,560	17,907,195	12,783,320		5.27		
476	7,146,000	5,283,000	6,646,000	1,363,000	4,172,330	2,593,000		1.64		
477	10,101,600	7,185,600	9,351,600	2,166,000	4,961,811	3,401,600		2.49		
478	8,670,000	6,427,800	8,170,000	1,742,200	5,436,477	4,899,800		2.47		
479	22,110,000	17,235,000	19,610,000	2,375,000	12,304,960	8,464,000		2.35		
480	698,640	395,640	548,640	153,000	333,393	-736,360	768.18	-2.84	NEGATIVE	6
481	2,051,440	1,126,440	1,801,440	675,000	878,421	582,440		0.65		
482	871,440	352,440	721,440	369,000	308,869	83,440		0.39		
483	1,408,000	864,000	1,008,000	144,000	567,153	116,000	350.00	0.23		
484	1,447,440	1,000,440	1,297,440	297,000	940,469	738,440		1.71		
485	41,200,000	34,452,000	37,200,000	2,748,000	27,500,448	23,409,000		3.87		
486	15,386,200	12,692,700	13,386,200	693,500	9,734,994	8,002,700		3.73		
487	556,020	65,970	553,020	487,050	53,077	17,970		0.30		
488	3,231,600	2,557,800	2,981,600	423,800	1,581,403	803,800		1.72		
489	1,581,440	991,440	1,081,440	90,000	770,304	243,440		0.45		
490	6,274,000	4,879,800	6,024,000	1,144,200	3,282,111	2,157,800		1.62		
491	3,039,600	2,100,600	2,289,600	189,000	1,614,473	770,600		1.08		
492	2,029,440	991,440	1,729,440	738,000	858,380	483,440		0.67		
493	3,172,440	1,832,940	2,922,440	1,089,500	1,150,692	917,940		1.27		
494	353,840	46,440	303,840	257,400	25,758	-61,560	252.75	-0.20	NEGATIVE	3
495	555,440	46,440	505,440	459,000	26,317	-80,560	405.94	-0.16	NEGATIVE	2
496	2,273,440	1,585,440	1,773,440	188,000	1,347,533	987,440		1.71		
497	1,397,440	523,440	1,297,440	774,000	493,886	254,440		0.59		
498	843,440	46,440	793,440	747,000	(10,825)	-114,560	629.56	-0.14	NEGATIVE	11
499	9,172,000	7,290,000	8,312,000	1,022,000	5,433,976	3,421,000		2.16		
500	1,979,440	1,090,440	1,729,440	639,000	(124,762)	479,440		0.55		
501	4,367,440	2,656,440	4,217,440	1,561,000	2,358,132	1,918,440		1.67		
502	493,440	55,440	433,440	378,000	45,092	-72,560	350.39	-0.17	NEGATIVE	4
503	707,440	406,440	577,440	171,000	373,317	132,440		0.46		
504	2,027,040	1,247,040	1,727,040	480,000	1,019,131	473,040		0.67		
505	1,732,040	938,340	1,232,040	293,700	720,979	269,340		0.98		
506	791,840	411,840	591,840	180,000	360,227	301,840		1.31		
507	400,440	191,340	350,440	159,100	146,764	99,340		0.81		
508	6,267,040	4,811,040	5,967,040	1,156,000	4,135,710	3,111,040		2.77		
509	14,879,741	11,937,367	12,879,741	942,374	9,501,961	7,411,367		3.43		
510	684,640	386,640	584,640	198,000	258,316	142,640		0.55		
511	943,440	352,440	793,440	441,000	222,017	117,440		0.54		
512	1,119,440	388,440	1,009,440	621,000	335,233	220,440		0.77		
513	1,231,440	424,440	1,081,440	657,000	326,152	198,440		0.69		
514	2,134,040	1,026,540	1,934,040	907,500	852,477	640,540		1.48		
515	703,840	390,240	591,840	201,600	352,074	218,240		0.76		
516	893,440	451,440	793,440	342,000	389,825	262,440		0.73		
517	1,889,040	676,440	1,139,040	462,600	556,034	-561,660	1180.04	-0.49	NEGATIVE	8
518	159,840	33,840	123,840	90,000	28,543	15,840	85.00	0.13		

	Analysis 1									
	firm well or firm storage control				**firm capacity**					
Point Number	**Total Capacity (gallons)**	**Total Firm Capacity (gallons)**	**Total Firm Capacity based on largest storage out of service (gallons)**	**Difference of Firm Storage Basis minus Firm Well Basis, if positive value then firm well controls**	**Spare firm capacity for average day demand, no fire demand or reserve (gallons)**	**Spare Firm Capcity, Surplus Firm Capacity for Maximum Day Demand, No Fire Demand or Reserve (gallons)**	**Additional capacity as equivalent well capacity needed for SE < 0.25**	**SE: Ratio of Surplus Firm Capacity to Largest Available Well**	**Check of SE: NEGATIVE if SE < 0**	**Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction**
				499	509		Ave			
				96%	98%		517.82			
				firm well basis	meet ave day		Max		99	# deficit
							2,949.69		19.1%	% of systems
							Median		0.8%	deviation
							386.50			
							Min			
			103	# deficit			50.00			85% Effective
			19.9%	% of systems			Count			
							131			
							530			
							1000			
							132			
							###########			
							1.259712	$ 667,647.36	per well	
							###########			

APPENDIX E: ANALYSIS 2 RESULTS

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	0	150,000	10.7%	1,956	1,523,520	2.47	6.97			1,254,720	636,720	442	1.03	0.45	1.92		
2	0	150,000	9.2%	1,819	2,033,640	3.01	8.22			1,474,140	798,140	554	1.18	0.49	1.05		
3	0	60,000	14.5%	536	573,290	4.94	23.50			353,145	237,145	165	2.04	0.57	0.78		
4	0	120,000	23.2%	1,140	848,640	4.04	12.35			398,040	188,040	131	0.90	0.36	0.69		
5	0	210,000	12.2%	3,656	1,644,600	2.44	8.70			1,510,800	835,800	580	1.24	0.49	1.57		
6	0	90,000	12.2%	860	1,121,440	5.44	16.85			649,440	443,440	308	2.15	0.60	0.95		
7	0	630,000	5.9%	14,882	9,715,000	3.29	8.20			10,017,000	7,068,000	4,908	2.40	0.66	3.51		
8	0	90,000	17.9%	863	599,005	2.64	9.48			414,149	187,149	130	0.82	0.37	0.52		
9	0	60,000	87.0%	447	117,440	0.45	8.57			8,940	-250,060	-174	-0.97	-3.63	-0.69	NEGATIVE	1
10	0	90,000	44.7%	765	289,240	2.56	7.84			111,240	-1,760	-1	-0.02	-0.01	-0.01	NEGATIVE	3
11	0	300,000	22.2%	6,665	618,440	0.68	2.44			1,051,440	136,440	95	0.15	0.10	0.50		
12	0	180,000	20.7%	2,800	993,720	1.62	5.22			689,940	75,940	53	0.12	0.09	0.14		
13	0	120,000	12.7%	983	1,374,240	5.45	20.64			828,240	576,240	400	2.29	0.61	0.98		
14	0	300,000	10.3%	8,600	2,131,600	1.42	3.50			2,610,600	1,110,600	771	0.74	0.38	1.47		
15	0	150,000	4.1%	2,194	3,749,840	2.18	5.37			3,519,840	1,799,840	1,250	1.05	0.49	2.08		
16	0	60,000	129.2%	525	-78,560	-0.16	6.88	NEGATIVE	1	-13,560	-515,560	-358	-1.03	-11.10	-1.19	NEGATIVE	1
17	0	90,000	13.1%	798	1,127,240	4.76	20.85			595,440	358,440	249	1.51	0.52	0.83		
18	0	90,000	37.0%	565	289,540	0.78	13.27			153,270	-219,730	-153	-0.59	-0.90	-0.46	NEGATIVE	4
19	0	960,000	8.3%	17,777	7,187,100	1.14	3.68			10,650,000	4,337,100	3,012	0.69	0.37	2.41		
20	0	120,000	18.4%	1,102	403,840	1.55	8.95			533,040	273,040	190	1.05	0.42	3.16		
21	0	120,000	7.4%	1,450	1,487,240	2.70	6.69			1,494,240	943,240	655	1.71	0.58	1.87		
22	0	90,000	68.7%	623	400,440	2.52	7.63			41,040	-117,960	-82	-0.74	-0.90	-0.23	NEGATIVE	2
23	0	60,000	11.8%	296	832,040	7.24	24.85			449,040	334,040	232	2.90	0.66	0.77		
24	0	210,000	13.7%	3,301	2,110,000	2.73	8.41			1,320,000	548,000	381	0.71	0.36	0.51		
25	0	90,000	10.6%	648	900,440	2.85	12.26			761,940	445,940	310	1.41	0.52	1.03		
26	0	120,000	23.0%	1,400	613,040	1.81	7.14			402,000	64,000	44	0.19	0.12	0.13		
27	0	540,000	9.1%	11,188	3,626,000	0.93	3.40			5,415,300	1,516,300	1,053	0.39	0.25	0.96		
28	0	120,000	14.1%	1,127	1,019,720	3.41	18.18			730,320	431,320	300	1.44	0.51	1.97		
29	0	210,000	5.6%	3,319	2,616,600	0.98	3.89			3,537,600	858,600	596	0.32	0.23	0.73		
30	0	90,000	49.6%	571	309,080	1.81	12.34			91,440	-79,560	-55	-0.47	-0.44	-0.22	NEGATIVE	9
31	0	90,000	9.1%	778	1,336,160	3.47	11.69			894,060	509,060	354	1.32	0.52	0.64		
32	0	60,000	16.8%	446	543,440	2.82	26.38			296,940	103,940	72	0.54	0.29	0.36		
33	0	630,000	9.3%	15,464	5,446,000	1.89	4.02			6,120,000	3,240,000	2,250	1.13	0.48	1.61		
34	0	150,000	8.0%	1,887	1,854,440	1.78	12.00			1,718,940	678,940	471	0.65	0.36	0.73		
35	0	150,000	22.5%	1,947	862,440	2.13	6.92			517,440	112,440	78	0.28	0.17	0.28		
36	0	630,000	13.3%	13,500	1,790,200	0.46	4.61			4,111,200	260,200	181	0.07	0.05	0.18		
37	0	90,000	16.0%	875	647,040	2.33	6.17			473,040	195,040	135	0.70	0.35	0.51		
38	0	90,000	19.5%	976	820,640	4.64	15.72			371,340	194,340	135	1.10	0.42	0.73		
39	0	270,000	7.4%	5,371	3,821,000	2.31	6.87			3,388,500	1,734,500	1,205	1.05	0.47	1.10		
40	0	90,000	37.0%	688	491,040	3.43	10.79			153,540	10,540	7	0.07	0.04	0.08		
41	0	90,000	9.5%	901	1,066,440	1.99	12.25			856,440	321,440	223	0.60	0.34	0.45		
42	0	120,000	11.1%	1,218	1,141,440	1.43	4.40			961,440	165,440	115	0.21	0.15	0.23		
43	0	120,000	17.5%	1,374	879,440	2.06	13.63			565,440	139,440	97	0.33	0.20	0.28		
44	0	210,000	10.0%	3,608	1,925,000	2.08	5.28			1,896,000	971,000	674	1.05	0.46	1.93		
45	0	120,000	9.9%	1,231	1,264,040	1.90	4.93			1,096,440	431,440	300	0.65	0.35	0.60		
46	0	90,000	13.9%	802	996,240	5.69	15.67			555,660	380,660	264	2.18	0.59	1.32		
47	0	210,000	13.1%	3,364	1,333,560	2.50	6.18			1,395,960	862,960	599	1.62	0.54	5.12		
48	0	90,000	98.4%	770	221,840	1.35	7.53			1,440	-162,560	-113	-0.99	-1.78	-0.43	NEGATIVE	1
49	0	90,000	13.1%	650	951,734	3.54	25.48			599,485	330,485	230	1.23	0.48	0.61		
50	0	60,000	65.6%	459	370,440	3.60	13.86			31,440	-71,560	-50	-0.69	-0.78	-0.17	NEGATIVE	2
51	0	120,000	11.4%	1,450	1,367,240	4.29	16.75			936,240	617,240	429	1.93	0.58	1.16		
52	0	210,000	8.2%	3,228	2,926,440	4.65	12.17			2,365,440	1,736,440	1,206	2.76	0.67	2.01		
53	0	60,000	44.0%	339	194,440	1.72	11.60			76,440	-36,560	-25	-0.32	-0.27	-0.17	NEGATIVE	2
54	0	120,000	53.0%	1,043	267,640	0.79	5.26			106,440	-232,560	-162	-0.69	-1.03	-0.49	NEGATIVE	3
55	0	90,000	39.1%	672	236,640	1.56	10.45			140,040	-11,960	-8	-0.08	-0.05	-0.09	NEGATIVE	1
56	0	90,000	16.5%	872	788,990	7.37	11.94			454,815	347,815	242	3.25	0.64	1.10		
57	0	180,000	10.4%	2,937	1,184,760	0.78	3.16			1,550,520	39,520	27	0.03	0.02	0.04		
58	0	90,000	8.1%	598	1,114,440	2.02	7.95			1,023,840	470,840	327	0.85	0.42	0.74		
59	0	180,000	30.2%	2,692	658,840	1.54	4.77			415,440	-13,560	-9	-0.03	-0.02	-0.03	NEGATIVE	3

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
60	0	210,000	14.8%	3,165	1,513,040	2.35	8.14			1,206,240	562,240	390	0.87	0.40	0.63		
61	0	30,000	1.0%	140	1,412,190	0.35	1.76			3,113,115	-896,885	-623	-0.22	-0.29	-0.48	**NEGATIVE**	8
62	0	1,080,000	6.0%	21,900	13,870,340	1.71	5.48			16,975,890	8,861,890	6,154	1.09	0.49	6.48		
63	0	90,000	15.8%	789	921,040	3.60	16.69			480,240	224,240	156	0.88	0.39	0.58		
64	0	630,000	4.6%	12,741	12,356,000	3.34	10.92			13,122,000	9,420,000	6,542	2.54	0.68	3.44		
65	0	90,000	26.9%	561	402,440	1.15	13.53			244,440	-106,560	-74	-0.30	-0.32	-0.37	**NEGATIVE**	5
66	0	60,000	63.9%	256	169,378	2.73	11.68			33,904	-28,096	-20	-0.45	-0.30	-0.15	**NEGATIVE**	1
67	0	60,000	19.2%	495	286,760	1.26	8.99			251,940	23,940	17	0.11	0.08	0.10		
68	0	30,000	13.1%	80	522,540	8.43	42.25			199,230	137,230	95	2.21	0.60	0.38		
69	0	540,000	7.2%	9,958	3,527,000	0.65	4.66			6,912,000	1,459,000	1,013	0.27	0.20	0.92		
70	0	150,000	12.8%	1,881	1,021,440	1.67	4.58			1,021,440	411,440	286	0.67	0.35	0.76		
71	0	60,000	30.5%	438	643,440	2.94	13.20			136,740	-82,260	-57	-0.38	-0.42	-0.57	**NEGATIVE**	10
72	0	120,000	7.2%	1,352	1,632,440	3.17	18.14			1,546,440	1,031,440	716	2.00	0.62	1.79		
73	0	90,000	5.5%	779	2,279,440	3.16	16.00			1,539,540	818,540	568	1.14	0.50	0.57		
74	0	120,000	15.1%	1,101	756,440	1.42	7.26			673,440	140,440	98	0.26	0.18	0.33		
75	0	150,000	15.4%	1,573	1,085,640	2.33	7.21			823,440	358,440	249	0.77	0.37	0.55		
76	0	150,000	21.7%	1,930	925,440	2.49	8.62			540,840	168,840	117	0.45	0.24	0.47		
77	0	90,000	122.5%	640	140,240	0.83	5.25			-16,560	-184,560	-128	-1.10	-2.51	-0.58	**NEGATIVE**	3
78	0	90,000	98.4%	703	363,240	3.33	8.63			1,440	-107,560	-75	-0.99	-1.18	-0.23	**NEGATIVE**	3
79	0	120,000	23.7%	1,005	621,440	3.05	10.90			385,440	181,440	126	0.89	0.36	0.42		
80	0	120,000	13.7%	1,144	1,074,440	1.66	8.62			754,440	105,440	73	0.16	0.12	0.18		
81	0	60,000	16.3%	263	612,440	9.42	32.61			308,640	243,640	169	3.75	0.66	0.85		
82	0	540,000	10.9%	10,770	3,443,400	1.38	4.05			4,415,400	1,914,400	1,329	0.77	0.39	1.77		
83	0	150,000	11.8%	1,887	1,119,440	1.81	8.53			1,124,940	505,940	351	0.82	0.40	1.00		
84	0	90,000	48.9%	711	527,640	1.79	7.46			94,140	-199,860	-139	-0.68	-1.09	-1.73	**NEGATIVE**	3
85	0	60,000	74.4%	306	217,200	1.53	6.49			20,640	-121,360	-84	-0.85	-1.50	-0.37	**NEGATIVE**	3
86	0	150,000	12.8%	1,931	1,151,440	1.80	6.69			1,021,440	381,440	265	0.60	0.33	0.53		
87	0	210,000	9.2%	3,764	1,952,000	1.57	4.51			2,076,000	834,000	579	0.67	0.36	1.16		
88	0	630,000	5.1%	12,925	5,259,000	0.61	3.76			11,763,000	3,198,000	2,221	0.37	0.26	1.78		
89	0	60,000	12.3%	509	638,240	1.05	17.74			428,340	-180,660	-125	-0.30	-0.37	-0.48	**NEGATIVE**	8
90	0	120,000	13.3%	1,061	337,440	0.25	2.45			781,440	-546,560	-380	-0.41	-0.61	-0.76	**NEGATIVE**	8
91	0	120,000	12.1%	1,365	1,229,440	2.35	13.76			871,440	347,440	241	0.66	0.35	0.42		
92	0	150,000	14.1%	1,876	2,560,440	4.16	13.26			913,440	298,440	207	0.49	0.28	0.38		
93	0	240,000	7.3%	4,567	3,819,600	3.80	11.04			3,030,600	2,026,600	1,407	2.02	0.62	2.81		
94	0	60,000	2.9%	385	2,460,640	2.43	11.49			2,038,440	1,024,440	711	1.01	0.49	0.95		
95	0	60,000	65.6%	440	567,440	2.92	23.50			31,440	-162,560	-113	-0.84	-1.78	-0.23	**NEGATIVE**	1
96	0	60,000	33.2%	435	343,240	1.33	13.24			120,540	-137,460	-95	-0.53	-0.76	-0.30	**NEGATIVE**	4
97	0	150,000	28.7%	1,600	283,040	1.32	4.16			373,440	159,440	111	0.75	0.30	1.85		
98	0	90,000	9.1%	852	525,440	0.41	6.06			901,440	-368,560	-256	-0.29	-0.37	-0.51	**NEGATIVE**	8
99	0	120,000	14.3%	1,155	836,040	2.27	10.17			722,040	353,040	245	0.96	0.42	0.98		
100	0	60,000	19.1%	367	513,040	1.59	4.83			254,640	-67,360	-47	-0.21	-0.21	-0.25	**NEGATIVE**	2
101	0	240,000	11.2%	4,748	2,427,000	3.08	6.23			1,911,000	1,124,000	781	1.43	0.52	1.56		
102	0	90,000	14.7%	714	1,001,440	3.82	21.01			523,440	261,440	182	1.00	0.43	0.61		
103	0	120,000	28.9%	1,390	286,440	0.47	8.47			295,440	-319,560	-222	-0.52	-0.77	-2.22	**NEGATIVE**	4
104	0	240,000	13.3%	4,152	2,409,200	3.04	8.70			1,558,200	766,200	532	0.97	0.43	0.71		
105	0	60,000	129.2%	500	509,440	8.78	23.52			-13,560	-71,560	-50	-1.23	-1.54	-0.12	**NEGATIVE**	2
106	0	150,000	22.6%	1,958	678,440	1.17	8.09			512,940	-67,060	-47	-0.12	-0.10	-0.16	**NEGATIVE**	1
107	0	120,000	18.2%	1,041	819,440	2.56	8.60			538,440	218,440	152	0.68	0.33	0.51		
108	0	210,000	19.4%	3,100	937,840	1.10	4.01			875,040	19,040	13	0.02	0.02	0.03		
109	0	150,000	9.2%	2,156	2,176,040	5.96	13.68			1,478,640	1,113,640	773	3.05	0.68	1.19		
110	0	150,000	6.2%	1,983	1,458,440	0.75	5.69			2,281,440	348,440	242	0.18	0.14	0.34		
111	0	30,000	9.7%	176	219,240	1.00	5.12			279,240	60,240	42	0.28	0.19	1.39		
112	0	60,000	20.4%	477	417,440	3.69	20.65			233,940	120,940	84	1.07	0.41	0.56		
113	0	60,000	16.3%	477	746,040	11.15	36.86			308,190	241,290	168	3.61	0.66	0.67		
114	0	90,000	12.3%	621	1,572,240	5.87	29.15			642,240	374,240	260	1.40	0.51	0.65		
115	0	540,000	21.9%	12,000	1,252,400	0.69	3.86			1,926,000	116,000	81	0.06	0.05	0.11		
116	0	150,000	25.2%	1,596	893,440	3.17	11.36			445,440	163,440	114	0.58	0.27	0.32		
117	0	180,000	14.3%	2,235	1,199,640	1.70	6.46			1,081,440	376,440	261	0.53	0.30	0.52		
118	0	150,000	9.3%	1,617	1,839,440	4.54	13.12			1,457,940	1,052,940	731	2.60	0.65	2.09		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
119	0	300,000	12.2%	7,997	3,106,000	2.14	5.34			2,166,000	712,000	494	0.49	0.29	0.58		
120	0	300,000	6.6%	8,128	4,605,000	2.34	6.54			4,218,000	2,251,000	1,563	1.14	0.50	2.61		
121	0	150,000	13.9%	2,000	1,320,240	2.97	7.95			927,840	483,840	336	1.09	0.45	0.60		
122	0	960,000	12.5%	20,332	1,849,800	0.27	2.39			6,700,800	-94,200	-65	-0.01	-0.01	-0.07	NEGATIVE	6
123	0	210,000	2333.3%	3,518	-565,000	-0.31	2.29	NEGATIVE	8	-201,000	-2,006,000	-1,393	-1.11	-222.89	-1.39	NEGATIVE	8
124	0	120,000	24.3%	1,038	429,840	1.18	10.65			372,840	8,840	6	0.02	0.02	0.03		
125	0	60,000	64.4%	266	324,440	4.11	41.83			33,240	-45,760	-32	-0.58	-0.49	-0.13	NEGATIVE	5
126	0	210,000	13.5%	3,882	1,242,400	1.57	4.21			1,348,800	558,800	388	0.71	0.36	1.21		
127	0	90,000	19.7%	834	385,840	1.31	9.10			366,840	72,840	51	0.25	0.16	0.32		
128	0	150,000	22.2%	1,716	647,880	1.47	5.94			524,640	83,640	58	0.19	0.12	0.21		
129	0	30,000	17.3%	150	181,160	1.63	10.40			143,160	32,160	22	0.29	0.19	0.25		
130	0	90,000	16.6%	670	295,440	0.52	6.31			451,440	-120,560	-84	-0.21	-0.22	-0.33	NEGATIVE	4
131	0	60,000	33.1%	442	155,540	0.58	15.29			121,440	-145,260	-101	-0.54	-0.80	-0.52	NEGATIVE	4
132	0	150,000	12.6%	1,968	2,163,440	3.28	12.80			1,043,040	383,040	266	0.58	0.32	0.53		
133	0	150,000	21.3%	1,728	668,040	1.36	7.40			555,240	64,240	45	0.13	0.09	0.17		
134	0	120,000	11.3%	1,374	1,587,440	2.11	9.58			943,440	189,440	132	0.25	0.18	0.38		
135	0	60,000	124.4%	447	100,840	1.98	4.97			-11,760	-62,760	-44	-1.23	-1.30	-0.40	NEGATIVE	3
136	0	210,000	10.9%	3,806	1,581,200	1.25	4.56			1,711,320	449,320	312	0.36	0.23	0.77		
137	0	2,940,000	7.4%	61,150	26,331,920	1.42	4.82			36,955,920	18,353,920	12,746	0.99	0.46	6.71		
138	0	120,000	18.5%	1,451	449,040	1.33	8.58			529,440	191,440	133	0.57	0.29	1.06		
139	0	240,000	8.6%	4,936	3,257,000	4.25	10.09			2,550,000	1,783,000	1,238	2.32	0.64	1.46		
140	0	60,000	14.4%	275	686,640	5.25	17.45			355,440	224,640	156	1.72	0.54	1.56		
141	0	90,000	32.1%	635	283,240	2.98	9.08			190,440	95,440	66	1.00	0.34	0.66		
142	0	120,000	5.8%	1,056	3,094,240	8.27	22.01			1,964,040	1,590,040	1,104	4.25	0.76	1.81		
143	0	300,000	8.1%	7,500	2,733,000	1.21	4.09			3,400,800	1,149,800	798	0.51	0.31	1.00		
144	0	90,000	27.7%	810	612,640	3.44	12.30			235,440	57,440	40	0.32	0.18	0.23		
145	0	180,000	25.0%	2,844	766,440	1.66	4.17			541,440	78,440	54	0.17	0.11	0.22		
146	0	90,000	6.3%	841	2,011,640	9.36	34.65			1,337,040	1,122,040	779	5.22	0.79	1.30		
147	0	150,000	13.8%	1,611	1,598,440	3.57	16.07			934,140	486,140	338	1.09	0.45	0.61		
148	0	60,000	129.2%	496	98,440	0.90	5.10			-13,560	-122,560	-85	-1.12	-2.64	-0.57	NEGATIVE	3
149	0	60,000	14.9%	536	524,440	3.91	19.53			341,940	207,940	144	1.55	0.52	1.44		
150	0	210,000	14.8%	3,487	1,599,600	2.14	5.97			1,212,000	464,000	322	0.62	0.33	0.59		
151	0	60,000	129.2%	260	130,040	2.06	9.44			-13,560	-76,560	-53	-1.22	-1.65	-0.38	NEGATIVE	5
152	0	60,000	15.6%	504	332,640	1.14	14.47			323,940	30,940	21	0.11	0.08	0.12		
153	0	60,000	129.2%	302	20,440	0.03	8.29			-13,560	-740,560	-514	-1.02	-15.95	-0.98	NEGATIVE	8
154	0	120,000	25.5%	1,100	386,740	1.65	7.05			351,240	116,940	81	0.50	0.25	0.48		
155	0	180,000	16.6%	2,378	1,725,440	2.63	9.90			901,440	245,440	170	0.37	0.23	0.34		
156	0	60,000	33.9%	300	90,440	0.64	14.69			116,940	-25,060	-17	-0.18	-0.14	-0.23	NEGATIVE	4
157	0	630,000	8.4%	15,485	4,667,000	1.13	4.36			6,912,000	2,789,000	1,937	0.68	0.37	1.61		
158	0	150,000	13.0%	1,809	2,295,640	4.32	15.80			1,000,740	468,740	326	0.88	0.41	0.77		
159	0	1,650,000	8.2%	37,757	14,144,800	1.73	4.01			18,363,300	10,188,300	7,075	1.25	0.51	8.84		
160	0	150,000	6.6%	1,839	1,859,560	1.28	5.39			2,116,560	663,560	461	0.46	0.29	1.03		
161	0	90,000	10.6%	768	1,334,640	7.99	26.82			760,140	593,140	412	3.55	0.70	0.91		
162	0	60,000	129.2%	320	180,440	0.87	9.64			-13,560	-220,560	-153	-1.07	-4.75	-0.56	NEGATIVE	1
163	0	540,000	7.5%	12,046	5,227,000	1.59	4.41			6,619,500	3,335,500	2,316	1.02	0.47	1.93		
164	0	120,000	88.0%	983	60,840	0.47	4.46			16,440	-112,560	-78	-0.87	-0.82	-0.71	NEGATIVE	3
165	0	120,000	11.3%	1,482	1,337,840	2.88	11.61			941,640	477,640	332	1.03	0.45	0.57		
166	0	300,000	10.8%	7,012	1,390,000	0.52	5.26			2,490,000	-200,000	-139	-0.07	-0.07	-0.14	NEGATIVE	6
167	0	120,000	6.7%	1,039	1,708,440	2.69	12.05			1,672,440	1,037,440	720	1.63	0.58	1.80		
168	0	150,000	15.1%	1,975	1,025,440	2.04	7.88			841,440	339,440	236	0.68	0.34	0.52		
169	0	60,000	10.5%	299	904,040	6.95	49.61			509,340	379,340	263	2.92	0.67	0.74		
170	0	120,000	11.8%	1,427	1,003,440	1.65	8.35			898,440	290,440	202	0.48	0.29	0.67		
171	0	90,000	65.5%	567	742,440	2.90	18.64			47,340	-208,660	-145	-0.82	-1.52	-0.22	NEGATIVE	1
172	0	60,000	81.7%	264	181,440	1.97	9.83			13,440	-78,560	-55	-0.85	-1.07	-0.31	NEGATIVE	3
173	0	150,000	14.6%	2,060	863,440	1.69	6.42			877,440	365,440	254	0.71	0.36	0.85		
174	0	630,000	11.7%	15,864	3,089,800	0.86	4.10			4,762,800	1,161,800	807	0.32	0.22	0.98		
175	0	120,000	5.1%	1,356	2,656,440	2.83	14.34			2,252,940	1,312,940	912	1.40	0.55	1.22		
176	0	60,000	14.9%	436	614,440	6.61	20.70			342,840	249,840	174	2.69	0.62	0.69		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
177	0	60,000	50.7%	382	258,440	1.05	14.01			58,440	-186,560	-130	-0.76	-1.58	-0.43	NEGATIVE	11
178	0	120,000	22.2%	1,102	2,215,440	9.80	25.07			421,440	195,440	136	0.86	0.36	0.39		
179	0	30,000	64.6%	150	44,840	0.71	8.49			16,440	-46,560	-32	-0.74	-1.00	-0.54	NEGATIVE	1
180	0	90,000	26.9%	928	431,440	4.07	7.26			244,440	138,440	96	1.31	0.41	0.48		
181	0	90,000	26.3%	803	158,440	0.49	10.76			251,640	-71,360	-50	-0.22	-0.21	-0.33	NEGATIVE	2
182	0	540,000	8.9%	11,098	4,525,280	1.81	4.97			5,494,680	3,000,680	2,084	1.20	0.50	2.14		
183	0	960,000	14.1%	19,723	4,788,000	1.41	4.07			5,826,000	2,434,000	1,690	0.72	0.36	1.06		
184	0	60,000	20.2%	385	435,840	6.81	20.78			236,640	172,640	120	2.70	0.58	0.67		
185	0	120,000	15.2%	1,406	303,440	0.41	6.64			669,840	-72,160	-50	-0.10	-0.09	-0.25	NEGATIVE	2
186	0	30,000	11.4%	207	510,440	9.63	27.98			234,240	181,240	126	3.42	0.69	0.84		
187	0	630,000	7.1%	15,128	6,284,000	1.18	7.51			8,289,000	2,969,000	2,062	0.56	0.33	0.98		
188	0	120,000	15.0%	1,064	477,440	0.54	8.97			682,440	-195,560	-136	-0.22	-0.24	-0.34	NEGATIVE	1
189	0	240,000	15.2%	5,064	1,640,800	2.15	5.28			1,336,800	572,800	398	0.75	0.36	1.10		
190	0	120,000	12.4%	1,079	579,440	1.31	7.67			844,440	400,440	278	0.90	0.42	5.56		
191	0	60,000	24.9%	534	214,600	2.17	7.52			181,200	82,200	57	0.83	0.34	0.71		
192	0	210,000	18.5%	3,500	796,240	1.21	7.37			927,240	269,240	187	0.41	0.24	0.95		
193	0	150,000	23.9%	1,614	615,640	1.26	8.23			477,840	-9,160	-6	-0.02	-0.01	-0.02	NEGATIVE	4
194	0	60,000	129.2%	462	170,440	0.67	9.22			-13,560	-266,560	-185	-1.05	-5.74	-0.62	NEGATIVE	4
195	0	90,000	14.2%	950	770,440	2.56	9.10			545,040	244,040	169	0.81	0.38	0.56		
196	0	540,000	12.1%	11,419	2,986,400	1.05	3.41			3,911,400	1,061,400	737	0.37	0.24	1.04		
197	0	300,000	6.4%	8,219	4,001,800	1.73	6.44			4,391,700	2,083,700	1,447	0.90	0.44	1.32		
198	0	60,000	100.1%	385	300,440	2.18	13.34			-60	-138,060	-96	-1.00	-2.30	-0.32	NEGATIVE	9
199	0	60,000	129.2%	251	2,092,740	35.65	116.86			-13,560	-72,260	-50	-1.23	-1.56	-0.03	NEGATIVE	2
200	0	60,000	45.2%	407	189,840	1.83	9.10			72,840	-31,160	-22	-0.30	-0.23	-0.36	NEGATIVE	2
201	0	150,000	8.3%	2,193	1,711,440	2.32	6.12			1,657,380	920,380	639	1.25	0.51	1.60		
202	0	120,000	19.6%	1,171	1,011,840	7.91	12.78			493,440	365,440	254	2.86	0.60	0.85		
203	0	90,000	27.7%	799	602,440	3.84	13.86			235,440	78,440	54	0.50	0.24	0.54		
204	0	120,000	39.8%	1,176	331,720	0.91	7.71			181,680	-181,320	-126	-0.50	-0.60	-1.09	NEGATIVE	2
205	0	120,000	11.4%	1,325	901,040	1.31	8.56			936,240	246,240	171	0.36	0.23	0.41		
206	0	60,000	79.3%	443	101,940	0.59	5.59			15,690	-158,310	-110	-0.91	-2.09	-0.63	NEGATIVE	1
207	0	150,000	55.3%	1,950	630,440	0.66	6.92			121,440	-839,560	-583	-0.87	-3.09	-0.58	NEGATIVE	12
208	0	60,000	12.1%	450	663,840	3.55	11.94			437,340	250,340	174	1.34	0.50	0.74		
209	0	60,000	16.1%	256	896,920	6.32	55.75			312,420	170,420	118	1.20	0.46	0.55		
210	0	300,000	7.8%	6,984	2,841,800	1.09	6.68			3,556,500	952,500	661	0.37	0.25	0.55		
211	0	210,000	9.2%	3,732	1,850,700	1.22	6.14			2,079,330	556,330	386	0.37	0.24	0.70		
212	0	180,000	26.7%	2,415	575,640	1.51	5.11			494,640	113,640	79	0.30	0.17	0.28		
213	0	630,000	11.8%	14,170	3,813,200	1.12	3.99			4,714,200	1,296,200	900	0.38	0.24	0.60		
214	0	630,000	7.5%	14,187	4,565,000	0.96	4.87			7,749,000	2,994,000	2,079	0.63	0.36	2.31		
215	0	120,000	17.7%	1,146	671,640	2.23	10.06			558,240	257,240	179	0.85	0.38	0.81		
216	0	30,000	125.3%	170	453,540	13.96	32.93			-6,060	-38,560	-27	-1.19	-1.61	-0.08	NEGATIVE	4
217	0	120,000	14.3%	1,244	956,640	2.54	11.57			716,640	340,640	237	0.91	0.41	0.72		
218	0	120,000	18.2%	1,298	640,440	1.31	8.01			540,240	51,240	36	0.10	0.08	0.09		
219	0	30,000	17.1%	150	175,440	1.50	18.86			145,140	28,140	20	0.24	0.16	0.20		
220	0	120,000	19.7%	997	784,640	5.81	13.19			488,940	353,940	246	2.62	0.58	0.98		
221	0	90,000	19.9%	600	347,240	0.65	15.93			363,240	-171,760	-119	-0.32	-0.38	-0.54	NEGATIVE	4
222	0	30,000	105.5%	200	757,440	21.04	51.38			-1,560	-37,560	-26	-1.04	-1.32	-0.05	NEGATIVE	1
223	0	270,000	10.5%	6,034	2,612,200	1.93	5.21			2,311,200	958,200	665	0.71	0.37	0.78		
224	0	2,940,000	9.0%	61,110	15,966,000	0.73	2.80			29,892,000	8,166,000	5,671	0.38	0.25	1.35		
225	0	300,000	5.3%	7,541	5,168,000	2.10	6.39			5,408,700	2,949,700	2,048	1.20	0.52	2.16		
226	0	150,000	18.2%	1,901	915,240	1.66	7.48			672,240	119,240	83	0.22	0.15	0.26		
227	0	60,000	35.5%	440	93,640	0.77	5.04			108,840	-12,160	-8	-0.10	-0.07	-0.19	NEGATIVE	2
228	0	180,000	8.6%	2,622	1,911,640	1.98	11.83			1,905,840	940,840	653	0.97	0.45	2.33		
229	0	630,000	15.7%	13,430	3,065,000	1.39	3.59			3,383,100	1,179,100	819	0.53	0.29	1.36		
230	0	60,000	87.0%	400	9,440	0.03	12.47			8,940	-358,060	-249	-0.98	-5.19	-0.99	NEGATIVE	4
231	0	60,000	13.7%	450	810,040	10.00	27.05			377,040	296,040	206	3.65	0.68	0.86		
232	0	210,000	8.5%	3,345	2,222,400	1.94	7.54			2,260,500	1,117,500	776	0.98	0.45	1.72		
233	0	180,000	7.5%	2,801	2,870,440	4.58	10.76			2,233,440	1,606,440	1,116	2.56	0.67	1.31		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
234	0	210,000	6.4%	3,540	4,062,000	5.80	10.98			3,066,000	2,366,000	1,643	3.38	0.72	1.64		
235	0	60,000	13.0%	500	713,240	5.53	25.40			402,240	273,240	190	2.12	0.59	0.70		
236	0	270,000	6.3%	6,000	3,568,640	1.39	4.65			4,004,640	1,434,640	996	0.56	0.34	0.75		
237	0	60,000	13.7%	430	822,040	11.74	36.66			379,380	309,380	215	4.42	0.70	0.86		
238	0	150,000	66.2%	2,010	-484,560	-0.19	1.71	NEGATIVE	6	76,440	-2,453,560	-1,704	-0.97	-10.84	-1.26	NEGATIVE	6
239	0	270,000	27.3%	5,400	1,226,000	2.03	5.13			720,000	116,000	81	0.19	0.12	0.16		
240	0	2,340,000	5.5%	53,000	22,421,760	0.82	4.15			40,131,360	12,879,360	8,944	0.47	0.30	3.65		
241	0	210,000	12.2%	3,826	1,955,200	2.59	6.87			1,507,200	753,200	523	1.00	0.44	1.05		
242	0	90,000	18.9%	780	694,440	2.19	15.87			386,640	69,640	48	0.22	0.15	0.19		
243	0	30,000	3.0%	25	1,465,760	4.44	12.30			957,840	627,840	436	1.90	0.64	0.78		
244	0	120,000	3.1%	1,470	2,447,840	0.89	4.40			3,711,840	947,840	658	0.34	0.25	0.76		
245	0	300,000	4.9%	7,107	5,087,650	1.78	5.93			5,851,725	2,989,725	2,076	1.04	0.49	2.08		
246	0	180,000	10.8%	2,381	1,875,440	1.90	6.51			1,490,940	505,940	351	0.51	0.30	0.38		
247	0	270,000	5.8%	5,137	5,547,000	4.03	8.77			4,374,000	2,999,000	2,083	2.18	0.65	1.60		
248	0	240,000	8.4%	4,021	2,598,400	1.53	5.53			2,627,400	929,400	645	0.55	0.32	0.75		
249	0	60,000	160.3%	450	158,440	0.48	6.69			-22,560	-349,560	-243	-1.07	-9.34	-0.69	NEGATIVE	11
250	0	90,000	49.6%	950	293,040	1.24	6.13			91,440	-144,560	-100	-0.61	-0.80	-0.35	NEGATIVE	3
251	0	60,000	81.7%	323	206,840	2.55	7.97			13,440	-67,560	-47	-0.83	-0.92	-0.25	NEGATIVE	2
252	0	120,000	2564.1%	1,200	420,440	0.60	2.72			-115,320	-818,320	-568	-1.16	-174.85	-0.66	NEGATIVE	8
253	0	90,000	13.5%	585	1,016,640	2.04	5.02			577,440	79,440	55	0.16	0.12	0.20		
254	0	60,000	129.2%	320	-150,560	-0.35	10.38	NEGATIVE	8	-13,560	-443,560	-308	-1.03	-9.55	-1.54	NEGATIVE	8
255	0	60,000	52.7%	429	428,440	3.02	14.31			53,940	-88,060	-61	-0.62	-0.77	-0.17	NEGATIVE	3
256	0	30,000	125.3%	130	290,640	7.86	40.63			-6,060	-43,060	-30	-1.16	-1.80	-0.13	NEGATIVE	5
257	0	540,000	11.0%	10,583	4,308,000	1.94	5.03			4,356,000	2,132,000	1,481	0.96	0.44	1.14		
258	0	90,000	79.0%	570	110,440	0.31	7.98			23,940	-334,060	-232	-0.93	-2.93	-0.77	NEGATIVE	1
259	0	180,000	7.2%	2,968	2,629,840	2.23	10.92			2,315,700	1,136,700	789	0.96	0.46	0.79		
260	0	60,000	81.7%	268	284,240	5.26	12.51			13,440	-40,560	-28	-0.75	-0.55	-0.13	NEGATIVE	6
261	0	180,000	22.9%	2,410	555,440	1.07	4.25			604,440	84,440	59	0.16	0.11	0.20		
262	0	90,000	15.1%	631	868,440	5.75	16.13			505,440	354,440	246	2.35	0.60	0.70		
263	0	60,000	129.2%	374	541,440	5.52	27.53			-13,560	-111,560	-77	-1.14	-2.40	-0.17	NEGATIVE	2
264	0	120,000	28.6%	1,308	225,640	1.01	4.56			299,040	76,040	53	0.34	0.18	1.06		
265	0	120,000	19.3%	1,223	1,028,440	4.61	11.56			502,440	279,440	194	1.25	0.45	0.78		
266	0	150,000	22.8%	2,052	428,740	0.99	3.59			507,990	74,990	52	0.17	0.11	0.35		
267	0	60,000	17.3%	474	482,440	1.89	18.71			287,040	32,040	22	0.13	0.09	0.10		
268	0	7,200,000	8.5%	200,814	36,656,400	0.68	2.82			77,445,000	23,237,000	16,137	0.43	0.27	7.02		
269	0	30,000	43.5%	121	502,440	10.47	52.16			38,940	-9,060	-6	-0.19	-0.13	-0.02	NEGATIVE	13
270	0	120,000	5.1%	1,205	2,576,640	8.23	17.17			2,233,140	1,920,140	1,333	6.13	0.82	3.29		
271	0	30,000	20.5%	122	247,440	19.03	52.45			116,340	103,340	72	7.95	0.71	0.72		
272	0	150,000	11.9%	1,695	1,224,040	2.43	7.55			1,106,940	602,940	419	1.20	0.48	1.35		
273	0	60,000	129.2%	400	447,440	3.73	21.42			-13,560	-133,560	-93	-1.11	-2.88	-0.23	NEGATIVE	5
274	0	120,000	16.0%	1,348	711,440	1.19	4.81			628,440	28,440	20	0.05	0.04	0.07		
275	0	120,000	15.8%	1,496	897,440	2.67	8.00			637,440	301,440	209	0.90	0.40	0.52		
276	0	210,000	21.2%	3,513	977,000	1.40	6.23			780,000	83,000	58	0.12	0.08	0.12		
277	0	960,000	11.4%	18,708	5,841,344	1.76	4.22			7,485,622	4,162,622	2,891	1.25	0.49	6.88		
278	0	30,000	69.2%	88	-20,690	-0.23	12.72	NEGATIVE	4	13,380	-75,750	-53	-0.85	-1.75	-1.50	NEGATIVE	4
279	0	60,000	20.5%	382	521,040	3.38	10.93			233,040	79,040	55	0.51	0.27	0.39		
280	0	240,000	8.2%	4,143	2,805,400	2.24	8.01			2,672,400	1,419,400	986	1.13	0.49	1.10		
281	0	270,000	7.8%	5,187	3,064,600	2.40	6.69			3,175,200	1,900,200	1,320	1.49	0.55	2.01		
282	0	120,000	10.3%	1,377	1,452,520	4.02	13.21			1,048,920	687,920	478	1.91	0.59	0.96		
283	0	270,000	6.9%	5,897	3,626,000	2.26	8.80			3,663,000	2,061,000	1,431	1.29	0.52	1.43		
284	0	240,000	12.1%	4,010	390,400	0.21	3.78			1,743,600	-88,400	-61	-0.05	-0.04	-0.27	NEGATIVE	2
285	0	90,000	23.2%	845	414,040	1.15	3.60			298,440	-62,560	-43	-0.17	-0.16	-0.35	NEGATIVE	9
286	0	60,000	37.1%	524	17,640	0.08	6.32			101,640	-131,360	-91	-0.56	-0.81	-1.14	NEGATIVE	1
287	0	540,000	7.8%	11,100	4,098,800	0.86	3.09			6,382,800	1,620,800	1,126	0.34	0.23	1.13		
288	0	630,000	9.9%	14,055	4,742,000	1.26	4.26			5,702,400	1,942,400	1,349	0.52	0.31	1.04		
289	0	90,000	15.8%	760	676,440	2.37	13.65			478,440	193,440	134	0.68	0.34	0.45		
290	0	540,000	10.0%	10,353	5,180,720	2.19	8.19			4,838,400	2,472,400	1,717	1.04	0.46	1.38		
291	0	90,000	30.5%	589	340,440	4.20	13.88			204,840	123,840	86	1.53	0.42	0.78		
292	0	60,000	87.0%	392	475,440	2.52	21.68			8,940	-180,060	-125	-0.95	-2.61	-0.28	NEGATIVE	2

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
293	0	630,000	8.1%	16,129	5,102,400	1.13	4.35			7,151,400	2,635,400	1,830	0.58	0.34	1.38		
294	0	60,000	50.7%	277	34,440	0.34	7.95			58,440	-42,560	-30	-0.42	-0.36	-0.59	**NEGATIVE**	3
295	0	120,000	25.4%	1,146	613,640	3.45	9.93			352,140	174,140	121	0.98	0.37	0.43		
296	0	270,000	8.0%	5,419	3,921,200	4.50	9.98			3,096,000	2,224,000	1,544	2.55	0.66	1.54		
297	0	60,000	129.2%	275	158,440	1.86	6.57			-13,560	-98,560	-68	-1.16	-2.12	-0.39	**NEGATIVE**	6
298	0	180,000	12.5%	2,428	1,764,440	2.86	8.00			1,261,440	644,440	448	1.04	0.45	0.60		
299	0	90,000	11.8%	557	1,000,640	2.92	11.40			671,940	328,940	228	0.96	0.43	0.54		
300	0	120,000	14.4%	1,422	1,004,440	2.25	10.20			713,940	267,940	186	0.60	0.32	0.39		
301	0	180,000	10.2%	2,667	1,427,520	1.62	8.07			1,576,440	694,440	482	0.79	0.40	1.07		
302	0	300,000	6.7%	8,908	3,846,000	1.37	7.92			4,209,000	1,409,000	978	0.50	0.31	0.75		
303	0	540,000	7.6%	10,241	5,719,400	2.09	4.67			6,599,700	3,859,700	2,680	1.41	0.54	2.69		
304	0	120,000	19.3%	1,329	469,840	0.93	6.16			502,440	-1,560	-1	0.00	0.00	0.00	**NEGATIVE**	4
305	0	90,000	29.1%	666	587,840	2.83	11.99			219,240	11,240	8	0.05	0.04	0.07		
306	0	120,000	17.3%	1,140	1,156,240	3.33	15.44			573,540	226,540	157	0.65	0.33	0.63		
307	0	90,000	17.6%	887	572,120	1.10	10.49			421,560	-99,440	-69	-0.19	-0.19	-0.35	**NEGATIVE**	1
308	0	60,000	10.5%	400	1,088,440	7.16	22.40			512,940	360,940	251	2.37	0.63	0.72		
309	0	240,000	8.4%	4,134	2,041,800	1.61	5.53			2,630,100	1,362,100	946	1.07	0.47	2.78		
310	0	90,000	12.2%	558	1,503,440	9.17	36.68			649,440	485,440	337	2.96	0.66	0.75		
311	0	30,000	54.1%	168	2,040	0.01	8.40			25,440	-205,560	-143	-0.89	-3.71	-1.02	**NEGATIVE**	4
312	0	270,000	12.3%	6,009	2,049,880	1.68	5.65			1,926,000	707,000	491	0.58	0.32	0.94		
313	0	30,000	28.1%	209	367,240	9.66	25.03			76,740	38,740	27	1.02	0.36	0.12		
314	0	270,000	7.1%	6,312	3,663,000	3.02	6.93			3,519,000	2,306,000	1,601	1.90	0.61	2.00		
315	0	120,000	15.3%	1,286	1,576,440	2.48	10.28			664,440	29,440	20	0.05	0.04	0.06		
316	0	300,000	8.2%	8,000	2,741,000	1.54	6.27			3,379,200	1,604,200	1,114	0.90	0.44	1.55		
317	0	90,000	9.1%	844	1,013,640	1.61	15.62			904,140	276,140	192	0.44	0.28	0.64		
318	0	180,000	10.7%	2,761	1,507,240	2.34	7.42			1,495,440	852,440	592	1.33	0.51	1.48		
319	0	180,000	7.8%	2,557	2,458,440	3.61	10.79			2,123,640	1,442,640	1,002	2.12	0.63	1.82		
320	0	60,000	75.6%	375	151,040	0.64	6.70			19,380	-217,620	-151	-0.92	-2.74	-0.60	**NEGATIVE**	4
321	0	90,000	193.8%	570	84,040	0.45	8.28			-43,560	-230,560	-160	-1.23	-4.96	-0.74	**NEGATIVE**	2
322	0	1,500,000	14.0%	30,046	4,262,985	0.63	3.26			9,176,327	2,382,327	1,654	0.35	0.22	1.84		
323	0	150,000	14.2%	1,899	1,065,240	2.84	7.00			906,240	531,240	369	1.42	0.50	1.15		
324	0	210,000	8.0%	3,412	3,007,800	3.32	7.61			2,406,300	1,500,300	1,042	1.66	0.57	1.27		
325	0	120,000	18.5%	1,495	608,440	1.49	7.34			529,440	120,440	84	0.29	0.19	0.42		
326	0	300,000	6.6%	7,162	2,133,520	0.64	2.41			4,211,520	877,520	609	0.26	0.19	0.91		
327	0	270,000	7.5%	6,312	1,589,600	0.47	4.31			3,306,600	-49,400	-34	-0.01	-0.01	-0.04	**NEGATIVE**	8
328	0	150,000	15.2%	2,079	1,192,332	2.13	5.14			837,383	276,383	192	0.49	0.28	0.53		
329	0	60,000	65.6%	308	107,440	1.38	9.53			31,440	-46,560	-32	-0.60	-0.51	-0.32	**NEGATIVE**	6
330	0	30,000	43.5%	50	53,840	1.74	16.93			38,940	7,940	6	0.26	0.12	0.18		
331	0	240,000	14.7%	4,292	1,671,000	1.83	6.06			1,398,000	485,000	337	0.53	0.30	0.96		
332	0	90,000	76.0%	649	393,240	3.61	11.34			28,440	-80,560	-56	-0.74	-0.68	-0.17	**NEGATIVE**	5
333	0	90,000	18.1%	653	720,240	4.45	23.24			406,440	244,440	170	1.51	0.49	0.68		
334	0	60,000	87.0%	311	466,440	1.04	42.03			8,940	-441,060	-306	-0.98	-6.40	-0.49	**NEGATIVE**	4
335	0	120,000	6.4%	1,015	1,639,640	1.82	21.87			1,756,140	856,140	595	0.95	0.46	1.19		
336	0	540,000	5.5%	12,545	7,840,200	2.14	6.46			9,189,900	5,523,900	3,836	1.51	0.57	2.65		
337	0	240,000	8.0%	4,505	3,135,600	3.45	10.12			2,751,600	1,841,600	1,279	2.02	0.62	1.52		
338	0	180,000	10.0%	2,892	1,459,440	1.58	7.62			1,621,440	699,440	486	0.76	0.39	0.97		
339	0	60,000	2666.7%	253	82,740	4.60	14.53			-57,750	-75,750	-53	-4.21	-33.67	-0.48	**NEGATIVE**	10
340	0	210,000	31.6%	3,177	224,040	0.37	3.16			453,840	-147,160	-102	-0.24	-0.22	-0.49	**NEGATIVE**	1
341	0	630,000	5.8%	15,224	6,658,200	0.85	6.27			10,208,700	2,370,700	1,646	0.30	0.22	0.69		
342	0	60,000	81.7%	476	45,040	0.25	6.87			13,440	-164,560	-114	-0.92	-2.24	-0.82	**NEGATIVE**	3
343	0	180,000	12.6%	2,680	1,360,640	2.51	7.84			1,252,440	710,440	493	1.31	0.50	1.23		
344	0	300,000	8.9%	6,592	2,950,000	1.78	6.16			3,064,200	1,408,200	978	0.85	0.42	1.15		
345	0	120,000	12.9%	1,250	1,764,840	4.71	19.86			813,840	438,840	305	1.17	0.47	0.66		
346	0	180,000	21.7%	2,554	840,440	1.04	5.30			649,440	-155,560	-108	-0.19	-0.19	-0.54	**NEGATIVE**	1
347	0	90,000	17.6%	936	382,840	1.32	3.97			420,840	131,840	92	0.46	0.26	2.62		
348	0	90,000	33.4%	945	442,040	1.72	9.59			179,640	-77,360	-54	-0.30	-0.29	-0.30	**NEGATIVE**	6
349	0	150,000	20.6%	1,775	98,800	0.08	6.44			578,640	-589,360	-409	-0.50	-0.81	-1.08	**NEGATIVE**	3
350	0	150,000	11.4%	2,074	1,277,640	2.24	9.35			1,163,640	592,640	412	1.04	0.45	1.14		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
351	0	180,000	10.7%	2,993	1,107,640	0.73	3.57			1,494,540	-25,460	-18	-0.02	-0.02	-0.04	NEGATIVE	6
352	0	30,000	64.6%	165	293,440	1.83	18.73			16,440	-143,560	-100	-0.90	-3.09	-0.33	NEGATIVE	4
353	0	240,000	28.4%	4,071	834,000	2.21	6.20			606,000	228,000	158	0.60	0.27	0.40		
354	0	90,000	31.1%	929	520,440	2.29	6.50			199,440	-27,560	-19	-0.12	-0.10	-0.13	NEGATIVE	6
355	0	210,000	19.9%	3,525	964,000	1.50	4.78			843,000	199,000	138	0.31	0.19	0.31		
356	0	300,000	7.5%	8,275	3,422,640	2.21	5.91			3,705,360	2,155,360	1,497	1.39	0.54	2.14		
357	0	540,000	9.4%	9,418	3,286,600	0.98	5.22			5,226,300	1,856,300	1,289	0.55	0.32	2.22		
358	0	90,000	18.5%	550	900,440	11.40	23.13			397,440	318,440	221	4.03	0.65	0.74		
359	0	150,000	12.0%	1,675	397,240	0.32	4.90			1,102,440	-134,560	-93	-0.11	-0.11	-0.27	NEGATIVE	10
360	0	60,000	65.6%	393	284,440	2.43	13.31			31,440	-85,560	-59	-0.73	-0.94	-0.24	NEGATIVE	5
361	0	90,000	23.2%	838	282,840	1.50	7.26			298,440	109,440	76	0.58	0.28	0.76		
362	0	90,000	14.7%	792	1,043,440	4.74	15.13			523,440	303,440	211	1.38	0.49	0.70		
363	0	90,000	16.6%	899	802,240	2.13	11.22			453,240	77,240	54	0.21	0.14	0.16		
364	0	540,000	10.6%	9,989	4,755,000	3.59	7.09			4,572,000	3,247,000	2,255	2.45	0.64	2.37		
365	0	300,000	2.1%	7,462	14,866,000	4.82	10.55			14,280,000	11,198,000	7,776	3.63	0.77	4.57		
366	0	540,000	9.1%	10,981	6,009,000	2.50	7.17			5,382,000	2,979,000	2,069	1.24	0.50	1.29		
367	0	300,000	9.6%	7,929	1,694,180	0.85	2.85			2,828,400	825,300	573	0.41	0.26	1.39		
368	0	540,000	7.4%	9,981	7,866,000	3.58	6.31			6,795,000	4,595,000	3,191	2.09	0.63	2.13		
369	0	150,000	8.9%	1,866	798,440	0.65	3.70			1,529,040	296,040	206	0.24	0.18	0.69		
370	0	60,000	33.1%	400	132,040	1.39	14.42			121,440	26,440	18	0.28	0.15	0.37		
371	0	90,000	36.6%	668	470,240	2.72	14.85			156,060	-16,940	-12	-0.10	-0.07	-0.17	NEGATIVE	2
372	0	60,000	108.2%	407	575,440	7.78	28.70			-4,560	-78,560	-55	-1.06	-1.42	-0.12	NEGATIVE	3
373	0	180,000	15.2%	2,496	1,993,440	4.11	11.51			1,003,140	518,140	360	1.07	0.44	0.60		
374	0	270,000	3.3%	6,018	7,965,200	3.46	7.25			7,855,200	5,555,200	3,858	2.42	0.68	2.76		
375	0	180,000	16.6%	2,380	2,375,440	3.27	8.84			901,440	175,440	122	0.24	0.16	0.24		
376	0	90,000	9.5%	605	1,249,440	3.55	14.05			856,440	504,440	350	1.43	0.53	0.70		
377	0	210,000	8.0%	3,645	2,525,000	1.85	8.12			2,400,000	1,035,000	719	0.76	0.40	0.72		
378	0	120,000	13.1%	1,458	1,007,040	1.50	14.30			799,440	127,440	89	0.19	0.14	0.20		
379	0	180,000	16.2%	2,524	1,407,440	1.36	8.03			928,440	-107,560	-75	-0.10	-0.10	-0.25	NEGATIVE	3
380	0	30,000	27.9%	224	334,640	4.78	17.61			77,640	7,640	5	0.11	0.07	0.10		
381	0	150,000	10.9%	1,842	1,507,440	4.18	12.81			1,223,940	862,940	599	2.39	0.63	1.50		
382	0	150,000	15.1%	1,599	565,440	0.51	4.49			841,440	-256,560	-178	-0.23	-0.26	-0.36	NEGATIVE	8
383	0	60,000	87.0%	395	101,240	0.44	11.58			8,940	-223,060	-155	-0.96	-3.24	-0.70	NEGATIVE	4
384	0	150,000	16.1%	2,019	1,347,440	5.37	9.56			782,940	531,940	369	2.12	0.57	0.74		
385	0	300,000	4.9%	8,000	4,260,800	1.22	4.10			5,812,800	2,312,800	1,606	0.66	0.38	1.52		
386	0	120,000	19.2%	1,200	282,040	0.38	11.47			506,040	-236,960	-165	-0.32	-0.38	-0.48	NEGATIVE	2
387	0	90,000	16.2%	710	781,240	5.17	19.14			465,840	314,840	219	2.09	0.57	0.84		
388	0	30,000	11.4%	220	561,840	11.24	27.47			232,440	182,440	127	3.65	0.70	0.84		
389	0	300,000	4.8%	7,427	5,735,000	1.89	6.17			5,937,000	2,898,000	2,013	0.95	0.46	1.12		
390	0	90,000	35.8%	945	72,441	0.23	6.64			161,641	-147,359	-102	-0.48	-0.59	-0.68	NEGATIVE	3
391	0	270,000	12.2%	5,850	1,068,000	0.68	4.25			1,935,000	375,000	260	0.24	0.17	0.58		
392	0	300,000	7.7%	8,300	2,665,000	1.09	3.26			3,597,000	1,160,000	806	0.48	0.30	0.90		
393	0	240,000	14.8%	5,018	664,000	0.29	2.14			1,380,000	-876,000	-608	-0.39	-0.54	-1.22	NEGATIVE	3
394	0	90,000	29.1%	577	342,240	1.58	13.05			219,240	3,240	2	0.02	0.01	0.02		
395	0	120,000	15.6%	987	717,240	1.19	16.06			650,040	47,040	33	0.08	0.06	0.07		
396	0	540,000	8.9%	12,560	4,916,600	1.66	6.84			5,511,600	2,554,600	1,774	0.86	0.42	1.48		
397	0	120,000	18.2%	1,230	1,152,440	4.19	13.65			538,440	263,440	183	0.96	0.40	0.61		
398	0	90,000	193.8%	552	88,440	0.71	4.95			-43,560	-168,560	-117	-1.35	-3.63	-0.67	NEGATIVE	6
399	0	60,000	51.8%	432	142,440	0.80	8.59			55,740	-122,260	-85	-0.69	-1.06	-0.49	NEGATIVE	2
400	0	210,000	11.2%	3,190	1,780,440	1.24	5.22			1,663,440	228,440	159	0.16	0.12	0.26		
401	0	60,000	12.5%	494	1,021,240	8.88	34.05			418,440	303,440	211	2.64	0.63	0.70		
402	0	150,000	14.8%	2,079	662,560	1.21	4.31			861,060	314,060	218	0.57	0.31	1.74		
403	0	60,000	34.8%	400	248,440	1.04	12.41			112,440	-126,560	-88	-0.53	-0.73	-3.52	NEGATIVE	2
404	0	90,000	17.2%	738	803,440	1.39	20.65			433,440	-142,560	-99	-0.25	-0.27	-0.33	NEGATIVE	2
405	0	180,000	9.0%	3,019	2,615,740	2.72	9.03			1,819,710	857,710	596	0.89	0.43	0.50		
406	0	240,000	6.0%	4,328	3,477,800	1.80	4.26			3,757,800	1,820,800	1,264	0.94	0.46	1.60		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
407	0	150,000	5.9%	2,117	2,317,440	1.69	5.42			2,411,940	1,040,940	723	0.76	0.41	0.96		
408	0	120,000	88.0%	1,500	172,440	0.48	4.53			16,440	-346,560	-241	-0.95	-2.54	-0.69	**NEGATIVE**	3
409	0	60,000	44.9%	250	23,990	0.10	11.28			73,515	-163,485	-114	-0.69	-1.22	-0.95	**NEGATIVE**	2
410	0	60,000	129.2%	325	-102,360	-0.29	6.95	**NEGATIVE**	4	-13,560	-366,560	-255	-1.04	-7.89	-1.41	**NEGATIVE**	4
411	0	210,000	16.8%	3,535	977,000	0.97	5.52			1,041,000	34,000	24	0.03	0.03	0.04		
412	0	150,000	18.7%	1,549	1,237,440	4.07	13.22			652,440	348,440	242	1.15	0.43	0.60		
413	0	300,000	6.1%	8,330	3,578,000	1.33	4.51			4,605,000	1,913,000	1,328	0.71	0.39	1.90		
414	0	240,000	12.7%	4,950	2,023,000	1.86	7.31			1,650,000	565,000	392	0.52	0.30	0.98		
415	0	210,000	19.9%	3,437	685,400	0.75	4.43			844,800	-70,200	-49	-0.08	-0.07	-0.12	**NEGATIVE**	3
416	0	300,000	2.6%	6,976	10,018,800	2.51	8.99			11,083,200	7,093,200	4,926	1.78	0.62	2.83		
417	0	60,000	12.3%	260	690,440	3.95	46.08			427,440	252,440	175	1.44	0.52	0.58		
418	0	120,000	13.2%	1,135	915,440	1.40	11.36			790,440	134,440	93	0.20	0.15	0.20		
419	0	150,000	20.6%	2,210	837,140	1.69	8.17			579,090	85,090	59	0.17	0.12	0.19		
420	0	90,000	9.8%	950	1,553,440	10.64	28.39			829,440	683,440	475	4.68	0.74	0.79		
421	0	120,000	20.0%	1,236	563,040	1.53	8.78			479,040	111,040	77	0.30	0.19	0.27		
422	0	90,000	15.8%	896	759,940	2.77	9.20			478,890	204,890	142	0.75	0.36	0.47		
423	0	120,000	7.5%	1,500	1,619,840	2.64	10.30			1,488,840	874,840	608	1.42	0.54	1.22		
424	0	210,000	25.4%	3,901	801,200	1.02	4.42			616,200	-165,800	-115	-0.21	-0.20	-0.33	**NEGATIVE**	2
425	0	90,000	20.6%	651	901,880	7.84	18.66			347,040	232,040	161	2.02	0.53	0.73		
426	0	150,000	9.3%	1,736	2,309,440	3.71	12.36			1,471,440	849,440	590	1.37	0.52	0.59		
427	0	60,000	12.4%	478	585,640	2.97	21.42			422,040	225,040	156	1.14	0.47	0.65		
428	0	300,000	5.4%	8,648	4,297,200	1.78	5.30			5,282,700	2,873,700	1,996	1.19	0.51	2.49		
429	0	150,000	25.6%	1,941	357,440	1.12	5.24			436,440	116,440	81	0.36	0.20	0.54		
430	0	180,000	14.9%	2,530	1,963,440	2.90	6.04			1,027,440	349,440	243	0.52	0.29	0.37		
431	0	120,000	16.2%	1,283	680,440	0.60	6.39			619,440	-505,560	-351	-0.45	-0.68	-1.17	**NEGATIVE**	4
432	0	120,000	26.5%	1,271	496,040	1.94	7.15			332,340	76,340	53	0.30	0.17	0.25		
433	0	210,000	18.6%	3,500	747,600	1.02	2.89			918,600	188,600	131	0.26	0.17	0.39		
434	0	90,000	49.6%	621	329,840	1.45	6.39			91,440	-136,560	-95	-0.60	-0.75	-0.31	**NEGATIVE**	2
435	0	1,080,000	5.2%	24,551	9,536,400	0.70	3.04			19,859,400	6,187,400	4,297	0.45	0.30	2.05		
436	0	30,000	64.6%	150	67,440	0.21	23.67			16,440	-297,560	-207	-0.95	-6.41	-0.83	**NEGATIVE**	2
437	0	90,000	22.1%	650	359,040	1.52	14.30			316,440	80,440	56	0.34	0.20	0.35		
438	0	90,000	16.6%	815	990,440	4.74	16.49			451,440	242,440	168	1.16	0.45	0.84		
439	0	30,000	105.5%	175	104,240	1.49	10.40			-1,560	-71,560	-50	-1.02	-2.52	-0.41	**NEGATIVE**	3
440	0	540,000	8.9%	12,524	5,292,600	2.58	5.57			5,520,600	3,469,600	2,409	1.69	0.57	2.32		
441	0	150,000	28.0%	1,651	304,520	1.21	5.78			385,320	134,320	93	0.54	0.25	1.17		
442	0	120,000	38.6%	1,100	142,560	0.74	3.46			191,040	-960	-1	-0.01	0.00	-0.02	**NEGATIVE**	3
443	0	540,000	8.5%	9,400	5,344,200	2.05	5.73			5,776,200	3,175,200	2,205	1.22	0.50	2.51		
444	0	150,000	20.1%	1,864	936,440	2.18	9.32			595,740	165,740	115	0.39	0.22	0.58		
445	0	960,000	10.6%	21,000	5,218,000	1.03	3.95			8,058,000	2,992,000	2,078	0.59	0.33	1.54		
446	0	90,000	18.3%	601	721,240	4.51	18.18			401,940	241,940	168	1.51	0.49	0.75		
447	0	540,000	11.0%	9,351	3,443,880	1.43	4.68			4,367,520	1,956,520	1,359	0.81	0.40	1.85		
448	0	60,000	10.3%	513	792,440	6.83	32.42			523,740	407,740	283	3.52	0.70	1.13		
449	0	60,000	66.3%	364	123,440	0.35	15.97			30,540	-318,460	-221	-0.91	-3.52	-0.74	**NEGATIVE**	2
450	0	120,000	17.5%	1,310	955,440	1.35	18.10			565,440	-144,560	-100	-0.20	-0.21	-0.29	**NEGATIVE**	1
451	0	150,000	49.0%	1,565	24,960	0.10	1.95			156,360	-83,640	-58	-0.35	-0.27	-1.32	**NEGATIVE**	4
452	0	90,000	19.9%	600	570,240	1.83	11.22			363,240	51,240	36	0.16	0.11	0.16		
453	0	90,000	14.3%	865	965,440	4.98	17.68			541,440	347,440	241	1.79	0.55	0.60		
454	0	30,000	16.5%	25	1,047,840	3.61	26.36			151,440	-138,560	-96	-0.48	-0.76	-0.12	**NEGATIVE**	6
455	0	300,000	6.4%	8,532	4,384,000	2.04	6.03			4,362,000	2,218,000	1,540	1.03	0.48	1.93		
456	0	210,000	13.3%	3,328	1,902,800	2.38	6.15			1,365,360	565,360	393	0.71	0.36	0.47		
457	0	30,000	64.6%	141	222,440	2.56	32.70			16,440	-70,560	-49	-0.81	-1.52	-0.25	**NEGATIVE**	10
458	0	120,000	15.2%	1,258	550,440	0.77	8.93			669,840	-41,160	-29	-0.06	-0.05	-0.08	**NEGATIVE**	4
459	0	120,000	23.2%	1,065	717,600	1.48	6.76			396,600	-89,400	-62	-0.18	-0.17	-0.24	**NEGATIVE**	3
460	0	30,000	39.9%	214	526,240	8.77	33.51			45,240	-14,760	-10	-0.25	-0.20	-0.03	**NEGATIVE**	10
461	0	240,000	8.8%	4,101	2,708,800	2.09	7.32			2,490,600	1,192,600	828	0.92	0.44	1.02		
462	0	120,000	12.7%	997	1,586,440	5.81	17.40			826,440	553,440	384	2.03	0.58	0.77		
463	0	300,000	6.4%	8,726	2,598,800	0.65	6.64			4,372,800	378,800	263	0.09	0.08	0.18		
464	0	90,000	25.5%	641	316,440	1.27	4.20			262,440	13,440	9	0.05	0.04	0.09		

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
465	0	90,000	21.7%	667	783,440	2.84	19.11			325,440	49,440	34	0.18	0.12	0.17		
466	0	240,000	18.3%	4,335	861,000	1.12	3.72			1,074,000	307,000	213	0.40	0.23	0.61		
467	0	90,000	15.8%	750	631,040	1.96	11.42			480,240	158,240	110	0.49	0.28	0.34		
468	0	60,000	129.2%	452	308,440	2.68	12.20			-13,560	-128,560	-89	-1.12	-2.77	-0.30	NEGATIVE	3
469	0	180,000	18.8%	2,304	663,240	0.73	3.11			775,440	-135,560	-94	-0.15	-0.14	-0.27	NEGATIVE	6
470	0	60,000	81.7%	286	121,340	0.76	10.11			13,440	-145,860	-101	-0.92	-1.99	-0.56	NEGATIVE	3
471	0	150,000	17.9%	2,080	859,440	1.71	7.50			688,440	186,440	129	0.37	0.22	0.30		
472	0	240,000	18.2%	4,239	782,600	0.73	4.27			1,077,600	2,600	2	0.00	0.00	0.01		
473	0	210,000	8.6%	3,317	1,657,200	0.98	3.28			2,227,200	539,200	374	0.32	0.22	0.71		
474	0	1,080,000	7.5%	22,973	11,430,000	2.31	6.36			13,287,600	8,341,600	5,793	1.69	0.58	3.86		
475	0	3,150,000	12.3%	65,000	14,823,880	1.16	3.61			22,414,320	9,633,320	6,690	0.75	0.38	3.97		
476	0	540,000	10.2%	9,900	3,916,000	1.46	5.95			4,743,000	2,053,000	1,426	0.76	0.39	1.30		
477	0	270,000	3.8%	5,750	6,047,600	1.60	4.42			6,915,600	3,131,600	2,175	0.83	0.44	2.29		
478	0	540,000	8.4%	10,649	6,602,000	4.32	8.20			5,887,800	4,359,800	3,028	2.85	0.68	2.20		
479	0	1,650,000	9.6%	38,426	11,689,000	1.33	4.15			15,585,000	6,814,000	4,732	0.78	0.40	1.89		
480	0	90,000	22.7%	648	-523,360	-0.46	9.78	NEGATIVE	6	305,640	-826,360	-574	-0.73	-2.09	-3.19	NEGATIVE	6
481	0	150,000	13.3%	1,855	1,357,440	2.50	7.67			976,440	432,440	300	0.79	0.38	0.48		
482	0	90,000	25.5%	605	512,440	1.90	17.93			262,440	-6,560	-5	-0.02	-0.02	-0.03	NEGATIVE	2
483	0	240,000	27.8%	4,400	420,000	0.56	3.93			624,000	-124,000	-86	-0.17	-0.14	-0.25	NEGATIVE	2
484	0	90,000	9.0%	610	1,095,440	4.18	22.63			910,440	648,440	450	2.47	0.65	1.50		
485	0	2,940,000	8.5%	63,240	27,217,000	2.46	5.50			31,512,000	20,469,000	14,215	1.85	0.59	3.38		
486	0	1,500,000	11.8%	28,943	9,196,200	1.96	4.69			11,192,700	6,502,700	4,516	1.39	0.51	3.03		
487	0	30,000	45.5%	150	478,020	9.96	40.80			35,970	-12,030	-8	-0.25	-0.18	-0.20	NEGATIVE	5
488	0	270,000	10.6%	5,709	1,207,600	0.69	3.03			2,287,800	533,800	371	0.30	0.21	1.14		
489	0	150,000	15.1%	2,045	683,440	0.91	6.47			841,440	93,440	65	0.12	0.09	0.17		
490	0	630,000	12.9%	13,300	2,922,000	1.07	3.53			4,249,800	1,527,800	1,061	0.56	0.31	1.15		
491	0	240,000	11.4%	4,809	1,469,600	1.10	5.76			1,860,600	530,600	368	0.40	0.25	0.74		
492	0	90,000	9.1%	800	1,431,440	2.82	14.58			901,440	393,440	273	0.77	0.40	0.55		
493	0	150,000	8.2%	1,549	2,107,440	2.30	4.43			1,682,940	767,940	533	0.84	0.42	1.07		
494	0	60,000	129.2%	313	185,840	1.72	14.21			-13,560	-121,560	-84	-1.13	-2.62	-0.40	NEGATIVE	3
495	0	60,000	129.2%	317	368,440	2.90	24.62			-13,560	-140,560	-98	-1.11	-3.03	-0.28	NEGATIVE	2
496	0	150,000	9.5%	1,820	1,525,440	2.55	8.93			1,435,440	837,440	582	1.40	0.53	1.45		
497	0	60,000	11.5%	351	1,068,440	3.97	45.25			463,440	194,440	135	0.72	0.37	0.45		
498	0	90,000	193.8%	743	592,440	3.68	13.16			-43,560	-204,560	-142	-1.27	-4.40	-0.26	NEGATIVE	11
499	0	630,000	8.6%	14,000	4,673,000	1.21	4.60			6,660,000	2,791,000	1,938	0.72	0.38	1.76		
500	0	150,000	13.8%	1,765	1,218,440	1.99	1.51			940,440	329,440	229	0.54	0.30	0.38		
501	0	150,000	5.6%	2,108	3,479,440	4.71	14.14			2,506,440	1,768,440	1,228	2.40	0.67	1.54		
502	0	30,000	54.1%	170	335,440	2.62	44.78			25,440	-102,560	-71	-0.80	-1.85	-0.24	NEGATIVE	4
503	0	60,000	14.8%	525	373,440	1.36	19.55			346,440	72,440	50	0.26	0.18	0.25		
504	0	120,000	9.6%	1,200	1,133,040	1.46	8.37			1,127,040	353,040	245	0.46	0.28	0.50		
505	0	180,000	19.2%	2,351	883,040	1.32	7.14			758,340	89,340	62	0.13	0.10	0.33		
506	0	60,000	14.6%	376	621,840	5.65	14.18			351,840	241,840	168	2.20	0.59	1.05		
507	0	30,000	15.7%	98	278,440	3.03	8.31			161,340	69,340	48	0.75	0.36	0.57		
508	0	180,000	3.7%	2,465	4,387,040	2.58	9.01			4,631,040	2,931,040	2,035	1.72	0.61	2.61		
509	0	960,000	8.0%	20,000	9,393,741	2.08	5.72			10,977,367	6,451,367	4,480	1.43	0.54	2.99		
510	0	60,000	15.5%	514	380,640	1.56	4.87			326,640	82,640	57	0.34	0.21	0.32		
511	0	120,000	34.0%	1,200	588,440	2.50	6.31			232,440	-2,560	-2	-0.01	-0.01	-0.01	NEGATIVE	8
512	0	90,000	23.2%	834	861,440	5.13	19.35			298,440	130,440	91	0.78	0.34	0.45		
513	0	120,000	28.3%	1,100	885,440	3.92	11.31			304,440	78,440	54	0.35	0.18	0.27		
514	0	180,000	17.5%	2,350	1,568,040	4.06	11.23			846,540	460,540	320	1.19	0.45	1.07		
515	0	90,000	23.1%	550	441,840	2.57	16.08			300,240	128,240	89	0.75	0.33	0.45		
516	0	90,000	19.9%	715	614,440	3.25	13.04			361,440	172,440	120	0.91	0.38	0.48		
517	0	90,000	13.3%	750	560,940	0.45	14.94			586,440	-651,660	-453	-0.53	-0.96	-0.57	NEGATIVE	8
518	0	30,000	88.7%	83	111,840	6.21	24.51			3,840	-14,160	-10	-0.79	-0.42	-0.12	NEGATIVE	8

	Analysis 2																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
			Ave	Ave		Ave	Ave					Ave	Ave	Ave	Ave		
			41%	4,154		2.65	11.32					591.85	0.60	-1.01	0.65		
			Max	Max		Max	Max	7	# deficit			Max	Max	Max	Max	146	# deficit
			2667%	200,814		35.65	116.86	1.4%	% of systems			16,136.81	7.95	0.82	8.84	28.2%	% of systems
			Median	Median		Median	Median	0.2%	deviation			Median	Median	Median	Median	1.0%	deviation
			15%	1,309		1.90	8.28					159.89	0.50	0.29	0.55		
			Min	Min		Min	Min					Min	Min	Min	Min		
			1%	25		-0.46	1.51					-1,703.86	-4.21	-222.89	-3.52		
							85% Effective	8	# deficit						85% Effective	151	# deficit
								1.5%	% of systems							29.2%	% of systems

APPENDIX F: ANALYSIS 3 RESULTS

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	0	276,000	19.6%	1,956	1,397,520	2.26	6.56			1,128,720	510,720	355	0.83	0.36		1.54		
2	0	276,000	17.0%	1,819	1,907,640	2.82	7.84			1,348,140	672,140	467	0.99	0.41		0.88		
3	0	108,000	26.1%	536	525,290	4.53	21.86			305,145	189,145	131	1.63	0.46		0.63		
4	0	216,000	41.7%	1,140	752,640	3.58	11.23			302,040	92,040	64	0.44	0.18		0.34		
5	0	384,000	22.3%	3,656	1,470,600	2.18	8.04			1,336,800	661,800	460	0.98	0.38		1.24		
6	0	168,000	22.7%	860	1,043,440	5.07	15.86			571,440	365,440	254	1.77	0.49		0.78		
7	0	1,134,000	10.7%	14,882	9,211,000	3.12	7.87			9,513,000	6,564,000	4,558	2.23	0.62		3.26		
8	0	168,000	33.3%	863	521,005	2.30	8.58			336,149	109,149	76	0.48	0.22		0.30		
9	0	108,000	156.7%	447	69,440	0.27	7.48			-39,060	-298,060	-207	-1.15	-4.32	456.99	-0.83	NEGATIVE	1
10	0	168,000	83.5%	765	211,240	1.87	6.32			33,240	-79,760	-55	-0.71	-0.40	292.31	-0.46	NEGATIVE	3
11	0	540,000	40.0%	6,665	378,440	0.41	2.06			811,440	-103,560	-72	-0.11	-0.08	414.15	-0.38	NEGATIVE	6
12	0	324,000	37.2%	2,800	849,720	1.38	4.75			545,940	-68,060	-47	-0.11	-0.08	689.13	-0.13	NEGATIVE	1
13	0	216,000	22.8%	983	1,278,240	5.07	19.42			732,240	480,240	334	1.91	0.51		0.81		
14	0	540,000	18.6%	8,600	1,891,600	1.26	3.27			2,370,600	870,600	605	0.58	0.30		1.15		
15	0	276,000	7.5%	2,194	3,623,840	2.11	5.25			3,393,840	1,673,840	1,162	0.97	0.46		1.94		
16	0	108,000	232.6%	525	-126,560	-0.25	6.10	NEGATIVE	1	-61,560	-563,560	-391	-1.12	-12.14	691.36	-1.30	NEGATIVE	1
17	0	168,000	24.5%	798	1,049,240	4.43	19.66			517,440	280,440	195	1.18	0.41		0.65		
18	0	168,000	69.1%	565	211,540	0.57	11.71			75,270	-297,730	-207	-0.80	-1.22	541.76	-0.62	NEGATIVE	4
19	0	1,728,000	14.9%	17,777	6,419,100	1.02	3.47			9,882,000	3,569,100	2,479	0.57	0.31		1.98		
20	0	216,000	33.1%	1,102	307,840	1.18	7.65			437,040	177,040	123	0.68	0.27		2.05		
21	0	216,000	13.4%	1,450	1,391,240	2.52	6.38			1,398,240	847,240	588	1.54	0.52		1.68		
22	0	168,000	128.2%	623	322,440	2.03	6.56			-36,960	-195,960	-136	-1.23	-1.50	486.08	-0.39	NEGATIVE	2
23	0	108,000	21.2%	296	784,040	6.82	23.59			401,040	286,040	199	2.49	0.56		0.66		
24	0	384,000	25.1%	3,301	1,936,000	2.51	7.90			1,146,000	374,000	260	0.48	0.24		0.35		
25	0	168,000	19.7%	648	822,440	2.60	11.47			683,940	367,940	256	1.16	0.43		0.85		
26	0	216,000	41.4%	1,400	517,040	1.53	6.42			306,000	-32,000	-22	-0.09	-0.06	404.13	-0.06	NEGATIVE	3
27	0	972,000	16.3%	11,188	3,194,000	0.82	3.20			4,983,300	1,084,300	753	0.28	0.18		0.68		
28	0	216,000	25.4%	1,127	923,720	3.09	16.86			634,320	335,320	233	1.12	0.39		1.53		
29	0	384,000	10.2%	3,319	2,442,600	0.91	3.77			3,363,600	684,600	475	0.26	0.18		0.58		
30	0	168,000	92.6%	571	231,080	1.35	10.33			13,440	-157,560	-109	-0.92	-0.87	365.42	-0.43	NEGATIVE	9
31	0	168,000	17.1%	778	1,258,160	3.27	11.16			816,060	431,060	299	1.12	0.44		0.54		
32	0	108,000	30.3%	446	495,440	2.57	24.66			248,940	55,940	39	0.29	0.16	300.00	0.19		
33	0	1,134,000	16.8%	15,464	4,942,000	1.72	3.78			5,616,000	2,736,000	1,900	0.95	0.41		1.36		
34	0	276,000	14.8%	1,887	1,728,440	1.66	11.48			1,592,940	552,940	384	0.53	0.30		0.59		
35	0	276,000	41.4%	1,947	736,440	1.82	6.24			391,440	-13,560	-9	-0.03	-0.02	517.12	-0.03	NEGATIVE	4
36	0	1,134,000	23.9%	13,500	1,286,200	0.33	4.20			3,607,200	-243,800	-169	-0.06	-0.05	1169.31	-0.17	NEGATIVE	10
37	0	168,000	29.8%	875	569,040	2.05	5.65			395,040	117,040	81	0.42	0.21		0.31		
38	0	168,000	36.4%	976	742,640	4.20	14.49			293,340	116,340	81	0.66	0.25		0.44		
39	0	480,000	13.1%	5,371	3,611,000	2.18	6.61			3,178,500	1,524,500	1,059	0.92	0.42		0.96		
40	0	168,000	69.0%	688	413,040	2.89	9.47			75,540	-67,460	-47	-0.47	-0.28	494.17	-0.52	NEGATIVE	2
41	0	168,000	17.8%	901	988,440	1.85	11.66			778,440	243,440	169	0.46	0.26		0.34		
42	0	216,000	20.0%	1,218	1,045,440	1.31	4.18			865,440	69,440	48	0.09	0.06	650.00	0.10		
43	0	216,000	31.5%	1,374	783,440	1.84	12.63			469,440	43,440	30	0.10	0.06	500.00	0.09		
44	0	384,000	18.2%	3,608	1,751,000	1.89	4.95			1,722,000	797,000	553	0.86	0.38		1.58		
45	0	216,000	17.8%	1,231	1,168,040	1.76	4.69			1,000,440	335,440	233	0.50	0.28		0.47		
46	0	168,000	26.0%	802	918,240	5.25	14.63			477,660	302,660	210	1.73	0.47		1.05		
47	0	384,000	23.9%	3,364	1,159,560	2.18	5.60			1,221,960	688,960	478	1.29	0.43		4.09		
48	0	168,000	183.7%	770	143,840	0.88	6.01			-76,560	-240,560	-167	-1.47	-2.63	427.06	-0.64	NEGATIVE	1
49	0	168,000	24.4%	650	873,734	3.25	23.85			521,485	252,485	175	0.94	0.37		0.47		
50	0	108,000	118.1%	459	322,440	3.13	12.46			-16,560	-119,560	-83	-1.16	-1.31	383.03	-0.28	NEGATIVE	2
51	0	216,000	20.4%	1,450	1,271,240	3.99	15.80			840,240	521,240	362	1.63	0.49		0.98		
52	0	384,000	14.9%	3,228	2,752,440	4.38	11.58			2,191,440	1,562,440	1,085	2.48	0.61		1.81		
53	0	108,000	79.2%	339	146,440	1.30	9.79			28,440	-84,560	-59	-0.75	-0.62	208.72	-0.39	NEGATIVE	2
54	0	216,000	95.4%	1,043	171,640	0.51	4.43			10,440	-328,560	-228	-0.97	-1.45	558.17	-0.69	NEGATIVE	3
55	0	168,000	73.0%	672	158,640	1.04	8.35			62,040	-89,960	-62	-0.59	-0.39	279.53	-0.69	NEGATIVE	1
56	0	168,000	30.8%	872	710,990	6.64	10.90			376,815	269,815	187	2.52	0.50		0.85		
57	0	324,000	18.7%	2,937	1,040,760	0.69	2.99			1,406,520	-104,480	-73	-0.07	-0.06	846.19	-0.10	NEGATIVE	6
58	0	168,000	15.1%	598	1,036,440	1.87	7.58			945,840	392,840	273	0.71	0.35		0.62		
59	0	324,000	54.4%	2,692	514,840	1.20	4.14			271,440	-157,560	-109	-0.37	-0.26	603.80	-0.31	NEGATIVE	3

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
60	0	384,000	27.1%	3,165	1,339,040	2.08	7.48			1,032,240	388,240	270	0.60	0.27		0.43		
61	0	30,000	1.0%	140	1,412,190	0.35	1.76			3,113,115	-896,885	-623	-0.22	-0.29	2366.57	-0.48	**NEGATIVE**	8
62	0	1,944,000	10.8%	21,900	13,006,340	1.60	5.27			16,111,890	7,997,890	5,554	0.99	0.44		5.85		
63	0	168,000	29.5%	789	843,040	3.29	15.58			402,240	146,240	102	0.57	0.26		0.38		
64	0	1,134,000	8.2%	12,741	11,852,000	3.20	10.58			12,618,000	8,916,000	6,192	2.41	0.65		3.26		
65	0	168,000	50.2%	561	324,440	0.92	12.13			166,440	-184,560	-128	-0.53	-0.55	574.29	-0.64	**NEGATIVE**	5
66	0	108,000	115.0%	256	121,378	1.96	9.25			-14,096	-76,096	-53	-1.23	-0.81	182.84	-0.41	**NEGATIVE**	1
67	0	108,000	34.6%	495	238,760	1.05	8.15			203,940	-24,060	-17	-0.11	-0.08	194.99	-0.10	**NEGATIVE**	5
68	0	30,000	13.1%	80	522,540	8.43	42.25			199,230	137,230	95	2.21	0.60		0.38		
69	0	972,000	13.0%	9,958	3,095,000	0.57	4.43			6,480,000	1,027,000	713	0.19	0.14		0.65		
70	0	276,000	23.6%	1,881	895,440	1.47	4.23			895,440	285,440	198	0.47	0.24		0.53		
71	0	108,000	54.9%	438	595,440	2.72	12.47			88,740	-130,260	-90	-0.59	-0.66	952.29	-0.90	**NEGATIVE**	10
72	0	216,000	13.0%	1,352	1,536,440	2.98	17.33			1,450,440	935,440	650	1.82	0.56		1.62		
73	0	168,000	10.3%	779	2,201,440	3.05	15.58			1,461,540	740,540	514	1.03	0.45		0.51		
74	0	216,000	27.2%	1,101	660,440	1.24	6.72			577,440	44,440	31	0.08	0.06	400.00	0.10		
75	0	276,000	28.4%	1,573	959,640	2.06	6.63			697,440	232,440	161	0.50	0.24		0.36		
76	0	276,000	40.0%	1,930	799,440	2.15	7.79			414,840	42,840	30	0.12	0.06	500.00	0.12		
77	0	168,000	228.8%	640	62,240	0.37	3.92			-94,560	-262,560	-182	-1.56	-3.58	402.33	-0.83	**NEGATIVE**	3
78	0	168,000	183.7%	703	285,240	2.62	7.20			-76,560	-185,560	-129	-1.70	-2.03	448.86	-0.40	**NEGATIVE**	3
79	0	216,000	42.7%	1,005	525,440	2.58	9.63			289,440	85,440	59	0.42	0.17	300.00	0.20		
80	0	216,000	24.7%	1,144	978,440	1.51	8.14			658,440	9,440	7	0.01	0.01	650.00	0.02		
81	0	108,000	29.3%	263	564,440	8.68	30.30			260,640	195,640	136	3.01	0.53		0.68		
82	0	972,000	19.6%	10,770	3,011,400	1.20	3.75			3,983,400	1,482,400	1,029	0.59	0.30		1.37		
83	0	276,000	21.6%	1,887	993,440	1.60	7.91			998,940	379,940	264	0.61	0.30		0.75		
84	0	168,000	91.2%	711	449,640	1.53	6.76			16,140	-277,860	-193	-0.95	-1.51	1705.99	-2.41	**NEGATIVE**	3
85	0	108,000	133.9%	306	169,200	1.19	5.62			-27,360	-169,360	-118	-1.19	-2.10	346.61	-0.51	**NEGATIVE**	3
86	0	276,000	23.6%	1,931	1,025,440	1.60	6.22			895,440	255,440	177	0.40	0.22		0.35		
87	0	384,000	16.8%	3,764	1,778,000	1.43	4.27			1,902,000	660,000	458	0.53	0.29		0.92		
88	0	1,134,000	9.2%	12,925	4,755,000	0.56	3.62			11,259,000	2,694,000	1,871	0.31	0.22		1.50		
89	0	108,000	22.1%	509	590,240	0.97	17.06			380,340	-228,660	-159	-0.38	-0.47	902.01	-0.61	**NEGATIVE**	8
90	0	216,000	24.0%	1,061	241,440	0.18	2.31			685,440	-642,560	-446	-0.48	-0.71	1135.47	-0.89	**NEGATIVE**	8
91	0	216,000	21.8%	1,365	1,133,440	2.16	13.01			775,440	251,440	175	0.48	0.25		0.30		
92	0	276,000	26.0%	1,876	2,434,440	3.96	12.74			787,440	172,440	120	0.28	0.16	1550.00	0.22		
93	0	432,000	13.2%	4,567	3,627,600	3.61	10.60			2,838,600	1,834,600	1,274	1.83	0.56		2.55		
94	0	108,000	5.1%	385	2,412,640	2.38	11.33			1,990,440	976,440	678	0.96	0.47		0.90		
95	0	108,000	118.1%	440	519,440	2.68	22.02			-16,560	-210,560	-146	-1.09	-2.30	646.22	-0.29	**NEGATIVE**	1
96	0	108,000	59.8%	435	295,240	1.14	12.18			72,540	-185,460	-129	-0.72	-1.03	448.79	-0.40	**NEGATIVE**	4
97	0	276,000	52.7%	1,600	157,040	0.73	3.11			247,440	33,440	23	0.16	0.06		0.39		
98	0	168,000	16.9%	852	447,440	0.35	5.79			823,440	-446,560	-310	-0.35	-0.45	972.13	-0.62	**NEGATIVE**	8
99	0	216,000	25.7%	1,155	740,040	2.01	9.36			626,040	257,040	179	0.70	0.31		0.71		
100	0	108,000	34.3%	367	465,040	1.44	4.56			206,640	-115,360	-80	-0.36	-0.37	568.65	-0.42	**NEGATIVE**	2
101	0	432,000	20.1%	4,748	2,235,000	2.84	5.86			1,719,000	932,000	647	1.18	0.43		1.29		
102	0	168,000	27.4%	714	923,440	3.52	19.71			445,440	183,440	127	0.70	0.30		0.42		
103	0	216,000	52.0%	1,390	190,440	0.31	7.57			199,440	-415,560	-289	-0.68	-1.00	1554.33	-2.89	**NEGATIVE**	4
104	0	432,000	24.0%	4,152	2,217,200	2.80	8.18			1,366,200	574,200	399	0.73	0.32		0.53		
105	0	108,000	232.6%	500	461,440	7.96	21.53			-61,560	-119,560	-83	-2.06	-2.57	483.03	-0.21	**NEGATIVE**	2
106	0	276,000	41.6%	1,958	552,440	0.95	7.28			386,940	-193,060	-134	-0.33	-0.29	723.45	-0.45	**NEGATIVE**	1
107	0	216,000	32.8%	1,041	723,440	2.26	7.87			442,440	122,440	85	0.38	0.19		0.28		
108	0	384,000	35.4%	3,100	763,840	0.89	3.62			701,040	-154,960	-108	-0.18	-0.14	757.48	-0.26	**NEGATIVE**	1
109	0	276,000	16.9%	2,156	2,050,040	5.62	13.00			1,352,640	987,640	686	2.71	0.61		1.06		
110	0	276,000	11.4%	1,983	1,332,440	0.69	5.47			2,155,440	222,440	154	0.12	0.09	750.00	0.21		
111	0	30,000	9.7%	176	219,240	1.00	5.12			279,240	60,240	42	0.28	0.19		1.39		
112	0	108,000	36.7%	477	369,440	3.27	18.78			185,940	72,940	51	0.65	0.25		0.34		
113	0	108,000	29.3%	477	698,040	10.43	34.68			260,190	193,290	134	2.89	0.52		0.54		
114	0	168,000	22.9%	621	1,494,240	5.58	27.92			564,240	296,240	206	1.11	0.40		0.51		
115	0	972,000	39.4%	12,000	820,400	0.45	3.31			1,494,000	-316,000	-219	-0.17	-0.13	957.47	-0.30	**NEGATIVE**	6
116	0	276,000	46.4%	1,596	767,440	2.72	10.14			319,440	37,440	26	0.13	0.06	500.00	0.07		
117	0	324,000	25.7%	2,235	1,055,640	1.50	5.97			937,440	232,440	161	0.33	0.18		0.32		
118	0	276,000	17.2%	1,617	1,713,440	4.23	12.38			1,331,940	926,940	644	2.29	0.58		1.84		

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
119	0	540,000	21.9%	7,997	2,866,000	1.97	5.06			1,926,000	472,000	328	0.32	0.19		0.39		
120	0	540,000	12.0%	8,128	4,365,000	2.22	6.30			3,978,000	2,011,000	1,397	1.02	0.45		2.33		
121	0	276,000	25.6%	2,000	1,194,240	2.69	7.38			801,840	357,840	249	0.81	0.33		0.44		
122	0	1,728,000	22.6%	20,332	1,081,800	0.16	2.18			5,932,800	-862,200	-599	-0.13	-0.11	1918.50	-0.60	NEGATIVE	6
123	0	384,000	4266.7%	3,518	-739,000	-0.41	1.97	NEGATIVE	8	-375,000	-2,180,000	-1,514	-1.21	-242.22	2513.89	-1.51	NEGATIVE	8
124	0	216,000	43.8%	1,038	333,840	0.92	9.36			276,840	-87,160	-61	-0.24	-0.18	364.97	-0.33	NEGATIVE	1
125	0	108,000	115.8%	266	276,440	3.50	36.86			-14,760	-93,760	-65	-1.19	-1.01	315.11	-0.26	NEGATIVE	5
126	0	384,000	24.6%	3,882	1,068,400	1.35	3.85			1,174,800	384,800	267	0.49	0.25		0.84		
127	0	168,000	36.8%	834	307,840	1.05	8.06			288,840	-5,160	-4	-0.02	-0.01	204.48	-0.02	NEGATIVE	1
128	0	276,000	40.9%	1,716	521,880	1.18	5.25			398,640	-42,360	-29	-0.10	-0.06	409.98	-0.11	NEGATIVE	6
129	0	30,000	17.3%	150	181,160	1.63	10.40			143,160	32,160	22	0.29	0.19		0.25		
130	0	168,000	31.0%	670	217,440	0.38	5.74			373,440	-198,560	-138	-0.35	-0.37	426.68	-0.55	NEGATIVE	4
131	0	108,000	59.5%	442	107,540	0.40	13.56			73,440	-193,260	-134	-0.72	-1.07	329.21	-0.69	NEGATIVE	4
132	0	276,000	23.1%	1,968	2,037,440	3.09	12.23			917,040	257,040	179	0.39	0.22		0.36		
133	0	276,000	39.1%	1,728	542,040	1.10	6.59			429,240	-61,760	-43	-0.13	-0.09	457.74	-0.16	NEGATIVE	6
134	0	216,000	20.3%	1,374	1,491,440	1.98	9.19			847,440	93,440	65	0.12	0.09	950.00	0.19		
135	0	108,000	223.9%	447	52,840	1.04	3.40			-59,760	-110,760	-77	-2.17	-2.30	186.92	-0.70	NEGATIVE	3
136	0	384,000	20.0%	3,806	1,407,200	1.12	4.28			1,537,320	275,320	191	0.22	0.14		0.47		
137	0	5,292,000	13.3%	61,150	23,979,920	1.29	4.57			34,603,920	16,001,920	11,112	0.86	0.40		5.85		
138	0	216,000	33.3%	1,451	353,040	1.04	7.53			433,440	95,440	66	0.28	0.15		0.53		
139	0	432,000	15.5%	4,936	3,065,000	4.00	9.61			2,358,000	1,591,000	1,105	2.07	0.57		1.30		
140	0	108,000	26.0%	275	638,640	4.88	16.43			307,440	176,640	123	1.35	0.43		1.23		
141	0	168,000	59.9%	635	205,240	2.16	7.21			112,440	17,440	12	0.18	0.06	120.00	0.12		
142	0	216,000	10.4%	1,056	2,998,240	8.02	21.41			1,868,040	1,494,040	1,038	3.99	0.72		1.70		
143	0	540,000	14.6%	7,500	2,493,000	1.11	3.90			3,160,800	909,800	632	0.40	0.25		0.79		
144	0	168,000	51.6%	810	534,640	3.00	11.08			157,440	-20,560	-14	-0.12	-0.06	411.00	-0.08	NEGATIVE	6
145	0	324,000	44.9%	2,844	622,440	1.34	3.68			397,440	-65,560	-46	-0.14	-0.09	531.95	-0.18	NEGATIVE	2
146	0	168,000	11.8%	841	1,933,640	8.99	33.43			1,259,040	1,044,040	725	4.86	0.73		1.21		
147	0	276,000	25.5%	1,611	1,472,440	3.29	15.08			808,140	360,140	250	0.80	0.33		0.45		
148	0	108,000	232.6%	496	50,440	0.46	3.92			-61,560	-170,560	-118	-1.56	-3.67	268.44	-0.79	NEGATIVE	3
149	0	108,000	26.9%	536	476,440	3.56	18.11			293,940	159,940	111	1.19	0.40		1.11		
150	0	384,000	27.0%	3,487	1,425,600	1.91	5.52			1,038,000	290,000	201	0.39	0.20		0.37		
151	0	108,000	232.6%	260	82,040	1.30	7.10			-61,560	-124,560	-87	-1.98	-2.68	226.50	-0.62	NEGATIVE	5
152	0	108,000	28.1%	504	284,640	0.97	13.36			275,940	-17,060	-12	-0.06	-0.04	213.16	-0.07	NEGATIVE	4
153	0	108,000	232.6%	302	-27,560	-0.04	7.75	NEGATIVE	8	-61,560	-788,560	-548	-1.08	-16.98	1072.61	-1.04	NEGATIVE	8
154	0	216,000	45.8%	1,100	290,740	1.24	5.96			255,240	20,940	15	0.09	0.04	170.00	0.09		
155	0	324,000	30.0%	2,378	1,581,440	2.41	9.30			757,440	101,440	70	0.15	0.09	1000.00	0.14		
156	0	108,000	61.0%	300	42,440	0.30	11.65			68,940	-73,060	-51	-0.51	-0.41	125.74	-0.68	NEGATIVE	4
157	0	1,134,000	15.0%	15,485	4,163,000	1.01	4.11			6,408,000	2,285,000	1,587	0.55	0.30		1.32		
158	0	276,000	24.0%	1,809	2,169,640	4.08	15.09			874,740	342,740	238	0.64	0.30		0.56		
159	0	2,970,000	14.8%	37,757	12,824,800	1.57	3.78			17,043,300	8,868,300	6,159	1.08	0.44		7.70		
160	0	276,000	12.2%	1,839	1,733,560	1.19	5.19			1,990,560	537,560	373	0.37	0.24		0.83		
161	0	168,000	19.8%	768	1,256,640	7.52	25.43			682,140	515,140	358	3.08	0.61		0.79		
162	0	108,000	232.6%	320	132,440	0.64	8.45			-61,560	-268,560	-187	-1.30	-5.78	461.50	-0.68	NEGATIVE	1
163	0	972,000	13.6%	12,046	4,795,000	1.46	4.19			6,187,500	2,903,500	2,016	0.88	0.41		1.68		
164	0	216,000	158.3%	983	-35,160	-0.27	2.21	NEGATIVE	3	-79,560	-208,560	-145	-1.62	-1.53	254.83	-1.32	NEGATIVE	3
165	0	216,000	20.3%	1,482	1,241,840	2.68	10.99			845,640	381,640	265	0.82	0.36		0.46		
166	0	540,000	19.4%	7,012	1,150,000	0.43	4.95			2,250,000	-440,000	-306	-0.16	-0.16	1305.56	-0.31	NEGATIVE	6
167	0	216,000	12.1%	1,039	1,612,440	2.54	11.56			1,576,440	941,440	654	1.48	0.53		1.63		
168	0	276,000	27.8%	1,975	899,440	1.79	7.23			715,440	213,440	148	0.43	0.22		0.33		
169	0	108,000	19.0%	299	856,040	6.58	47.31			461,340	331,340	230	2.55	0.58		0.65		
170	0	216,000	21.2%	1,427	907,440	1.49	7.86			802,440	194,440	135	0.32	0.19		0.45		
171	0	168,000	122.3%	567	664,440	2.60	17.18			-30,660	-286,660	-199	-1.12	-2.09	849.07	-0.31	NEGATIVE	1
172	0	108,000	147.1%	264	133,440	1.45	8.11			-34,560	-126,560	-88	-1.38	-1.72	262.89	-0.50	NEGATIVE	3
173	0	276,000	26.9%	2,060	737,440	1.44	5.83			751,440	239,440	166	0.47	0.23		0.55		
174	0	1,134,000	21.0%	15,864	2,585,800	0.72	3.79			4,258,800	657,800	457	0.18	0.12		0.55		
175	0	216,000	9.1%	1,356	2,560,440	2.72	13.96			2,156,940	1,216,940	845	1.29	0.51		1.13		
176	0	108,000	26.8%	436	566,440	6.09	19.30			294,840	201,840	140	2.17	0.50		0.56		

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
177	0	108,000	91.2%	382	210,440	0.86	12.67			10,440	-234,560	-163	-0.96	-1.98	462.89	-0.54	NEGATIVE	11
178	0	216,000	39.9%	1,102	2,119,440	9.38	24.08			325,440	99,440	69	0.44	0.18	1400.00	0.20		
179	0	30,000	64.6%	150	44,840	0.71	8.49			16,440	-46,560	-32	-0.74	-1.00	92.33	-0.54	NEGATIVE	1
180	0	168,000	50.2%	928	353,440	3.33	6.21			166,440	60,440	42	0.57	0.18	200.00	0.21		
181	0	168,000	49.2%	803	80,440	0.25	9.01			173,640	-149,360	-104	-0.46	-0.44	253.72	-0.69	NEGATIVE	2
182	0	972,000	16.1%	11,098	4,093,280	1.64	4.67			5,062,680	2,568,680	1,784	1.03	0.43		1.83		
183	0	1,728,000	25.5%	19,723	4,020,000	1.19	3.68			5,058,000	1,666,000	1,157	0.49	0.25		0.72		
184	0	108,000	36.4%	385	387,840	6.06	18.78			188,640	124,640	87	1.95	0.42		0.48		
185	0	216,000	27.3%	1,406	207,440	0.28	6.03			573,840	-168,160	-117	-0.23	-0.21	380.13	-0.58	NEGATIVE	2
186	0	30,000	11.4%	207	510,440	9.63	27.98			234,240	181,240	126	3.42	0.69		0.84		
187	0	1,134,000	12.7%	15,128	5,780,000	1.09	7.18			7,785,000	2,465,000	1,712	0.46	0.28		0.82		
188	0	216,000	26.9%	1,064	381,440	0.43	8.34			586,440	-291,560	-202	-0.33	-0.36	677.78	-0.51	NEGATIVE	1
189	0	432,000	27.4%	5,064	1,448,800	1.90	4.86			1,144,800	380,800	264	0.50	0.24		0.73		
190	0	216,000	22.4%	1,079	483,440	1.09	6.95			748,440	304,440	211	0.69	0.32		4.23		
191	0	108,000	44.8%	534	166,600	1.68	6.37			133,200	34,200	24	0.35	0.14		0.30		
192	0	384,000	33.8%	3,500	622,240	0.95	6.49			753,240	95,240	66	0.14	0.08		0.34		
193	0	276,000	44.0%	1,614	489,640	1.01	7.29			351,840	-135,160	-94	-0.28	-0.22	547.17	-0.30	NEGATIVE	4
194	0	108,000	232.6%	462	122,440	0.48	8.18			-61,560	-314,560	-218	-1.24	-6.77	518.44	-0.73	NEGATIVE	4
195	0	168,000	26.5%	950	692,440	2.30	8.44			467,040	166,040	115	0.55	0.26		0.38		
196	0	972,000	21.8%	11,419	2,554,400	0.90	3.16			3,479,400	629,400	437	0.22	0.14		0.62		
197	0	540,000	11.5%	8,219	3,761,800	1.63	6.19			4,151,700	1,843,700	1,280	0.80	0.39		1.16		
198	0	108,000	180.2%	385	252,440	1.83	11.88			-48,060	-186,060	-129	-1.35	-3.10	429.21	-0.43	NEGATIVE	9
199	0	108,000	232.6%	251	2,044,740	34.83	114.25			-61,560	-120,260	-84	-2.05	-2.59	1583.51	-0.06	NEGATIVE	2
200	0	108,000	81.3%	407	141,840	1.36	7.62			24,840	-79,160	-55	-0.76	-0.60	287.43	-0.92	NEGATIVE	2
201	0	276,000	15.3%	2,193	1,585,440	2.15	5.80			1,531,380	794,380	552	1.08	0.44		1.38		
202	0	216,000	35.2%	1,171	915,840	7.16	11.70			397,440	269,440	187	2.11	0.44		0.62		
203	0	168,000	51.6%	799	524,440	3.34	12.43			157,440	440	0	0.00	0.00	350.00	0.00		
204	0	216,000	71.6%	1,176	235,720	0.65	6.64			85,680	-277,320	-193	-0.76	-0.92	920.43	-1.66	NEGATIVE	2
205	0	216,000	20.4%	1,325	805,040	1.17	8.04			840,240	150,240	104	0.22	0.14	420.00	0.25		
206	0	108,000	142.7%	443	53,940	0.31	4.62			-32,310	-206,310	-143	-1.19	-2.73	318.27	-0.82	NEGATIVE	1
207	0	276,000	101.7%	1,950	504,440	0.52	6.38			-4,560	-965,560	-671	-1.00	-3.56	1670.53	-0.67	NEGATIVE	12
208	0	108,000	21.7%	450	615,840	3.29	11.27			389,340	202,340	141	1.08	0.41		0.60		
209	0	108,000	29.0%	256	848,920	5.98	53.17			264,420	122,420	85	0.86	0.33		0.39		
210	0	540,000	14.0%	6,984	2,601,800	1.00	6.38			3,316,500	712,500	495	0.27	0.18		0.41		
211	0	384,000	16.8%	3,732	1,676,700	1.10	5.82			1,905,330	382,330	266	0.25	0.17		0.48		
212	0	324,000	48.0%	2,415	431,640	1.13	4.34			350,640	-30,360	-21	-0.08	-0.05	322.59	-0.08	NEGATIVE	1
213	0	1,134,000	21.2%	14,170	3,309,200	0.97	3.71			4,210,200	792,200	550	0.23	0.15		0.37		
214	0	1,134,000	13.5%	14,187	4,061,000	0.85	4.60			7,245,000	2,490,000	1,729	0.52	0.30		1.92		
215	0	216,000	31.8%	1,146	575,640	1.91	9.07			462,240	161,240	112	0.54	0.24		0.51		
216	0	30,000	125.3%	170	453,540	13.96	32.93			-6,060	-38,560	-27	-1.19	-1.61	366.78	-0.08	NEGATIVE	4
217	0	216,000	25.8%	1,244	860,640	2.29	10.73			620,640	244,640	170	0.65	0.29		0.51		
218	0	216,000	32.7%	1,298	544,440	1.11	7.33			444,240	-44,760	-31	-0.09	-0.07	433.16	-0.08	NEGATIVE	6
219	0	30,000	17.1%	150	175,440	1.50	18.86			145,140	28,140	20	0.24	0.16	100.00	0.20		
220	0	216,000	35.5%	997	688,640	5.10	11.81			392,940	257,940	179	1.91	0.42		0.72		
221	0	168,000	37.1%	600	269,240	0.50	14.52			285,240	-249,760	-173	-0.47	-0.55	625.93	-0.79	NEGATIVE	4
222	0	30,000	105.5%	200	757,440	21.04	51.38			-1,560	-37,560	-26	-1.04	-1.32	576.08	-0.05	NEGATIVE	1
223	0	480,000	18.6%	6,034	2,402,200	1.78	4.93			2,101,200	748,200	520	0.55	0.29		0.61		
224	0	5,292,000	16.1%	61,110	13,614,000	0.63	2.62			27,540,000	5,814,000	4,038	0.27	0.18		0.96		
225	0	540,000	9.5%	7,541	4,928,000	2.00	6.19			5,168,700	2,709,700	1,882	1.10	0.47		1.98		
226	0	276,000	33.6%	1,901	789,240	1.43	6.84			546,240	-6,760	-5	-0.01	-0.01	532.70	-0.01	NEGATIVE	6
227	0	108,000	64.0%	440	45,640	0.38	3.91			60,840	-60,160	-42	-0.50	-0.36	134.99	-0.93	NEGATIVE	2
228	0	324,000	15.5%	2,622	1,767,640	1.83	11.24			1,761,840	796,840	553	0.83	0.38		1.98		
229	0	1,134,000	28.3%	13,430	2,561,000	1.16	3.24			2,879,100	675,100	469	0.31	0.17		0.78		
230	0	108,000	156.7%	400	-38,560	-0.11	10.88	NEGATIVE	4	-39,060	-406,060	-282	-1.11	-5.89	531.99	-1.13	NEGATIVE	4
231	0	108,000	24.7%	450	762,040	9.41	25.59			329,040	248,040	172	3.06	0.57		0.72		
232	0	384,000	15.5%	3,345	2,048,400	1.79	7.15			2,086,500	943,500	655	0.83	0.38		1.46		
233	0	324,000	13.4%	2,801	2,726,440	4.35	10.31			2,089,440	1,462,440	1,016	2.33	0.61		1.19		

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
234	0	384,000	11.7%	3,540	3,888,000	5.55	10.57			2,892,000	2,192,000	1,522	3.13	0.67		1.52		
235	0	108,000	23.4%	500	665,240	5.16	23.95			354,240	225,240	156	1.75	0.49		0.58		
236	0	480,000	11.2%	6,000	3,358,640	1.31	4.49			3,794,640	1,224,640	850	0.48	0.29		0.64		
237	0	108,000	24.6%	430	774,040	11.06	34.69			331,380	261,380	182	3.73	0.59		0.73		
238	0	276,000	121.9%	2,010	-610,560	-0.24	1.60	NEGATIVE	6	-49,560	-2,579,560	-1,791	-1.02	-11.39	3141.36	-1.33	NEGATIVE	6
239	0	480,000	48.5%	5,400	1,016,000	1.68	4.54			510,000	-94,000	-65	-0.16	-0.09	847.92	-0.13	NEGATIVE	10
240	0	4,212,000	9.9%	53,000	20,549,760	0.75	3.99			38,259,360	11,007,360	7,644	0.40	0.26		3.12		
241	0	384,000	22.4%	3,826	1,781,200	2.36	6.43			1,333,200	579,200	402	0.77	0.34		0.80		
242	0	168,000	35.2%	780	616,440	1.94	14.65			308,640	-8,360	-6	-0.03	-0.02	434.87	-0.02	NEGATIVE	2
243	0	30,000	3.0%	25	1,465,760	4.44	12.30			957,840	627,840	436	1.90	0.64		0.78		
244	0	216,000	5.6%	1,470	2,351,840	0.85	4.32			3,615,840	851,840	592	0.31	0.22		0.68		
245	0	540,000	8.8%	7,107	4,847,650	1.69	5.75			5,611,725	2,749,725	1,910	0.96	0.45		1.91		
246	0	324,000	19.4%	2,381	1,731,440	1.76	6.18			1,346,940	361,940	251	0.37	0.22		0.27		
247	0	480,000	10.3%	5,137	5,337,000	3.88	8.51			4,164,000	2,789,000	1,937	2.03	0.60		1.49		
248	0	432,000	15.1%	4,021	2,406,400	1.42	5.29			2,435,400	737,400	512	0.43	0.26		0.60		
249	0	108,000	288.5%	450	110,440	0.34	6.03			-70,560	-397,560	-276	-1.22	-10.62	626.08	-0.79	NEGATIVE	11
250	0	168,000	92.6%	950	215,040	0.91	5.23			13,440	-222,560	-155	-0.94	-1.23	444.56	-0.53	NEGATIVE	3
251	0	108,000	147.1%	323	158,840	1.96	6.64			-34,560	-115,560	-80	-1.43	-1.57	265.25	-0.43	NEGATIVE	2
252	0	216,000	4615.4%	1,200	324,440	0.46	2.49			-211,320	-914,320	-635	-1.30	-195.37	1494.94	-0.74	NEGATIVE	8
253	0	168,000	25.2%	585	938,640	1.88	4.76			499,440	1,440	1	0.00	0.00	630.00	0.00		
254	0	108,000	232.6%	320	-198,560	-0.46	8.59	NEGATIVE	8	-61,560	-491,560	-341	-1.14	-10.58	541.36	-1.71	NEGATIVE	8
255	0	108,000	94.8%	429	380,440	2.68	13.10			5,940	-136,060	-94	-0.96	-1.19	444.49	-0.27	NEGATIVE	3
256	0	30,000	125.3%	130	290,640	7.86	40.63			-6,060	-43,060	-30	-1.16	-1.80	259.90	-0.13	NEGATIVE	5
257	0	972,000	19.9%	10,583	3,876,000	1.74	4.70			3,924,000	1,700,000	1,181	0.76	0.35		0.91		
258	0	168,000	147.4%	570	32,440	0.09	6.65			-54,060	-412,060	-286	-1.15	-3.62	586.15	-0.95	NEGATIVE	1
259	0	324,000	13.0%	2,968	2,485,840	2.11	10.51			2,171,700	992,700	689	0.84	0.40		0.69		
260	0	108,000	147.1%	268	236,240	4.37	10.74			-34,560	-88,560	-62	-1.64	-1.21	281.50	-0.28	NEGATIVE	6
261	0	324,000	41.3%	2,410	411,440	0.79	3.68			460,440	-59,560	-41	-0.11	-0.08	341.36	-0.14	NEGATIVE	6
262	0	168,000	28.2%	631	790,440	5.23	14.90			427,440	276,440	192	1.83	0.46		0.55		
263	0	108,000	232.6%	374	493,440	5.04	25.47			-61,560	-159,560	-111	-1.63	-3.44	560.81	-0.25	NEGATIVE	2
264	0	216,000	51.5%	1,308	129,640	0.58	3.59			203,040	-19,960	-14	-0.09	-0.05	114.95	-0.28	NEGATIVE	2
265	0	216,000	34.7%	1,223	932,440	4.18	10.68			406,440	183,440	127	0.82	0.29		0.51		
266	0	276,000	41.9%	2,052	302,740	0.70	3.06			381,990	-51,010	-35	-0.12	-0.08	278.14	-0.24	NEGATIVE	6
267	0	108,000	31.1%	474	434,440	1.70	17.49			239,040	-15,960	-11	-0.06	-0.05	325.98	-0.05	NEGATIVE	2
268	0	12,960,000	15.3%	200,814	30,896,400	0.57	2.64			71,685,000	17,477,000	12,137	0.32	0.21		5.28		
269	0	30,000	43.5%	121	502,440	10.47	52.16			38,940	-9,060	-6	-0.19	-0.13	356.29	-0.02	NEGATIVE	13
270	0	216,000	9.2%	1,205	2,480,640	7.93	16.60			2,137,140	1,824,140	1,267	5.83	0.78		3.13		
271	0	30,000	20.5%	122	247,440	19.03	52.45			116,340	103,340	72	7.95	0.71		0.72		
272	0	276,000	22.0%	1,695	1,098,040	2.18	7.00			980,940	476,940	331	0.95	0.38		1.07		
273	0	108,000	232.6%	400	399,440	3.33	19.61			-61,560	-181,560	-126	-1.51	-3.91	526.08	-0.32	NEGATIVE	5
274	0	216,000	28.9%	1,348	615,440	1.03	4.46			532,440	-67,560	-47	-0.11	-0.09	520.38	-0.16	NEGATIVE	2
275	0	216,000	28.5%	1,496	801,440	2.39	7.38			541,440	205,440	143	0.61	0.27		0.36		
276	0	384,000	38.8%	3,513	803,000	1.15	5.59			606,000	-91,000	-63	-0.13	-0.09	675.83	-0.13	NEGATIVE	6
277	0	1,728,000	20.5%	18,708	5,073,344	1.53	3.87			6,717,622	3,394,622	2,357	1.02	0.40		5.61		
278	0	30,000	69.2%	88	-20,690	-0.23	12.72	NEGATIVE	4	13,380	-75,750	-53	-0.85	-1.75	87.60	-1.50	NEGATIVE	4
279	0	108,000	36.9%	382	473,040	3.07	10.15			185,040	31,040	22	0.20	0.11	300.00	0.15		
280	0	432,000	14.8%	4,143	2,613,400	2.09	7.63			2,480,400	1,227,400	852	0.98	0.42		0.95		
281	0	480,000	13.9%	5,187	2,854,600	2.24	6.36			2,965,200	1,690,200	1,174	1.33	0.49		1.79		
282	0	216,000	18.5%	1,377	1,356,520	3.76	12.51			952,920	591,920	411	1.64	0.51		0.82		
283	0	480,000	12.2%	5,897	3,416,000	2.13	8.44			3,453,000	1,851,000	1,285	1.16	0.47		1.29		
284	0	432,000	21.8%	4,010	198,400	0.11	3.45			1,551,600	-280,400	-195	-0.15	-0.14	503.67	-0.87	NEGATIVE	2
285	0	168,000	43.2%	845	336,040	0.93	3.24			220,440	-140,560	-98	-0.39	-0.36	560.98	-0.78	NEGATIVE	9
286	0	108,000	66.8%	524	-30,360	-0.13	5.11	NEGATIVE	1	53,640	-179,360	-125	-0.77	-1.11	255.69	-1.56	NEGATIVE	1
287	0	972,000	14.0%	11,100	3,666,800	0.77	2.94			5,950,800	1,188,800	826	0.25	0.17		0.83		
288	0	1,134,000	17.9%	14,055	4,238,000	1.13	4.01			5,198,400	1,438,400	999	0.38	0.23		0.77		
289	0	168,000	29.6%	760	598,440	2.10	12.54			400,440	115,440	80	0.41	0.20		0.27		
290	0	972,000	18.1%	10,353	4,748,720	2.01	7.72			4,406,400	2,040,400	1,417	0.86	0.38		1.14		
291	0	168,000	57.0%	589	262,440	3.24	11.31			126,840	45,840	32	0.57	0.16		0.29		
292	0	108,000	156.7%	392	427,440	2.26	20.12			-39,060	-228,060	-158	-1.21	-3.31	608.38	-0.35	NEGATIVE	2

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
293	0	1,134,000	14.6%	16,129	4,598,400	1.02	4.12			6,647,400	2,131,400	1,480	0.47	0.27		1.12		
294	0	108,000	91.2%	277	-13,560	-0.13	5.13	NEGATIVE	3	10,440	-90,560	-63	-0.90	-0.76	112.89	-1.26	NEGATIVE	3
295	0	216,000	45.7%	1,146	517,640	2.91	8.72			256,140	78,140	54	0.44	0.17	300.00	0.19		
296	0	480,000	14.3%	5,419	3,711,200	4.26	9.54			2,886,000	2,014,000	1,399	2.31	0.60		1.40		
297	0	108,000	232.6%	275	110,440	1.30	5.27			-61,560	-146,560	-102	-1.72	-3.16	276.78	-0.58	NEGATIVE	6
298	0	324,000	22.5%	2,428	1,620,440	2.63	7.51			1,117,440	500,440	348	0.81	0.35		0.46		
299	0	168,000	22.0%	557	922,640	2.69	10.74			593,940	250,940	174	0.73	0.33		0.41		
300	0	216,000	25.9%	1,422	908,440	2.04	9.53			617,940	171,940	119	0.39	0.21		0.25		
301	0	324,000	18.4%	2,667	1,283,520	1.46	7.57			1,432,440	550,440	382	0.62	0.31		0.85		
302	0	540,000	12.0%	8,908	3,606,000	1.29	7.63			3,969,000	1,169,000	812	0.42	0.26		0.62		
303	0	972,000	13.6%	10,241	5,287,400	1.93	4.43			6,167,700	3,427,700	2,380	1.25	0.48		2.39		
304	0	216,000	34.7%	1,329	373,840	0.74	5.56			406,440	-97,560	-68	-0.19	-0.16	386.37	-0.25	NEGATIVE	4
305	0	168,000	54.3%	666	509,840	2.45	10.82			141,240	-66,760	-46	-0.32	-0.22	540.67	-0.39	NEGATIVE	8
306	0	216,000	31.1%	1,140	1,060,240	3.06	14.45			477,540	130,540	91	0.38	0.19		0.36		
307	0	168,000	32.8%	887	494,120	0.95	9.74			343,560	-177,440	-123	-0.34	-0.35	728.43	-0.62	NEGATIVE	1
308	0	108,000	18.9%	400	1,040,440	6.85	21.53			464,940	312,940	217	2.06	0.55		0.62		
309	0	432,000	15.1%	4,134	1,849,800	1.46	5.21			2,438,100	1,170,100	813	0.92	0.41		2.39		
310	0	168,000	22.7%	558	1,425,440	8.69	34.97			571,440	407,440	283	2.48	0.55		0.63		
311	0	30,000	54.1%	168	2,040	0.01	8.40			25,440	-205,560	-143	-0.89	-3.71	282.75	-1.02	NEGATIVE	4
312	0	480,000	21.9%	6,009	1,839,880	1.51	5.29			1,716,000	497,000	345	0.41	0.23		0.66		
313	0	30,000	28.1%	209	367,240	9.66	25.03			76,740	38,740	27	1.02	0.36	220.00	0.12		
314	0	480,000	12.7%	6,312	3,453,000	2.85	6.64			3,309,000	2,096,000	1,456	1.73	0.55		1.82		
315	0	216,000	27.5%	1,286	1,480,440	2.33	9.84			568,440	-66,560	-46	-0.10	-0.08	1199.33	-0.14	NEGATIVE	3
316	0	540,000	14.7%	8,000	2,501,000	1.41	5.94			3,139,200	1,364,200	947	0.77	0.37		1.32		
317	0	168,000	16.9%	844	935,640	1.49	14.88			826,140	198,140	138	0.32	0.20		0.46		
318	0	324,000	19.3%	2,761	1,363,240	2.12	6.93			1,351,440	708,440	492	1.10	0.42		1.23		
319	0	324,000	14.1%	2,557	2,314,440	3.40	10.29			1,979,640	1,298,640	902	1.91	0.56		1.64		
320	0	108,000	136.1%	375	103,040	0.43	5.87			-28,620	-265,620	-184	-1.12	-3.35	434.46	-0.74	NEGATIVE	4
321	0	168,000	361.8%	570	6,040	0.03	5.90			-121,560	-308,560	-214	-1.65	-6.64	429.28	-1.00	NEGATIVE	2
322	0	2,700,000	25.3%	30,046	3,062,985	0.45	2.91			7,976,327	1,182,327	821	0.17	0.11		0.91		
323	0	276,000	26.1%	1,899	939,240	2.50	6.39			780,240	405,240	281	1.08	0.38		0.88		
324	0	384,000	14.7%	3,412	2,833,800	3.13	7.27			2,232,300	1,326,300	921	1.46	0.51		1.12		
325	0	216,000	33.3%	1,495	512,440	1.25	6.65			433,440	24,440	17	0.06	0.04	325.00	0.08		
326	0	540,000	12.0%	7,162	1,893,520	0.57	2.30			3,971,520	637,520	443	0.19	0.14		0.66		
327	0	480,000	13.4%	6,312	1,379,600	0.41	4.12			3,096,600	-259,400	-180	-0.08	-0.07	1347.69	-0.23	NEGATIVE	8
328	0	276,000	28.0%	2,079	1,066,332	1.90	4.77			711,383	150,383	104	0.27	0.15		0.29		
329	0	108,000	118.1%	308	59,440	0.76	7.06			-16,560	-94,560	-66	-1.21	-1.03	165.67	-0.66	NEGATIVE	6
330	0	30,000	43.5%	50	53,840	1.74	16.93			38,940	7,940	6	0.26	0.12	30.00	0.18		
331	0	432,000	26.4%	4,292	1,479,000	1.62	5.61			1,206,000	293,000	203	0.32	0.18		0.58		
332	0	168,000	141.8%	649	315,240	2.89	9.58			-49,560	-158,560	-110	-1.45	-1.34	430.11	-0.34	NEGATIVE	5
333	0	168,000	33.8%	653	642,240	3.96	21.18			328,440	166,440	116	1.03	0.34		0.46		
334	0	108,000	156.7%	311	418,440	0.93	39.83			-39,060	-489,060	-340	-1.09	-7.09	964.63	-0.54	NEGATIVE	4
335	0	216,000	11.5%	1,015	1,543,640	1.72	21.04			1,660,140	760,140	528	0.84	0.41		1.06		
336	0	972,000	10.0%	12,545	7,408,200	2.02	6.21			8,757,900	5,091,900	3,536	1.39	0.52		2.44		
337	0	432,000	14.4%	4,505	2,943,600	3.23	9.64			2,559,600	1,649,600	1,146	1.81	0.55		1.36		
338	0	324,000	18.0%	2,892	1,315,440	1.43	7.16			1,477,440	555,440	386	0.60	0.31		0.77		
339	0	108,000	4800.0%	253	34,740	1.93	7.61			-105,750	-123,750	-86	-6.88	-55.00	195.94	-0.78	NEGATIVE	10
340	0	384,000	57.8%	3,177	50,040	0.08	2.49			279,840	-321,160	-223	-0.53	-0.48	474.27	-1.06	NEGATIVE	1
341	0	1,134,000	10.5%	15,224	6,154,200	0.79	6.05			9,704,700	1,866,700	1,296	0.24	0.17		0.54		
342	0	108,000	147.1%	476	-2,960	-0.02	5.39	NEGATIVE	3	-34,560	-212,560	-148	-1.19	-2.89	287.61	-1.05	NEGATIVE	3
343	0	324,000	22.6%	2,680	1,216,640	2.24	7.25			1,108,440	566,440	393	1.05	0.40		0.98		
344	0	540,000	16.1%	6,592	2,710,000	1.64	5.84			2,824,200	1,168,200	811	0.71	0.35		0.95		
345	0	216,000	23.1%	1,250	1,668,840	4.45	18.97			717,840	342,840	238	0.91	0.37		0.52		
346	0	324,000	39.1%	2,554	696,440	0.87	4.83			505,440	-299,560	-208	-0.37	-0.36	1326.09	-1.04	NEGATIVE	1
347	0	168,000	32.9%	936	304,840	1.05	3.51			342,840	53,840	37	0.19	0.11		1.07		
348	0	168,000	62.3%	945	364,040	1.42	8.52			101,640	-155,360	-108	-0.60	-0.58	575.78	-0.60	NEGATIVE	6
349	0	276,000	37.9%	1,775	-27,200	-0.02	5.80	NEGATIVE	3	452,640	-715,360	-497	-0.61	-0.98	1070.59	-1.31	NEGATIVE	3
350	0	276,000	21.0%	2,074	1,151,640	2.02	8.71			1,037,640	466,640	324	0.82	0.36		0.90		

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
351	0	324,000	19.3%	2,993	963,640	0.63	3.37			1,350,540	-169,460	-118	-0.11	-0.10	937.92	-0.27	NEGATIVE	6
352	0	30,000	64.6%	165	293,440	1.83	18.73			16,440	-143,560	-100	-0.90	-3.09	399.69	-0.33	NEGATIVE	4
353	0	432,000	51.1%	4,071	642,000	1.70	5.22			414,000	36,000	25	0.10	0.04	400.00	0.06		
354	0	168,000	58.0%	929	442,440	1.95	5.82			121,440	-105,560	-73	-0.47	-0.36	558.26	-0.49	NEGATIVE	6
355	0	384,000	36.5%	3,525	790,000	1.23	4.26			669,000	25,000	17	0.04	0.02	500.00	0.04		
356	0	540,000	13.5%	8,275	3,182,640	2.05	5.62			3,465,360	1,915,360	1,330	1.24	0.48		1.90		
357	0	972,000	16.9%	9,418	2,854,600	0.85	4.89			4,794,300	1,424,300	989	0.42	0.25		1.71		
358	0	168,000	34.5%	550	822,440	10.41	21.29			319,440	240,440	167	3.04	0.49		0.56		
359	0	276,000	22.0%	1,675	271,240	0.22	4.53			976,440	-260,560	-181	-0.21	-0.21	528.61	-0.53	NEGATIVE	10
360	0	108,000	118.1%	393	236,440	2.02	11.72			-16,560	-133,560	-93	-1.14	-1.46	342.75	-0.37	NEGATIVE	5
361	0	168,000	43.2%	838	204,840	1.08	6.06			220,440	31,440	22	0.17	0.08	110.00	0.22		
362	0	168,000	27.4%	792	965,440	4.39	14.20			445,440	225,440	157	1.02	0.37		0.52		
363	0	168,000	30.9%	899	724,240	1.93	10.48			375,240	-760	-1	0.00	0.00	500.76	0.00	NEGATIVE	1
364	0	972,000	19.0%	9,989	4,323,000	3.26	6.59			4,140,000	2,815,000	1,955	2.12	0.55		2.06		
365	0	540,000	3.7%	7,462	14,626,000	4.75	10.41			14,040,000	10,958,000	7,610	3.56	0.75		4.48		
366	0	972,000	16.4%	10,981	5,577,000	2.32	6.80			4,950,000	2,547,000	1,769	1.06	0.43		1.11		
367	0	540,000	17.3%	7,929	1,454,180	0.73	2.66			2,588,400	585,300	406	0.29	0.19		0.99		
368	0	972,000	13.3%	9,981	7,434,000	3.38	6.04			6,363,000	4,163,000	2,891	1.89	0.57		1.93		
369	0	276,000	16.4%	1,866	672,440	0.55	3.47			1,403,040	170,040	118	0.14	0.10		0.39		
370	0	108,000	59.5%	400	84,040	0.88	11.37			73,440	-21,560	-15	-0.23	-0.12	84.46	-0.30	NEGATIVE	3
371	0	168,000	68.3%	668	392,240	2.27	13.05			78,060	-94,940	-66	-0.55	-0.39	644.05	-0.97	NEGATIVE	2
372	0	108,000	194.8%	407	527,440	7.13	26.58			-52,560	-126,560	-88	-1.71	-2.28	537.89	-0.20	NEGATIVE	3
373	0	324,000	27.4%	2,496	1,849,440	3.81	10.84			859,140	374,140	260	0.77	0.32		0.43		
374	0	480,000	5.9%	6,018	7,755,200	3.37	7.10			7,645,200	5,345,200	3,712	2.32	0.66		2.65		
375	0	324,000	30.0%	2,380	2,231,440	3.07	8.43			757,440	31,440	22	0.04	0.03	1500.00	0.04		
376	0	168,000	17.8%	605	1,171,440	3.33	13.36			778,440	426,440	296	1.21	0.45		0.59		
377	0	384,000	14.7%	3,645	2,351,000	1.72	7.75			2,226,000	861,000	598	0.63	0.33		0.60		
378	0	216,000	23.5%	1,458	911,040	1.36	13.48			703,440	31,440	22	0.05	0.03	590.00	0.05		
379	0	324,000	29.2%	2,524	1,263,440	1.22	7.56			784,440	-251,560	-175	-0.24	-0.23	1582.31	-0.58	NEGATIVE	3
380	0	30,000	27.9%	224	334,640	4.78	17.61			77,640	7,640	5	0.11	0.07	225.00	0.10		
381	0	276,000	20.1%	1,842	1,381,440	3.83	11.94			1,097,940	736,940	512	2.04	0.54		1.28		
382	0	276,000	27.8%	1,599	439,440	0.40	4.15			715,440	-382,560	-266	-0.35	-0.39	842.23	-0.53	NEGATIVE	8
383	0	108,000	156.7%	395	53,240	0.23	9.91			-39,060	-271,060	-188	-1.17	-3.93	408.24	-0.86	NEGATIVE	4
384	0	276,000	29.6%	2,019	1,221,440	4.87	8.80			656,940	405,940	282	1.62	0.44		0.56		
385	0	540,000	8.8%	8,000	4,020,800	1.15	3.98			5,572,800	2,072,800	1,439	0.59	0.34		1.36		
386	0	216,000	34.5%	1,200	186,040	0.25	10.40			410,040	-332,960	-231	-0.45	-0.53	588.02	-0.68	NEGATIVE	2
387	0	168,000	30.2%	710	703,240	4.66	17.53			387,840	236,840	164	1.57	0.43		0.63		
388	0	30,000	11.4%	220	561,840	11.24	27.47			232,440	182,440	127	3.65	0.70		0.84		
389	0	540,000	8.7%	7,427	5,495,000	1.81	6.01			5,697,000	2,658,000	1,846	0.87	0.43		1.03		
390	0	168,000	66.8%	945	-5,559	-0.02	5.29	NEGATIVE	3	83,641	-225,359	-156	-0.73	-0.90	306.50	-1.04	NEGATIVE	3
391	0	480,000	21.8%	5,850	858,000	0.55	3.91			1,725,000	165,000	115	0.11	0.07		0.25		
392	0	540,000	13.9%	8,300	2,425,000	1.00	3.11			3,357,000	920,000	639	0.38	0.24		0.71		
393	0	432,000	26.7%	5,018	472,000	0.21	2.00			1,188,000	-1,068,000	-742	-0.47	-0.66	2483.33	-1.48	NEGATIVE	3
394	0	168,000	54.3%	577	264,240	1.22	11.22			141,240	-74,760	-52	-0.35	-0.24	322.34	-0.43	NEGATIVE	3
395	0	216,000	28.1%	987	621,240	1.03	14.89			554,040	-48,960	-34	-0.08	-0.06	490.16	-0.08	NEGATIVE	4
396	0	972,000	16.1%	12,560	4,484,600	1.52	6.46			5,079,600	2,122,600	1,474	0.72	0.35		1.23		
397	0	216,000	32.8%	1,230	1,056,440	3.84	12.73			442,440	167,440	116	0.61	0.25		0.39		
398	0	168,000	361.8%	552	10,440	0.08	3.14			-121,560	-246,560	-171	-1.97	-5.31	346.22	-0.98	NEGATIVE	6
399	0	108,000	93.3%	432	94,440	0.53	7.30			7,740	-170,260	-118	-0.96	-1.47	293.24	-0.68	NEGATIVE	2
400	0	384,000	20.5%	3,190	1,606,440	1.12	4.94			1,489,440	54,440	38	0.04	0.03	1050.00	0.06		
401	0	108,000	22.6%	494	973,240	8.46	32.61			370,440	255,440	177	2.22	0.53		0.59		
402	0	276,000	27.3%	2,079	536,560	0.98	3.86			735,060	188,060	131	0.34	0.19		1.04		
403	0	108,000	62.6%	400	200,440	0.84	11.19			64,440	-174,560	-121	-0.73	-1.01	1462.22	-4.85	NEGATIVE	2
404	0	168,000	32.1%	738	725,440	1.26	19.48			355,440	-220,560	-153	-0.38	-0.42	981.86	-0.51	NEGATIVE	2
405	0	324,000	16.2%	3,019	2,471,740	2.57	8.67			1,675,710	713,710	496	0.74	0.36		0.41		
406	0	432,000	10.8%	4,328	3,285,800	1.70	4.11			3,565,800	1,628,800	1,131	0.84	0.41		1.43		

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
407	0	276,000	10.8%	2,117	2,191,440	1.60	5.24			2,285,940	914,940	635	0.67	0.36		0.85		
408	0	216,000	158.3%	1,500	76,440	0.21	3.72			-79,560	-442,560	-307	-1.22	-3.24	657.33	-0.88	**NEGATIVE**	3
409	0	108,000	80.9%	250	-24,010	-0.10	9.21	**NEGATIVE**	2	25,515	-211,485	-147	-0.89	-1.58	266.86	-1.22	**NEGATIVE**	2
410	0	108,000	232.6%	325	-150,360	-0.43	5.62	**NEGATIVE**	4	-61,560	-414,560	-288	-1.17	-8.93	467.89	-1.60	**NEGATIVE**	4
411	0	384,000	30.7%	3,535	803,000	0.80	5.03			867,000	-140,000	-97	-0.14	-0.11	726.27	-0.16	**NEGATIVE**	3
412	0	276,000	34.4%	1,549	1,111,440	3.66	12.14			526,440	222,440	154	0.73	0.28		0.39		
413	0	540,000	11.0%	8,330	3,338,000	1.24	4.34			4,365,000	1,673,000	1,162	0.62	0.34		1.66		
414	0	432,000	22.9%	4,950	1,831,000	1.69	6.86			1,458,000	373,000	259	0.34	0.20		0.65		
415	0	384,000	36.4%	3,437	511,400	0.56	3.95			670,800	-244,200	-170	-0.27	-0.23	687.85	-0.40	**NEGATIVE**	3
416	0	540,000	4.7%	6,976	9,778,800	2.45	8.83			10,843,200	6,853,200	4,759	1.72	0.60		2.74		
417	0	108,000	22.2%	260	642,440	3.67	43.52			379,440	204,440	142	1.17	0.42		0.47		
418	0	216,000	23.7%	1,135	819,440	1.25	10.67			694,440	38,440	27	0.06	0.04	525.00	0.06		
419	0	276,000	37.9%	2,210	711,140	1.44	7.40			453,090	-40,910	-28	-0.08	-0.06	546.57	-0.09	**NEGATIVE**	6
420	0	168,000	18.3%	950	1,475,440	10.11	27.09			751,440	605,440	420	4.15	0.66		0.70		
421	0	216,000	36.1%	1,236	467,040	1.27	7.88			383,040	15,040	10	0.04	0.03	300.00	0.04		
422	0	168,000	29.5%	896	681,940	2.49	8.51			400,890	126,890	88	0.46	0.22		0.29		
423	0	216,000	13.4%	1,500	1,523,840	2.48	9.86			1,392,840	778,840	541	1.27	0.48		1.08		
424	0	384,000	46.5%	3,901	627,200	0.80	3.93			442,200	-339,800	-236	-0.43	-0.41	1088.23	-0.67	**NEGATIVE**	2
425	0	168,000	38.4%	651	823,880	7.16	17.22			269,040	154,040	107	1.34	0.35		0.49		
426	0	276,000	17.0%	1,736	2,183,440	3.51	11.83			1,345,440	723,440	502	1.16	0.45		0.50		
427	0	108,000	22.4%	478	537,640	2.73	20.10			374,040	177,040	123	0.90	0.37		0.51		
428	0	540,000	9.7%	8,648	4,057,200	1.68	5.11			5,042,700	2,633,700	1,829	1.09	0.47		2.29		
429	0	276,000	47.1%	1,941	231,440	0.72	4.27			310,440	-9,560	-7	-0.03	-0.02	156.64	-0.04	**NEGATIVE**	8
430	0	324,000	26.8%	2,530	1,819,440	2.68	5.71			883,440	205,440	143	0.30	0.17	1100.00	0.22		
431	0	216,000	29.2%	1,283	584,440	0.52	6.05			523,440	-601,560	-418	-0.53	-0.81	1914.00	-1.39	**NEGATIVE**	4
432	0	216,000	47.8%	1,271	400,040	1.56	6.24			236,340	-19,660	-14	-0.08	-0.04	298.20	-0.07	**NEGATIVE**	3
433	0	384,000	34.0%	3,500	573,600	0.79	2.55			744,600	14,600	10	0.02	0.01	350.00	0.03		
434	0	168,000	92.6%	621	251,840	1.10	5.49			13,440	-214,560	-149	-0.94	-1.18	459.00	-0.48	**NEGATIVE**	2
435	0	1,944,000	9.3%	24,551	8,672,400	0.63	2.93			18,995,400	5,323,400	3,697	0.39	0.25		1.76		
436	0	30,000	64.6%	150	67,440	0.21	23.67			16,440	-297,560	-207	-0.95	-6.41	456.64	-0.83	**NEGATIVE**	2
437	0	168,000	41.3%	650	281,040	1.19	12.43			238,440	2,440	2	0.01	0.01	180.00	0.01		
438	0	168,000	31.0%	815	912,440	4.37	15.42			373,440	164,440	114	0.79	0.30		0.57		
439	0	30,000	105.5%	175	104,240	1.49	10.40			-1,560	-71,560	-50	-1.02	-2.52	169.69	-0.41	**NEGATIVE**	3
440	0	972,000	16.0%	12,524	4,860,600	2.37	5.24			5,088,600	3,037,600	2,109	1.48	0.50		2.03		
441	0	276,000	51.6%	1,651	178,520	0.71	4.47			259,320	8,320	6	0.03	0.02	105.00	0.07		
442	0	216,000	69.4%	1,100	46,560	0.24	2.47			95,040	-96,960	-67	-0.51	-0.31	216.06	-1.60	**NEGATIVE**	3
443	0	972,000	15.4%	9,400	4,912,200	1.89	5.42			5,344,200	2,743,200	1,905	1.05	0.43		2.16		
444	0	276,000	37.0%	1,864	810,440	1.88	8.46			469,740	39,740	28	0.09	0.05	500.00	0.14		
445	0	1,728,000	19.2%	21,000	4,450,000	0.88	3.65			7,290,000	2,224,000	1,544	0.44	0.25		1.14		
446	0	168,000	34.2%	601	643,240	4.02	16.57			323,940	163,940	114	1.02	0.33		0.51		
447	0	972,000	19.8%	9,351	3,011,880	1.25	4.34			3,935,520	1,524,520	1,059	0.63	0.31		1.44		
448	0	108,000	18.5%	513	744,440	6.42	30.71			475,740	359,740	250	3.10	0.62		1.00		
449	0	108,000	119.3%	364	75,440	0.22	14.35			-17,460	-366,460	-254	-1.05	-4.05	554.49	-0.85	**NEGATIVE**	2
450	0	216,000	31.5%	1,310	859,440	1.21	17.06			469,440	-240,560	-167	-0.34	-0.35	1107.98	-0.48	**NEGATIVE**	1
451	0	276,000	90.1%	1,565	-101,040	-0.42	1.02	**NEGATIVE**	4	30,360	-209,640	-146	-0.87	-0.68	280.07	-3.31	**NEGATIVE**	4
452	0	168,000	37.1%	600	492,240	1.58	10.23			285,240	-26,760	-19	-0.09	-0.06	379.56	-0.08	**NEGATIVE**	10
453	0	168,000	26.6%	865	887,440	4.57	16.49			463,440	269,440	187	1.39	0.43		0.47		
454	0	30,000	16.5%	25	1,047,840	3.61	26.36			151,440	-138,560	-96	-0.48	-0.76	906.22	-0.12	**NEGATIVE**	6
455	0	540,000	11.6%	8,532	4,144,000	1.93	5.80			4,122,000	1,978,000	1,374	0.92	0.42		1.72		
456	0	384,000	24.4%	3,328	1,728,800	2.16	5.76			1,191,360	391,360	272	0.49	0.25		0.32		
457	0	30,000	64.6%	141	222,440	2.56	32.70			16,440	-70,560	-49	-0.81	-1.52	249.00	-0.25	**NEGATIVE**	10
458	0	216,000	27.3%	1,258	454,440	0.64	8.25			573,840	-137,160	-95	-0.19	-0.17	493.19	-0.26	**NEGATIVE**	4
459	0	216,000	41.8%	1,065	621,600	1.28	6.22			300,600	-185,400	-129	-0.38	-0.36	818.23	-0.49	**NEGATIVE**	3
460	0	30,000	39.9%	214	526,240	8.77	33.51			45,240	-14,760	-10	-0.25	-0.20	380.25	-0.03	**NEGATIVE**	10
461	0	432,000	15.8%	4,101	2,516,800	1.94	6.97			2,298,600	1,000,600	695	0.77	0.37		0.86		
462	0	216,000	22.8%	997	1,490,440	5.46	16.51			730,440	457,440	318	1.68	0.48		0.64		
463	0	540,000	11.6%	8,726	2,358,800	0.59	6.40			4,132,800	138,800	96	0.03	0.03	1500.00	0.06		
464	0	168,000	47.7%	641	238,440	0.96	3.62			184,440	-64,560	-45	-0.26	-0.18	289.67	-0.45	**NEGATIVE**	3

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
465	0	168,000	40.4%	667	705,440	2.56	17.71			247,440	-28,560	-20	-0.10	-0.07	549.58	-0.10	**NEGATIVE**	2
466	0	432,000	32.9%	4,335	669,000	0.87	3.29			882,000	115,000	80	0.15	0.09	350.00	0.23		
467	0	168,000	29.5%	750	553,040	1.72	10.48			402,240	80,240	56	0.25	0.14	320.00	0.17		
468	0	108,000	232.6%	452	260,440	2.26	10.82			-61,560	-176,560	-123	-1.54	-3.80	422.61	-0.41	**NEGATIVE**	3
469	0	324,000	33.9%	2,304	519,240	0.57	2.82			631,440	-279,560	-194	-0.31	-0.29	808.43	-0.55	**NEGATIVE**	6
470	0	108,000	147.1%	286	73,340	0.46	8.38			-34,560	-193,860	-135	-1.22	-2.64	314.63	-0.75	**NEGATIVE**	3
471	0	276,000	32.9%	2,080	733,440	1.46	6.80			562,440	60,440	42	0.12	0.07	450.00	0.10		
472	0	432,000	32.8%	4,239	590,600	0.55	3.83			885,600	-189,400	-132	-0.18	-0.14	687.90	-0.38	**NEGATIVE**	11
473	0	384,000	15.8%	3,317	1,483,200	0.88	3.11			2,053,200	365,200	254	0.22	0.15		0.48		
474	0	1,944,000	13.5%	22,973	10,566,000	2.14	6.03			12,423,600	7,477,600	5,193	1.51	0.52		3.46		
475	0	5,670,000	22.2%	65,000	12,303,880	0.96	3.28			19,894,320	7,113,320	4,940	0.56	0.28		2.93		
476	0	972,000	18.4%	9,900	3,484,000	1.30	5.56			4,311,000	1,621,000	1,126	0.60	0.31		1.02		
477	0	480,000	6.7%	5,750	5,837,600	1.54	4.33			6,705,600	2,921,600	2,029	0.77	0.41		2.14		
478	0	972,000	15.1%	10,649	6,170,000	4.04	7.77			5,455,800	3,927,800	2,728	2.57	0.61		1.98		
479	0	2,970,000	17.2%	38,426	10,369,000	1.18	3.88			14,265,000	5,494,000	3,815	0.63	0.32		1.53		
480	0	168,000	42.5%	648	-601,360	-0.53	8.52	**NEGATIVE**	6	227,640	-904,360	-628	-0.80	-2.29	897.81	-3.49	**NEGATIVE**	6
481	0	276,000	24.5%	1,855	1,231,440	2.26	7.16			850,440	306,440	213	0.56	0.27		0.34		
482	0	168,000	47.7%	605	434,440	1.62	16.14			184,440	-84,560	-59	-0.31	-0.24	487.02	-0.39	**NEGATIVE**	2
483	0	432,000	50.0%	4,400	228,000	0.30	3.29			432,000	-316,000	-219	-0.42	-0.37	569.44	-0.63	**NEGATIVE**	2
484	0	168,000	16.8%	610	1,017,440	3.88	21.33			832,440	570,440	396	2.18	0.57		1.32		
485	0	5,292,000	15.4%	63,240	24,865,000	2.25	5.17			29,160,000	18,117,000	12,581	1.64	0.53		3.00		
486	0	2,700,000	21.3%	28,943	7,996,200	1.70	4.29			9,992,700	5,302,700	3,682	1.13	0.42		2.47		
487	0	30,000	45.5%	150	478,020	9.96	40.80			35,970	-12,030	-8	-0.25	-0.18	407.63	-0.20	**NEGATIVE**	5
488	0	480,000	18.8%	5,709	997,600	0.57	2.82			2,077,800	323,800	225	0.18	0.13		0.69		
489	0	276,000	27.8%	2,045	557,440	0.75	5.90			715,440	-32,560	-23	-0.04	-0.03	397.61	-0.06	**NEGATIVE**	3
490	0	1,134,000	23.2%	13,300	2,418,000	0.89	3.22			3,745,800	1,023,800	711	0.38	0.21		0.77		
491	0	432,000	20.6%	4,809	1,277,600	0.96	5.36			1,668,600	338,600	235	0.25	0.16		0.48		
492	0	168,000	16.9%	800	1,353,440	2.66	13.99			823,440	315,440	219	0.62	0.32		0.44		
493	0	276,000	15.1%	1,549	1,981,440	2.17	4.25			1,556,940	641,940	446	0.70	0.35		0.89		
494	0	108,000	232.6%	313	137,840	1.28	11.89			-61,560	-169,560	-118	-1.57	-3.65	327.75	-0.56	**NEGATIVE**	3
495	0	108,000	232.6%	317	320,440	2.52	22.24			-61,560	-188,560	-131	-1.48	-4.06	480.94	-0.37	**NEGATIVE**	2
496	0	276,000	17.4%	1,820	1,399,440	2.34	8.40			1,309,440	711,440	494	1.19	0.45		1.24		
497	0	108,000	20.6%	351	1,020,440	3.79	43.63			415,440	146,440	102	0.54	0.28		0.34		
498	0	168,000	361.8%	743	514,440	3.20	11.80			-121,560	-282,560	-196	-1.76	-6.08	746.22	-0.36	**NEGATIVE**	11
499	0	1,134,000	15.6%	14,000	4,169,000	1.08	4.33			6,156,000	2,287,000	1,588	0.59	0.31		1.44		
500	0	276,000	25.3%	1,765	1,092,440	1.79	1.40			814,440	203,440	141	0.33	0.19	600.00	0.24		
501	0	276,000	10.4%	2,108	3,353,440	4.54	13.72			2,380,440	1,642,440	1,141	2.23	0.62		1.43		
502	0	30,000	54.1%	170	335,440	2.62	44.78			25,440	-102,560	-71	-0.80	-1.85	371.22	-0.24	**NEGATIVE**	4
503	0	108,000	26.6%	525	325,440	1.19	18.10			298,440	24,440	17	0.09	0.06	200.00	0.08		
504	0	216,000	17.3%	1,200	1,037,040	1.34	7.95			1,031,040	257,040	179	0.33	0.21		0.36		
505	0	324,000	34.5%	2,351	739,040	1.10	6.48			614,340	-54,660	-38	-0.08	-0.06	599.89	-0.20	**NEGATIVE**	2
506	0	108,000	26.2%	376	573,840	5.22	13.25			303,840	193,840	135	1.76	0.47		0.84		
507	0	30,000	15.7%	98	278,440	3.03	8.31			161,340	69,340	48	0.75	0.36		0.57		
508	0	324,000	6.7%	2,465	4,243,040	2.50	8.80			4,487,040	2,787,040	1,935	1.64	0.58		2.48		
509	0	1,728,000	14.5%	20,000	8,625,741	1.91	5.40			10,209,367	5,683,367	3,947	1.26	0.48		2.63		
510	0	108,000	27.9%	514	332,640	1.36	4.49			278,640	34,640	24	0.14	0.09	200.00	0.13		
511	0	216,000	61.3%	1,200	492,440	2.10	5.58			136,440	-98,560	-68	-0.42	-0.28	582.52	-0.46	**NEGATIVE**	8
512	0	168,000	43.2%	834	783,440	4.66	17.88			220,440	52,440	36	0.31	0.14	500.00	0.18		
513	0	216,000	50.9%	1,100	789,440	3.49	10.33			208,440	-17,560	-12	-0.08	-0.04	583.53	-0.06	**NEGATIVE**	2
514	0	324,000	31.6%	2,350	1,424,040	3.69	10.40			702,540	316,540	220	0.82	0.31		0.73		
515	0	168,000	43.1%	550	363,840	2.12	14.04			222,240	50,240	35	0.29	0.13	210.00	0.17		
516	0	168,000	37.2%	715	536,440	2.84	11.77			283,440	94,440	66	0.50	0.21		0.26		
517	0	168,000	24.8%	750	482,940	0.39	14.29			508,440	-729,660	-507	-0.59	-1.08	1296.71	-0.64	**NEGATIVE**	8
518	0	30,000	88.7%	83	111,840	6.21	24.51			3,840	-14,160	-10	-0.79	-0.42	94.83	-0.12	**NEGATIVE**	8

	Analysis 3																	
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis								
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity No Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Maximum Spare Firm Capacity as Ratio to Total Firm Capacity	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
			Ave			Ave	Ave					Ave	Ave	Ave	Ave	Ave		
			73%			2.40	10.53					464.11	0.34	-1.32	587.70	0.39		
			Max			Max	Max	17	# deficit			Max	Max	Max	Max	Max	191	# deficit
			4800%			34.83	114.25	3.3%	% of systems			12,581.25	7.95	0.78	3,141.36	7.70	36.9%	% of systems
			Median			Median	Median	0.2%	deviation			Median	Median	Median	Median	Median	1.4%	deviation
			27%			1.70	7.58					103.01	0.30	0.18	467.89	0.34		
			Min			Min	Min					Min	Min	Min	Min	Min		
			1%			-0.53	1.02					-1,791.36	-6.88	-242.22	30.00	-4.85		
							85% Effective	18	# deficit							85% Effective	198	# deficit
								3.5%	% of systems								38.2%	% of systems

APPENDIX G: ANALYSIS 4 RESULTS

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	307,197	150,000	10.7%	1,956	1,216,323	1.97	5.97			947,523	329,523	229	0.53	0.23	0.99		
2	329,541	150,000	9.2%	1,819	1,704,099	2.52	7.22			1,144,599	468,599	325	0.69	0.29	0.61		
3	29,333	60,000	14.5%	536	543,957	4.69	22.50			323,812	207,812	144	1.79	0.50	0.69		
4	85,701	120,000	23.2%	1,140	762,939	3.63	11.35			312,339	102,339	71	0.49	0.20	0.37		
5	266,742	210,000	12.2%	3,656	1,377,858	2.04	7.70			1,244,058	569,058	395	0.84	0.33	1.07		
6	78,766	90,000	12.2%	860	1,042,674	5.06	15.85			570,674	364,674	253	1.77	0.49	0.78		
7	1,544,620	630,000	5.9%	14,882	8,170,380	2.77	7.20			8,472,380	5,523,380	3,836	1.87	0.52	2.74		
8	87,161	90,000	17.9%	863	511,844	2.25	8.48			326,988	99,988	69	0.44	0.20	0.28		
9	43,921	60,000	87.0%	447	73,519	0.28	7.57			-34,981	-293,981	-204	-1.14	-4.26	-0.82	NEGATIVE	1
10	51,295	90,000	44.7%	765	237,945	2.11	6.84			59,945	-53,055	-37	-0.47	-0.26	-0.31	NEGATIVE	3
11	629,018	300,000	22.2%	6,665	-10,578	-0.01	1.44	NEGATIVE	6	422,422	-492,578	-342	-0.54	-0.36	-1.81	NEGATIVE	6
12	307,974	180,000	20.7%	2,800	685,746	1.12	4.22			381,966	-232,034	-161	-0.38	-0.27	-0.43	NEGATIVE	1
13	78,801	120,000	12.7%	983	1,295,439	5.14	19.64			749,439	497,439	345	1.97	0.52	0.84		
14	1,038,017	300,000	10.3%	8,600	1,093,583	0.73	2.50			1,572,583	72,583	50	0.05	0.02	0.10		
15	1,018,052	150,000	4.1%	2,194	2,731,788	1.59	4.37			2,501,788	781,788	543	0.45	0.21	0.90		
16	61,588	60,000	129.2%	525	-140,148	-0.28	5.88	NEGATIVE	1	-75,148	-577,148	-401	-1.15	-12.43	-1.34	NEGATIVE	1
17	65,422	90,000	13.1%	798	1,061,818	4.48	19.85			530,018	293,018	203	1.24	0.43	0.68		
18	49,923	90,000	37.0%	565	239,617	0.64	12.27			103,347	-269,653	-187	-0.72	-1.11	-0.56	NEGATIVE	4
19	3,668,396	960,000	8.3%	17,777	3,518,704	0.56	2.68			6,981,604	668,704	464	0.11	0.06	0.37		
20	74,200	120,000	18.4%	1,102	329,640	1.27	7.95			458,840	198,840	138	0.76	0.30	2.30		
21	304,444	120,000	7.4%	1,450	1,182,796	2.15	5.69			1,189,796	638,796	444	1.16	0.40	1.27		
22	73,352	90,000	68.7%	623	327,088	2.06	6.63			-32,312	-191,312	-133	-1.20	-1.46	-0.38	NEGATIVE	2
23	38,110	60,000	11.8%	296	793,930	6.90	23.85			410,930	295,930	206	2.57	0.58	0.69		
24	342,828	210,000	13.7%	3,301	1,767,172	2.29	7.41			977,172	205,172	142	0.27	0.13	0.19		
25	99,250	90,000	10.6%	648	801,190	2.54	11.26			662,690	346,690	241	1.10	0.41	0.80		
26	133,219	120,000	23.0%	1,400	479,821	1.42	6.14			268,781	-69,219	-48	-0.20	-0.13	-0.14	NEGATIVE	3
27	2,214,665	540,000	9.1%	11,188	1,411,335	0.36	2.40			3,200,635	-698,365	-485	-0.18	-0.12	-0.44	NEGATIVE	6
28	72,541	120,000	14.1%	1,127	947,179	3.17	17.18			657,779	358,779	249	1.20	0.42	1.64		
29	1,359,915	210,000	5.6%	3,319	1,256,685	0.47	2.89			2,177,685	-501,315	-348	-0.19	-0.13	-0.43	NEGATIVE	6
30	38,909	90,000	49.6%	571	270,171	1.58	11.34			52,531	-118,469	-82	-0.69	-0.65	-0.32	NEGATIVE	9
31	147,217	90,000	9.1%	778	1,188,943	3.09	10.69			746,843	361,843	251	0.94	0.37	0.45		
32	27,920	60,000	16.8%	446	515,520	2.67	25.38			269,020	76,020	53	0.39	0.21	0.26		
33	2,069,714	630,000	9.3%	15,464	3,376,286	1.17	3.02			4,050,286	1,170,286	813	0.41	0.17	0.58		
34	241,140	150,000	8.0%	1,887	1,613,300	1.55	11.00			1,477,800	437,800	304	0.42	0.23	0.47		
35	183,037	150,000	22.5%	1,947	679,403	1.68	5.92			334,403	-70,597	-49	-0.17	-0.11	-0.18	NEGATIVE	4
36	1,224,523	630,000	13.3%	13,500	565,677	0.15	3.61			2,886,677	-964,323	-670	-0.25	-0.20	-0.67	NEGATIVE	10
37	149,916	90,000	16.0%	875	497,124	1.79	5.17			323,124	45,124	31	0.16	0.08	0.12		
38	63,466	90,000	19.5%	976	757,174	4.28	14.72			307,874	130,874	91	0.74	0.28	0.49		
39	796,611	270,000	7.4%	5,371	3,024,389	1.83	5.87			2,591,889	937,889	651	0.57	0.26	0.59		
40	58,744	90,000	37.0%	688	432,296	3.02	9.79			94,796	-48,204	-33	-0.34	-0.20	-0.37	NEGATIVE	2
41	130,693	90,000	9.5%	901	935,747	1.75	11.25			725,747	190,747	132	0.36	0.20	0.26		
42	440,590	120,000	11.1%	1,218	700,850	0.88	3.40			520,850	-275,150	-191	-0.35	-0.25	-0.38	NEGATIVE	10
43	95,780	120,000	17.5%	1,374	783,660	1.84	12.63			469,660	43,660	30	0.10	0.06	0.09		
44	540,275	210,000	10.0%	3,608	1,384,725	1.50	4.28			1,355,725	430,725	299	0.47	0.20	0.85		
45	391,158	120,000	9.9%	1,231	872,882	1.31	3.93			705,282	40,282	28	0.06	0.03	0.06		
46	74,734	90,000	13.9%	802	921,506	5.27	14.67			480,926	305,926	212	1.75	0.47	1.06		
47	302,166	210,000	13.1%	3,364	1,031,394	1.94	5.18			1,093,794	560,794	389	1.05	0.35	3.33		
48	51,234	90,000	98.4%	770	170,606	1.04	6.53			-49,794	-213,794	-148	-1.30	-2.34	-0.57	NEGATIVE	1
49	47,910	90,000	13.1%	650	903,824	3.36	24.48			551,574	282,574	196	1.05	0.41	0.52		
50	34,147	60,000	65.6%	459	336,293	3.26	12.86			-2,707	-105,707	-73	-1.03	-1.16	-0.24	NEGATIVE	2
51	100,666	120,000	11.4%	1,450	1,266,574	3.97	15.75			835,574	516,574	359	1.62	0.49	0.97		
52	292,038	210,000	8.2%	3,228	2,634,402	4.19	11.17			2,073,402	1,444,402	1,003	2.30	0.56	1.67		
53	26,494	60,000	44.0%	339	167,946	1.49	10.60			49,946	-63,054	-44	-0.56	-0.46	-0.29	NEGATIVE	2
54	115,311	120,000	53.0%	1,043	152,329	0.45	4.26			-8,871	-347,871	-242	-1.03	-1.54	-0.73	NEGATIVE	3
55	37,198	90,000	39.1%	672	199,442	1.31	9.45			102,842	-49,158	-34	-0.32	-0.21	-0.38	NEGATIVE	1
56	75,058	90,000	16.5%	872	713,932	6.67	10.94			379,757	272,757	189	2.55	0.50	0.86		
57	852,904	180,000	10.4%	2,937	331,856	0.22	2.16			697,616	-813,384	-565	-0.54	-0.47	-0.76	NEGATIVE	6
58	209,626	90,000	8.1%	598	904,814	1.64	6.95			814,214	261,214	181	0.47	0.23	0.41		
59	228,173	180,000	30.2%	2,692	430,667	1.00	3.77			187,267	-241,733	-168	-0.56	-0.41	-0.48	NEGATIVE	3

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
60	265,066	210,000	14.8%	3,165	1,247,974	1.94	7.14			941,174	297,174	206	0.46	0.21	0.33		
61	3,082,384	120,000	3.8%	140	-1,760,194	-0.44	0.73	NEGATIVE	8	-59,269	-4,069,269	-2,826	-1.01	-1.29	-2.17	NEGATIVE	8
62	4,009,904	1,080,000	6.0%	21,900	9,860,436	1.22	4.48			12,965,986	4,851,986	3,369	0.60	0.27	3.55		
63	70,534	90,000	15.8%	789	850,506	3.32	15.69			409,706	153,706	107	0.60	0.27	0.40		
64	1,470,081	630,000	4.6%	12,741	10,885,919	2.94	9.92			11,651,919	7,949,919	5,521	2.15	0.58	2.91		
65	55,701	90,000	26.9%	561	346,739	0.99	12.53			188,739	-162,261	-113	-0.46	-0.49	-0.56	NEGATIVE	5
66	19,817	60,000	63.9%	256	149,561	2.41	10.68			14,087	-47,913	-33	-0.77	-0.51	-0.26	NEGATIVE	1
67	57,238	60,000	19.2%	495	229,522	1.01	7.99			194,702	-33,298	-23	-0.15	-0.11	-0.13	NEGATIVE	5
68	13,835	120,000	52.3%	80	418,705	6.75	34.75			95,395	33,395	23	0.54	0.15	0.09		
69	1,928,356	540,000	7.2%	9,958	1,598,644	0.29	3.66			4,983,644	-469,356	-326	-0.09	-0.06	-0.30	NEGATIVE	6
70	355,932	150,000	12.8%	1,881	665,508	1.09	3.58			665,508	55,508	39	0.09	0.05	0.10		
71	65,335	60,000	30.5%	438	578,105	2.64	12.20			71,405	-147,595	-102	-0.67	-0.75	-1.02	NEGATIVE	10
72	118,383	120,000	7.2%	1,352	1,514,057	2.94	17.14			1,428,057	913,057	634	1.77	0.55	1.59		
73	187,532	90,000	5.5%	779	2,091,908	2.90	15.00			1,352,008	631,008	438	0.88	0.39	0.44		
74	177,512	120,000	15.1%	1,101	578,928	1.09	6.26			495,928	-37,072	-26	-0.07	-0.05	-0.09	NEGATIVE	9
75	214,998	150,000	15.4%	1,573	870,642	1.87	6.21			608,442	143,442	100	0.31	0.15	0.22		
76	150,433	150,000	21.7%	1,930	775,007	2.08	7.62			390,407	18,407	13	0.05	0.03	0.05		
77	58,724	90,000	122.5%	640	81,516	0.49	4.25			-75,284	-243,284	-169	-1.45	-3.31	-0.77	NEGATIVE	3
78	54,718	90,000	98.4%	703	308,522	2.83	7.63			-53,278	-162,278	-113	-1.49	-1.77	-0.35	NEGATIVE	3
79	75,727	120,000	23.7%	1,005	545,713	2.68	9.90			309,713	105,713	73	0.52	0.21	0.24		
80	200,040	120,000	13.7%	1,144	874,400	1.35	7.62			554,400	-94,600	-66	-0.15	-0.11	-0.16	NEGATIVE	2
81	20,771	60,000	16.3%	263	591,669	9.10	31.61			287,869	222,869	155	3.43	0.60	0.77		
82	1,469,423	540,000	10.9%	10,770	1,973,977	0.79	3.05			2,945,977	444,977	309	0.18	0.09	0.41		
83	203,912	150,000	11.8%	1,887	915,528	1.48	7.53			921,028	302,028	210	0.49	0.24	0.60		
84	110,082	90,000	48.9%	711	417,558	1.42	6.46			-15,942	-309,942	-215	-1.05	-1.68	-2.69	NEGATIVE	3
85	55,341	60,000	74.4%	306	161,859	1.14	5.49			-34,701	-176,701	-123	-1.24	-2.19	-0.54	NEGATIVE	3
86	267,869	150,000	12.8%	1,931	883,571	1.38	5.69			753,571	113,571	79	0.18	0.10	0.16		
87	707,970	210,000	9.2%	3,764	1,244,030	1.00	3.51			1,368,030	126,030	88	0.10	0.06	0.18		
88	3,675,936	630,000	5.1%	12,925	1,583,064	0.18	2.76			8,087,064	-477,936	-332	-0.06	-0.04	-0.27	NEGATIVE	3
89	70,315	60,000	12.3%	509	567,925	0.93	16.74			358,025	-250,975	-174	-0.41	-0.51	-0.67	NEGATIVE	8
90	678,715	120,000	13.3%	1,061	-341,275	-0.26	1.45	NEGATIVE	8	102,725	-1,225,275	-851	-0.92	-1.36	-1.70	NEGATIVE	8
91	127,420	120,000	12.1%	1,365	1,102,020	2.10	12.76			744,020	220,020	153	0.42	0.22	0.27		
92	239,397	150,000	14.1%	1,876	2,321,043	3.77	12.26			674,043	59,043	41	0.10	0.06	0.07		
93	436,823	240,000	7.3%	4,567	3,382,777	3.37	10.04			2,593,777	1,589,777	1,104	1.58	0.49	2.21		
94	302,531	60,000	2.9%	385	2,158,109	2.13	10.49			1,735,909	721,909	501	0.71	0.34	0.67		
95	32,403	60,000	65.6%	440	535,037	2.76	22.50			-963	-194,963	-135	-1.00	-2.13	-0.27	NEGATIVE	1
96	45,412	60,000	33.2%	435	297,828	1.15	12.24			75,128	-182,872	-127	-0.71	-1.01	-0.40	NEGATIVE	4
97	119,348	150,000	28.7%	1,600	163,692	0.76	3.16			254,092	40,092	28	0.19	0.08	0.46		
98	296,516	90,000	9.1%	852	228,924	0.18	5.06			604,924	-665,076	-462	-0.52	-0.67	-0.92	NEGATIVE	8
99	118,500	120,000	14.3%	1,155	717,540	1.94	9.17			603,540	234,540	163	0.64	0.28	0.65		
100	172,781	60,000	19.1%	367	340,259	1.06	3.83			81,859	-240,141	-167	-0.75	-0.76	-0.88	NEGATIVE	2
101	515,625	240,000	11.2%	4,748	1,911,375	2.43	5.23			1,395,375	608,375	422	0.77	0.28	0.84		
102	60,146	90,000	14.7%	714	941,294	3.59	20.01			463,294	201,294	140	0.77	0.33	0.47		
103	106,368	120,000	28.9%	1,390	180,072	0.29	7.47			189,072	-425,928	-296	-0.69	-1.03	-2.96	NEGATIVE	4
104	367,889	240,000	13.3%	4,152	2,041,311	2.58	7.70			1,190,311	398,311	277	0.50	0.22	0.37		
105	24,123	60,000	129.2%	500	485,317	8.37	22.52			-37,683	-95,683	-66	-1.65	-2.06	-0.17	NEGATIVE	2
106	155,498	150,000	22.6%	1,958	522,942	0.90	7.09			357,442	-222,558	-155	-0.38	-0.34	-0.52	NEGATIVE	1
107	132,529	120,000	18.2%	1,041	686,911	2.15	7.60			405,911	85,911	60	0.27	0.13	0.20		
108	447,380	210,000	19.4%	3,100	490,460	0.57	3.01			427,660	-428,340	-297	-0.50	-0.39	-0.73	NEGATIVE	1
109	185,716	150,000	9.2%	2,156	1,990,324	5.45	12.68			1,292,924	927,924	644	2.54	0.57	0.99		
110	596,443	150,000	6.2%	1,983	861,997	0.45	4.69			1,684,997	-248,003	-172	-0.13	-0.10	-0.24	NEGATIVE	8
111	85,578	120,000	38.8%	176	43,662	0.20	3.07			103,662	-115,338	-80	-0.53	-0.37	-2.67	NEGATIVE	5
112	25,691	60,000	20.4%	477	391,749	3.47	19.65			208,249	95,249	66	0.84	0.32	0.44		
113	22,056	60,000	16.3%	477	723,984	10.82	35.86			286,134	219,234	152	3.28	0.60	0.61		
114	63,128	90,000	12.3%	621	1,509,112	5.63	28.15			579,112	311,112	216	1.16	0.42	0.54		
115	794,327	540,000	21.9%	12,000	458,073	0.25	2.86			1,131,673	-678,327	-471	-0.37	-0.28	-0.65	NEGATIVE	6
116	103,452	150,000	25.2%	1,596	789,988	2.80	10.36			341,988	59,988	42	0.21	0.10	0.12		
117	294,713	180,000	14.3%	2,235	904,927	1.28	5.46			786,727	81,727	57	0.12	0.06	0.11		
118	171,133	150,000	9.3%	1,617	1,668,307	4.12	12.12			1,286,807	881,807	612	2.18	0.55	1.75		

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
119	854,312	300,000	12.2%	7,997	2,251,688	1.55	4.34			1,311,688	-142,312	-99	-0.10	-0.06	-0.12	NEGATIVE	6
120	1,004,620	300,000	6.6%	8,128	3,600,380	1.83	5.54			3,213,380	1,246,380	866	0.63	0.28	1.44		
121	221,897	150,000	13.9%	2,000	1,098,343	2.47	6.95			705,943	261,943	182	0.59	0.24	0.32		
122	3,614,931	960,000	12.5%	20,332	-1,765,131	-0.26	1.39	NEGATIVE	6	3,085,869	-3,709,131	-2,576	-0.55	-0.48	-2.58	NEGATIVE	6
123	541,512	210,000	2333.3%	3,518	-1,106,512	-0.61	1.29	NEGATIVE	8	-742,512	-2,547,512	-1,769	-1.41	-283.06	-1.77	NEGATIVE	8
124	74,517	120,000	24.3%	1,038	355,323	0.98	9.65			298,323	-65,677	-46	-0.18	-0.13	-0.25	NEGATIVE	1
125	9,644	60,000	64.4%	266	314,796	3.98	40.83			23,596	-55,404	-38	-0.70	-0.59	-0.15	NEGATIVE	5
126	482,617	210,000	13.5%	3,882	759,783	0.96	3.21			866,183	76,183	53	0.10	0.05	0.17		
127	74,704	90,000	19.7%	834	311,136	1.06	8.10			292,136	-1,864	-1	-0.01	0.00	-0.01	NEGATIVE	1
128	183,349	150,000	22.2%	1,716	464,531	1.05	4.94			341,291	-99,709	-69	-0.23	-0.15	-0.25	NEGATIVE	6
129	28,083	120,000	69.3%	150	63,077	0.57	6.20			25,077	-85,923	-60	-0.77	-0.50	-0.68	NEGATIVE	4
130	137,484	90,000	16.6%	670	157,956	0.28	5.31			313,956	-258,044	-179	-0.45	-0.48	-0.72	NEGATIVE	4
131	27,606	60,000	33.1%	442	127,934	0.48	14.29			93,834	-172,866	-120	-0.65	-0.95	-0.62	NEGATIVE	4
132	220,592	150,000	12.6%	1,968	1,942,848	2.94	11.80			822,448	162,448	113	0.25	0.14	0.23		
133	156,678	150,000	21.3%	1,728	511,362	1.04	6.40			398,562	-92,438	-64	-0.19	-0.13	-0.24	NEGATIVE	6
134	244,403	120,000	11.3%	1,374	1,343,037	1.78	8.58			699,037	-54,963	-38	-0.07	-0.05	-0.11	NEGATIVE	3
135	30,582	60,000	124.4%	447	70,258	1.38	3.97			-42,342	-93,342	-65	-1.83	-1.93	-0.59	NEGATIVE	3
136	624,166	210,000	10.9%	3,806	957,034	0.76	3.56			1,087,154	-174,846	-121	-0.14	-0.09	-0.30	NEGATIVE	6
137	9,319,852	2,940,000	7.4%	61,150	17,012,068	0.91	3.82			27,636,068	9,034,068	6,274	0.49	0.23	3.30		
138	91,730	120,000	18.5%	1,451	357,310	1.06	7.58			437,710	99,710	69	0.30	0.15	0.55		
139	398,928	240,000	8.6%	4,936	2,858,072	3.73	9.09			2,151,072	1,384,072	961	1.80	0.50	1.13		
140	46,832	60,000	14.4%	275	639,808	4.89	16.45			308,608	177,808	123	1.36	0.43	1.23		
141	41,667	90,000	32.1%	635	241,573	2.54	8.08			148,773	53,773	37	0.57	0.19	0.37		
142	157,544	120,000	5.8%	1,056	2,936,696	7.85	21.01			1,806,496	1,432,496	995	3.83	0.69	1.63		
143	1,217,345	300,000	8.1%	7,500	1,515,655	0.67	3.09			2,183,455	-67,545	-47	-0.03	-0.02	-0.06	NEGATIVE	6
144	64,299	90,000	27.7%	810	548,341	3.08	11.30			171,141	-6,859	-5	-0.04	-0.02	-0.03	NEGATIVE	6
145	294,635	180,000	25.0%	2,844	471,805	1.02	3.17			246,805	-216,195	-150	-0.47	-0.30	-0.60	NEGATIVE	2
146	64,268	90,000	6.3%	841	1,947,372	9.06	33.65			1,272,772	1,057,772	735	4.92	0.74	1.22		
147	127,336	150,000	13.8%	1,611	1,471,104	3.28	15.07			806,804	358,804	249	0.80	0.33	0.45		
148	40,684	60,000	129.2%	496	57,756	0.53	4.10			-54,244	-163,244	-113	-1.50	-3.52	-0.76	NEGATIVE	3
149	33,710	60,000	14.9%	536	490,730	3.66	18.53			308,230	174,230	121	1.30	0.43	1.21		
150	393,478	210,000	14.8%	3,487	1,206,122	1.61	4.97			818,522	70,522	49	0.09	0.05	0.09		
151	20,441	60,000	129.2%	260	109,599	1.74	8.44			-34,001	-97,001	-67	-1.54	-2.09	-0.48	NEGATIVE	5
152	43,239	60,000	15.6%	504	289,401	0.99	13.47			280,701	-12,299	-9	-0.04	-0.03	-0.05	NEGATIVE	4
153	90,211	60,000	129.2%	302	-69,771	-0.10	7.29	NEGATIVE	8	-103,771	-830,771	-577	-1.14	-17.89	-1.10	NEGATIVE	8
154	88,068	120,000	25.5%	1,100	298,672	1.27	6.05			263,172	28,872	20	0.12	0.06	0.12		
155	240,594	180,000	16.6%	2,378	1,484,846	2.26	8.90			660,846	4,846	3	0.01	0.00	0.01		
156	15,828	60,000	33.9%	300	74,612	0.53	13.69			101,112	-40,888	-28	-0.29	-0.23	-0.38	NEGATIVE	4
157	2,018,368	630,000	8.4%	15,485	2,648,632	0.64	3.36			4,893,632	770,632	535	0.19	0.10	0.45		
158	178,993	150,000	13.0%	1,809	2,116,647	3.98	14.80			821,747	289,747	201	0.54	0.25	0.47		
159	5,561,403	1,650,000	8.2%	37,757	8,583,397	1.05	3.01			12,801,897	4,626,897	3,213	0.57	0.23	4.02		
160	614,070	150,000	6.6%	1,839	1,245,490	0.86	4.39			1,502,490	49,490	34	0.03	0.02	0.08		
161	55,990	90,000	10.6%	768	1,278,650	7.66	25.82			704,150	537,150	373	3.22	0.63	0.82		
162	40,184	60,000	129.2%	320	140,256	0.68	8.64			-53,744	-260,744	-181	-1.26	-5.61	-0.66	NEGATIVE	1
163	1,928,729	540,000	7.5%	12,046	3,298,271	1.00	3.41			4,690,771	1,406,771	977	0.43	0.20	0.81		
164	42,524	120,000	88.0%	983	18,316	0.14	3.46			-26,084	-155,084	-108	-1.20	-1.14	-0.98	NEGATIVE	3
165	155,242	120,000	11.3%	1,482	1,182,598	2.55	10.61			786,398	322,398	224	0.69	0.30	0.39		
166	775,362	300,000	10.8%	7,012	614,638	0.23	4.26			1,714,638	-975,362	-677	-0.36	-0.35	-0.68	NEGATIVE	6
167	194,483	120,000	6.7%	1,039	1,513,957	2.38	11.05			1,477,957	842,957	585	1.33	0.47	1.46		
168	193,744	150,000	15.1%	1,975	831,696	1.66	6.88			647,696	145,696	101	0.29	0.15	0.22		
169	20,844	60,000	10.5%	299	883,196	6.79	48.61			488,496	358,496	249	2.76	0.63	0.70		
170	192,920	120,000	11.8%	1,427	810,520	1.33	7.35			705,520	97,520	68	0.16	0.10	0.23		
171	53,568	90,000	65.5%	567	688,872	2.69	17.64			-6,228	-262,228	-182	-1.02	-1.91	-0.28	NEGATIVE	1
172	27,805	60,000	81.7%	264	153,635	1.67	8.83			-14,365	-106,365	-74	-1.16	-1.45	-0.42	NEGATIVE	3
173	214,216	150,000	14.6%	2,060	649,224	1.27	5.42			663,224	151,224	105	0.30	0.15	0.35		
174	1,633,319	630,000	11.7%	15,864	1,456,481	0.40	3.10			3,129,481	-471,519	-327	-0.13	-0.09	-0.40	NEGATIVE	6
175	250,719	120,000	5.1%	1,356	2,405,721	2.56	13.34			2,002,221	1,062,221	738	1.13	0.45	0.98		
176	34,170	60,000	14.9%	436	580,270	6.24	19.70			308,670	215,670	150	2.32	0.54	0.60		

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
177	35,940	60,000	50.7%	382	222,500	0.91	13.01			22,500	-222,500	-155	-0.91	-1.88	-0.52	NEGATIVE	11
178	97,392	120,000	22.2%	1,102	2,118,048	9.37	24.07			324,048	98,048	68	0.43	0.18	0.19		
179	12,704	120,000	258.4%	150	-57,864	-0.92	0.40	NEGATIVE	1	-86,264	-149,264	-104	-2.37	-3.21	-1.73	NEGATIVE	1
180	74,008	90,000	26.9%	928	357,432	3.37	6.26			170,432	64,432	45	0.61	0.19	0.22		
181	44,754	90,000	26.3%	803	113,686	0.35	9.76			206,886	-116,114	-81	-0.36	-0.34	-0.54	NEGATIVE	2
182	1,411,836	540,000	8.9%	11,098	3,113,444	1.25	3.97			4,082,844	1,588,844	1,103	0.64	0.26	1.13		
183	2,011,484	960,000	14.1%	19,723	2,776,516	0.82	3.07			3,814,516	422,516	293	0.12	0.06	0.18		
184	24,055	60,000	20.2%	385	411,785	6.43	19.78			212,585	148,585	103	2.32	0.50	0.57		
185	157,477	120,000	15.2%	1,406	145,963	0.20	5.64			512,363	-229,637	-159	-0.31	-0.29	-0.80	NEGATIVE	2
186	20,139	120,000	45.4%	207	400,301	7.55	22.51			124,101	71,101	49	1.34	0.27	0.33		
187	1,546,036	630,000	7.1%	15,128	4,737,964	0.89	6.51			6,742,964	1,422,964	988	0.27	0.16	0.47		
188	151,062	120,000	15.0%	1,064	326,378	0.37	7.97			531,378	-346,622	-241	-0.39	-0.43	-0.60	NEGATIVE	1
189	455,691	240,000	15.2%	5,064	1,185,109	1.55	4.28			881,109	117,109	81	0.15	0.07	0.23		
190	133,469	120,000	12.4%	1,079	445,971	1.00	6.67			710,971	266,971	185	0.60	0.28	3.71		
191	41,707	60,000	24.9%	534	172,893	1.75	6.52			139,493	40,493	28	0.41	0.17	0.35		
192	197,320	210,000	18.5%	3,500	598,920	0.91	6.37			729,920	71,920	50	0.11	0.06	0.25		
193	133,948	150,000	23.9%	1,614	481,692	0.99	7.23			343,892	-143,108	-99	-0.29	-0.23	-0.32	NEGATIVE	4
194	45,921	60,000	129.2%	462	124,519	0.49	8.22			-59,481	-312,481	-217	-1.24	-6.73	-0.72	NEGATIVE	4
195	117,718	90,000	14.2%	950	652,722	2.17	8.10			427,322	126,322	88	0.42	0.20	0.29		
196	1,710,039	540,000	12.1%	11,419	1,276,361	0.45	2.41			2,201,361	-648,639	-450	-0.23	-0.15	-0.63	NEGATIVE	6
197	980,462	300,000	6.4%	8,219	3,021,338	1.31	5.44			3,411,238	1,103,238	766	0.48	0.24	0.70		
198	32,857	60,000	100.1%	385	267,583	1.94	12.34			-32,917	-170,917	-119	-1.24	-2.85	-0.40	NEGATIVE	9
199	18,411	60,000	129.2%	251	2,074,329	35.34	115.86			-31,971	-90,671	-63	-1.54	-1.95	-0.04	NEGATIVE	2
200	32,280	60,000	45.2%	407	157,560	1.51	8.10			40,560	-63,440	-44	-0.61	-0.48	-0.73	NEGATIVE	2
201	400,203	150,000	8.3%	2,193	1,311,237	1.78	5.12			1,257,177	520,177	361	0.71	0.29	0.90		
202	89,223	120,000	19.6%	1,171	922,617	7.21	11.78			404,217	276,217	192	2.16	0.45	0.64		
203	54,811	90,000	27.7%	799	547,629	3.49	12.86			180,629	23,629	16	0.15	0.07	0.16		
204	90,141	120,000	39.8%	1,176	241,579	0.67	6.71			91,539	-271,461	-189	-0.75	-0.90	-1.63	NEGATIVE	2
205	185,884	120,000	11.4%	1,325	715,156	1.04	7.56			750,356	60,356	42	0.09	0.06	0.10		
206	49,350	60,000	79.3%	443	52,590	0.30	4.59			-33,660	-207,660	-144	-1.19	-2.74	-0.82	NEGATIVE	1
207	229,867	150,000	55.3%	1,950	400,573	0.42	5.92			-108,427	-1,069,427	-743	-1.11	-3.94	-0.74	NEGATIVE	12
208	71,238	60,000	12.1%	450	592,602	3.17	10.94			366,102	179,102	124	0.96	0.36	0.53		
209	18,636	60,000	16.1%	256	878,284	6.19	54.75			293,784	151,784	105	1.07	0.41	0.49		
210	815,407	300,000	7.8%	6,984	2,026,393	0.78	5.68			2,741,093	137,093	95	0.05	0.04	0.08		
211	549,786	210,000	9.2%	3,732	1,300,914	0.85	5.14			1,529,544	6,544	5	0.00	0.00	0.01		
212	187,330	180,000	26.7%	2,415	388,310	1.02	4.11			307,310	-73,690	-51	-0.19	-0.11	-0.18	NEGATIVE	1
213	1,814,584	630,000	11.8%	14,170	1,998,616	0.58	2.99			2,899,616	-518,384	-360	-0.15	-0.10	-0.24	NEGATIVE	6
214	1,915,067	630,000	7.5%	14,187	2,649,933	0.56	3.87			5,833,933	1,078,933	749	0.23	0.13	0.83		
215	96,665	120,000	17.7%	1,146	574,975	1.91	9.06			461,575	160,575	112	0.53	0.24	0.51		
216	14,760	120,000	501.3%	170	348,780	10.73	25.83			-110,820	-143,320	-100	-4.41	-5.99	-0.29	NEGATIVE	4
217	115,200	120,000	14.3%	1,244	841,440	2.24	10.57			601,440	225,440	157	0.60	0.27	0.47		
218	141,033	120,000	18.2%	1,298	499,407	1.02	7.01			399,207	-89,793	-62	-0.18	-0.14	-0.17	NEGATIVE	6
219	15,502	120,000	68.5%	150	69,938	0.60	12.06			39,638	-77,362	-54	-0.66	-0.44	-0.54	NEGATIVE	2
220	69,734	120,000	19.7%	997	714,906	5.30	12.19			419,206	284,206	197	2.11	0.47	0.79		
221	55,392	90,000	19.9%	600	291,848	0.55	14.93			307,848	-227,152	-158	-0.42	-0.50	-0.72	NEGATIVE	4
222	15,444	120,000	421.9%	200	651,996	18.11	44.55			-107,004	-143,004	-99	-3.97	-5.03	-0.18	NEGATIVE	1
223	761,386	270,000	10.5%	6,034	1,850,814	1.37	4.21			1,549,814	196,814	137	0.15	0.08	0.16		
224	13,478,993	2,940,000	9.0%	61,110	2,487,007	0.11	1.80			16,413,007	-5,312,993	-3,690	-0.24	-0.16	-0.88	NEGATIVE	6
225	1,193,036	300,000	5.3%	7,541	3,974,964	1.62	5.39			4,215,664	1,756,664	1,220	0.71	0.31	1.28		
226	196,272	150,000	18.2%	1,901	718,968	1.30	6.48			475,968	-77,032	-53	-0.14	-0.09	-0.17	NEGATIVE	6
227	42,588	60,000	35.5%	440	51,052	0.42	4.04			66,252	-54,748	-38	-0.45	-0.32	-0.84	NEGATIVE	2
228	243,111	180,000	8.6%	2,622	1,668,529	1.73	10.83			1,662,729	697,729	485	0.72	0.33	1.73		
229	1,469,565	630,000	15.7%	13,430	1,595,435	0.72	2.59			1,913,535	-290,465	-202	-0.13	-0.07	-0.34	NEGATIVE	6
230	30,178	60,000	87.0%	400	-20,738	-0.06	11.47	NEGATIVE	4	-21,238	-388,238	-270	-1.06	-5.63	-1.08	NEGATIVE	4
231	32,942	60,000	13.7%	450	777,098	9.59	26.05			344,098	263,098	183	3.25	0.60	0.76		
232	446,310	210,000	8.5%	3,345	1,776,090	1.55	6.54			1,814,190	671,190	466	0.59	0.27	1.04		
233	325,187	180,000	7.5%	2,801	2,545,253	4.06	9.76			1,908,253	1,281,253	890	2.04	0.53	1.05		

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
234	433,869	210,000	6.4%	3,540	3,628,131	5.18	9.98			2,632,131	1,932,131	1,342	2.76	0.59	1.34		
235	33,157	60,000	13.0%	500	680,083	5.27	24.40			369,083	240,083	167	1.86	0.52	0.62		
236	1,321,143	270,000	6.3%	6,000	2,247,497	0.87	3.65			2,683,497	113,497	79	0.04	0.03	0.06		
237	24,331	60,000	13.7%	430	797,709	11.40	35.66			355,049	285,049	198	4.07	0.65	0.79		
238	1,197,401	150,000	66.2%	2,010	-1,681,961	-0.66	0.71	NEGATIVE	6	-1,120,961	-3,650,961	-2,535	-1.44	-16.12	-1.88	NEGATIVE	6
239	356,988	270,000	27.3%	5,400	869,012	1.44	4.13			363,012	-240,988	-167	-0.40	-0.24	-0.33	NEGATIVE	10
240	11,978,498	2,340,000	5.5%	53,000	10,443,262	0.38	3.15			28,152,862	900,862	626	0.03	0.02	0.26		
241	394,078	210,000	12.2%	3,826	1,561,122	2.07	5.87			1,113,122	359,122	249	0.48	0.21	0.50		
242	63,737	90,000	18.9%	780	630,703	1.99	14.87			322,903	5,903	4	0.02	0.01	0.02		
243	145,951	120,000	12.1%	25	1,229,809	3.73	10.69			721,889	391,889	272	1.19	0.40	0.49		
244	1,183,364	120,000	3.1%	1,470	1,264,476	0.46	3.40			2,528,476	-235,524	-164	-0.09	-0.06	-0.19	NEGATIVE	6
245	1,340,574	300,000	4.9%	7,107	3,747,076	1.31	4.93			4,511,151	1,649,151	1,145	0.58	0.27	1.15		
246	439,390	180,000	10.8%	2,381	1,436,050	1.46	5.51			1,051,550	66,550	46	0.07	0.04	0.05		
247	788,900	270,000	5.8%	5,137	4,758,100	3.46	7.77			3,585,100	2,210,100	1,535	1.61	0.48	1.18		
248	776,252	240,000	8.4%	4,021	1,822,148	1.07	4.53			1,851,148	153,148	106	0.09	0.05	0.12		
249	72,515	60,000	160.3%	450	85,925	0.26	5.69			-95,075	-422,075	-293	-1.29	-11.27	-0.84	NEGATIVE	11
250	86,315	90,000	49.6%	950	206,725	0.88	5.13			5,125	-230,875	-160	-0.98	-1.27	-0.55	NEGATIVE	3
251	36,118	60,000	81.7%	323	170,722	2.11	6.97			-22,678	-103,678	-72	-1.28	-1.41	-0.39	NEGATIVE	2
252	412,613	120,000	2564.1%	1,200	7,827	0.01	1.72			-527,933	-1,230,933	-855	-1.75	-263.02	-0.99	NEGATIVE	8
253	301,952	90,000	13.5%	585	714,688	1.44	4.02			275,488	-222,512	-155	-0.45	-0.33	-0.56	NEGATIVE	8
254	26,933	60,000	129.2%	320	-177,493	-0.41	9.38	NEGATIVE	8	-40,493	-470,493	-327	-1.09	-10.13	-1.63	NEGATIVE	8
255	39,874	60,000	52.7%	429	388,566	2.74	13.31			14,066	-127,934	-89	-0.90	-1.12	-0.25	NEGATIVE	3
256	8,064	120,000	501.3%	130	192,576	5.20	28.47			-104,124	-141,124	-98	-3.81	-5.89	-0.43	NEGATIVE	5
257	1,297,597	540,000	11.0%	10,583	3,010,403	1.35	4.03			3,058,403	834,403	579	0.38	0.17	0.45		
258	58,693	90,000	79.0%	570	51,747	0.14	6.98			-34,753	-392,753	-273	-1.10	-3.45	-0.91	NEGATIVE	1
259	348,854	180,000	7.2%	2,968	2,280,986	1.93	9.92			1,966,846	787,846	547	0.67	0.32	0.55		
260	27,027	60,000	81.7%	268	257,213	4.76	11.51			-13,587	-67,587	-47	-1.25	-0.92	-0.21	NEGATIVE	6
261	252,957	180,000	22.9%	2,410	302,483	0.58	3.25			351,483	-168,517	-117	-0.32	-0.21	-0.39	NEGATIVE	6
262	63,189	90,000	15.1%	631	805,251	5.33	15.13			442,251	291,251	202	1.93	0.49	0.58		
263	23,224	60,000	129.2%	374	518,216	5.29	26.53			-36,784	-134,784	-94	-1.38	-2.90	-0.21	NEGATIVE	2
264	98,316	120,000	28.6%	1,308	127,324	0.57	3.56			200,724	-22,276	-15	-0.10	-0.05	-0.31	NEGATIVE	2
265	108,226	120,000	19.3%	1,223	920,214	4.13	10.56			394,214	171,214	119	0.77	0.28	0.48		
266	240,174	150,000	22.8%	2,052	188,566	0.44	2.59			267,816	-165,184	-115	-0.38	-0.25	-0.76	NEGATIVE	6
267	39,415	60,000	17.3%	474	443,025	1.74	17.71			247,625	-7,375	-5	-0.03	-0.02	-0.02	NEGATIVE	2
268	32,225,346	7,200,000	8.5%	200,814	4,431,054	0.08	1.82			45,219,654	-8,988,346	-6,242	-0.17	-0.11	-2.71	NEGATIVE	6
269	10,553	120,000	174.1%	121	401,887	8.37	42.63			-61,613	-109,613	-76	-2.28	-1.59	-0.22	NEGATIVE	13
270	168,267	120,000	5.1%	1,205	2,408,373	7.69	16.17			2,064,873	1,751,873	1,217	5.60	0.74	3.00		
271	4,966	120,000	82.0%	122	152,474	11.73	33.32			21,374	8,374	6	0.64	0.06	0.06		
272	228,744	150,000	11.9%	1,695	995,296	1.97	6.55			878,196	374,196	260	0.74	0.30	0.84		
273	26,485	60,000	129.2%	400	420,955	3.51	20.42			-40,045	-160,045	-111	-1.33	-3.45	-0.28	NEGATIVE	5
274	272,796	120,000	16.0%	1,348	438,644	0.73	3.81			355,644	-244,356	-170	-0.41	-0.33	-0.57	NEGATIVE	2
275	154,202	120,000	15.8%	1,496	743,238	2.21	7.00			483,238	147,238	102	0.44	0.19	0.26		
276	268,490	210,000	21.2%	3,513	708,510	1.02	5.23			511,510	-185,490	-129	-0.27	-0.19	-0.26	NEGATIVE	6
277	2,170,922	960,000	11.4%	18,708	3,670,422	1.10	3.22			5,314,700	1,991,700	1,383	0.60	0.24	3.29		
278	5,379	120,000	276.6%	88	-116,069	-1.30	-5.01	NEGATIVE	4	-81,999	-171,129	-119	-1.92	-3.94	-3.40	NEGATIVE	4
279	61,759	60,000	20.5%	382	459,281	2.98	9.93			171,281	17,281	12	0.11	0.06	0.09		
280	506,807	240,000	8.2%	4,143	2,298,593	1.83	7.01			2,165,593	912,593	634	0.73	0.31	0.70		
281	649,103	270,000	7.8%	5,187	2,415,497	1.89	5.69			2,526,097	1,251,097	869	0.98	0.36	1.33		
282	137,284	120,000	10.3%	1,377	1,315,236	3.64	12.21			911,636	550,636	382	1.53	0.47	0.76		
283	594,400	270,000	6.9%	5,897	3,031,600	1.89	7.80			3,068,600	1,466,600	1,018	0.92	0.37	1.02		
284	587,823	240,000	12.1%	4,010	-197,423	-0.11	2.78	NEGATIVE	2	1,155,777	-676,223	-470	-0.37	-0.34	-2.09	NEGATIVE	2
285	215,238	90,000	23.2%	845	198,802	0.55	2.60			83,202	-277,798	-193	-0.77	-0.72	-1.54	NEGATIVE	9
286	39,630	60,000	37.1%	524	-21,990	-0.09	5.32	NEGATIVE	1	62,010	-170,990	-119	-0.73	-1.06	-1.48	NEGATIVE	1
287	2,865,845	540,000	7.8%	11,100	1,232,955	0.26	2.09			3,516,955	-1,245,045	-865	-0.26	-0.18	-0.86	NEGATIVE	6
288	1,994,107	630,000	9.9%	14,055	2,747,893	0.73	3.26			3,708,293	-51,707	-36	-0.01	-0.01	-0.03	NEGATIVE	6
289	70,449	90,000	15.8%	760	605,991	2.13	12.65			407,991	122,991	85	0.43	0.22	0.28		
290	921,816	540,000	10.0%	10,353	4,258,904	1.80	7.19			3,916,584	1,550,584	1,077	0.66	0.29	0.87		
291	30,355	90,000	30.5%	589	310,085	3.83	12.88			174,485	93,485	65	1.15	0.32	0.59		
292	30,645	60,000	87.0%	392	444,795	2.35	20.68			-21,705	-210,705	-146	-1.11	-3.06	-0.33	NEGATIVE	2

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
293	2,213,071	630,000	8.1%	16,129	2,889,329	0.64	3.35			4,938,329	422,329	293	0.09	0.05	0.22		
294	17,037	60,000	50.7%	277	17,403	0.17	6.95			41,403	-59,597	-41	-0.59	-0.50	-0.83	NEGATIVE	3
295	79,748	120,000	25.4%	1,146	533,892	3.00	8.93			272,392	94,392	66	0.53	0.20	0.23		
296	480,204	270,000	8.0%	5,419	3,440,996	3.95	8.98			2,615,796	1,743,796	1,211	2.00	0.52	1.21		
297	37,081	60,000	129.2%	275	121,359	1.43	5.57			-50,641	-135,641	-94	-1.60	-2.92	-0.54	NEGATIVE	6
298	297,846	180,000	12.5%	2,428	1,466,594	2.38	7.00			963,594	346,594	241	0.56	0.24	0.32		
299	117,846	90,000	11.8%	557	882,794	2.57	10.40			554,094	211,094	147	0.62	0.28	0.34		
300	142,153	120,000	14.4%	1,422	862,287	1.93	9.20			571,787	125,787	87	0.28	0.15	0.18		
301	286,037	180,000	10.2%	2,667	1,141,483	1.29	7.07			1,290,403	408,403	284	0.46	0.23	0.63		
302	839,491	300,000	6.7%	8,908	3,006,509	1.07	6.92			3,369,509	569,509	395	0.20	0.13	0.30		
303	1,812,681	540,000	7.6%	10,241	3,906,719	1.43	3.67			4,787,019	2,047,019	1,422	0.75	0.29	1.43		
304	158,002	120,000	19.3%	1,329	311,838	0.62	5.16			344,438	-159,562	-111	-0.32	-0.26	-0.40	NEGATIVE	4
305	66,366	90,000	29.1%	666	521,474	2.51	10.99			152,874	-55,126	-38	-0.27	-0.18	-0.32	NEGATIVE	8
306	97,370	120,000	17.3%	1,140	1,058,870	3.05	14.44			476,170	129,170	90	0.37	0.19	0.36		
307	104,194	90,000	17.6%	887	467,926	0.90	9.49			317,366	-203,634	-141	-0.39	-0.40	-0.71	NEGATIVE	1
308	55,389	60,000	10.5%	400	1,033,051	6.80	21.40			457,551	305,551	212	2.01	0.53	0.61		
309	598,158	240,000	8.4%	4,134	1,443,642	1.14	4.53			2,031,942	763,942	531	0.60	0.27	1.56		
310	45,456	90,000	12.2%	558	1,457,984	8.89	35.68			603,984	439,984	306	2.68	0.60	0.68		
311	27,736	120,000	216.5%	168	-115,696	-0.50	4.16	NEGATIVE	4	-92,296	-323,296	-225	-1.40	-5.83	-1.60	NEGATIVE	4
312	578,350	270,000	12.3%	6,009	1,471,530	1.21	4.65			1,347,650	128,650	89	0.11	0.06	0.17		
313	16,193	120,000	112.4%	209	261,047	6.87	18.47			-29,453	-67,453	-47	-1.78	-0.63	-0.21	NEGATIVE	3
314	703,204	270,000	7.1%	6,312	2,959,796	2.44	5.93			2,815,796	1,602,796	1,113	1.32	0.42	1.39		
315	215,061	120,000	15.3%	1,286	1,361,379	2.14	9.28			449,379	-185,621	-129	-0.29	-0.24	-0.40	NEGATIVE	3
316	720,455	300,000	8.2%	8,000	2,020,545	1.14	5.27			2,658,745	883,745	614	0.50	0.24	0.85		
317	105,094	90,000	9.1%	844	908,546	1.45	14.62			799,046	171,046	119	0.27	0.17	0.40		
318	289,619	180,000	10.7%	2,761	1,217,621	1.89	6.42			1,205,821	562,821	391	0.88	0.34	0.98		
319	291,065	180,000	7.8%	2,557	2,167,375	3.18	9.79			1,832,575	1,151,575	800	1.69	0.50	1.45		
320	57,936	60,000	75.6%	375	93,104	0.39	5.70			-38,556	-275,556	-191	-1.16	-3.47	-0.77	NEGATIVE	4
321	32,741	90,000	193.8%	570	51,299	0.27	7.28			-76,301	-263,301	-183	-1.41	-5.67	-0.85	NEGATIVE	2
322	3,389,726	1,500,000	14.0%	30,046	873,259	0.13	2.26			5,786,600	-1,007,400	-700	-0.15	-0.09	-0.78	NEGATIVE	6
323	205,740	150,000	14.2%	1,899	859,500	2.29	6.00			700,500	325,500	226	0.87	0.31	0.71		
324	514,131	210,000	8.0%	3,412	2,493,669	2.75	6.61			1,892,169	986,169	685	1.09	0.38	0.84		
325	138,554	120,000	18.5%	1,495	469,886	1.15	6.34			390,886	-18,114	-13	-0.04	-0.03	-0.06	NEGATIVE	4
326	2,269,751	300,000	6.6%	7,162	-136,231	-0.04	1.41	NEGATIVE	8	1,941,769	-1,392,231	-967	-0.42	-0.31	-1.45	NEGATIVE	8
327	1,148,039	270,000	7.5%	6,312	441,561	0.13	3.31			2,158,561	-1,197,439	-832	-0.36	-0.33	-1.04	NEGATIVE	8
328	341,156	150,000	15.2%	2,079	851,176	1.52	4.14			496,227	-64,773	-45	-0.12	-0.07	-0.12	NEGATIVE	10
329	19,465	60,000	65.6%	308	87,975	1.13	8.53			11,975	-66,025	-46	-0.85	-0.72	-0.46	NEGATIVE	6
330	5,010	120,000	174.1%	50	-41,170	-1.33	-2.03	NEGATIVE	8	-56,070	-87,070	-60	-2.81	-1.26	-2.02	NEGATIVE	8
331	426,478	240,000	14.7%	4,292	1,244,522	1.36	5.06			971,522	58,522	41	0.06	0.04	0.12		
332	44,278	90,000	76.0%	649	348,962	3.20	10.34			-15,838	-124,838	-87	-1.15	-1.05	-0.27	NEGATIVE	5
333	37,969	90,000	18.1%	653	682,271	4.21	22.24			368,471	206,471	143	1.27	0.42	0.57		
334	21,804	60,000	87.0%	311	444,636	0.99	41.03			-12,864	-462,864	-321	-1.03	-6.71	-0.51	NEGATIVE	4
335	116,131	120,000	6.4%	1,015	1,523,509	1.69	20.87			1,640,009	740,009	514	0.82	0.39	1.03		
336	1,782,288	540,000	5.5%	12,545	6,057,912	1.65	5.46			7,407,612	3,741,612	2,598	1.02	0.38	1.79		
337	399,730	240,000	8.0%	4,505	2,735,870	3.01	9.12			2,351,870	1,441,870	1,001	1.58	0.48	1.19		
338	312,529	180,000	10.0%	2,892	1,146,911	1.24	6.62			1,308,911	386,911	269	0.42	0.21	0.54		
339	6,933	60,000	2666.7%	253	75,807	4.21	13.53			-64,683	-82,683	-57	-4.59	-36.75	-0.52	NEGATIVE	10
340	261,145	210,000	31.6%	3,177	-37,105	-0.06	2.16	NEGATIVE	1	192,695	-408,305	-284	-0.68	-0.62	-1.35	NEGATIVE	1
341	2,313,307	630,000	5.8%	15,224	4,344,893	0.55	5.27			7,895,393	57,393	40	0.01	0.01	0.02		
342	32,475	60,000	81.7%	476	12,565	0.07	5.87			-19,035	-197,035	-137	-1.11	-2.68	-0.98	NEGATIVE	3
343	242,630	180,000	12.6%	2,680	1,118,010	2.06	6.84			1,009,810	467,810	325	0.86	0.33	0.81		
344	747,154	300,000	8.9%	6,592	2,202,846	1.33	5.16			2,317,046	661,046	459	0.40	0.20	0.54		
345	107,719	120,000	12.9%	1,250	1,657,121	4.42	18.86			706,121	331,121	230	0.88	0.35	0.50		
346	310,563	180,000	21.7%	2,554	529,877	0.66	4.30			338,877	-466,123	-324	-0.58	-0.56	-1.62	NEGATIVE	1
347	169,122	90,000	17.6%	936	213,718	0.74	2.97			251,718	-37,282	-26	-0.13	-0.07	-0.74	NEGATIVE	1
348	72,903	90,000	33.4%	945	369,137	1.44	8.59			106,737	-150,263	-104	-0.58	-0.56	-0.58	NEGATIVE	6
349	196,786	150,000	20.6%	1,775	-97,986	-0.08	5.44	NEGATIVE	3	381,854	-786,146	-546	-0.67	-1.08	-1.44	NEGATIVE	3
350	197,774	150,000	11.4%	2,074	1,079,866	1.89	8.35			965,866	394,866	274	0.69	0.30	0.76		

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
351	736,048	180,000	10.7%	2,993	371,592	0.24	2.57			758,492	-761,508	-529	-0.50	-0.45	-1.20	**NEGATIVE**	6
352	24,205	120,000	258.4%	165	179,235	1.12	14.02			-97,765	-257,765	-179	-1.61	-5.55	-0.60	**NEGATIVE**	4
353	195,521	240,000	28.4%	4,071	638,479	1.69	5.20			410,479	32,479	23	0.09	0.04	0.06		
354	115,044	90,000	31.1%	929	405,396	1.79	5.50			84,396	-142,604	-99	-0.63	-0.49	-0.66	**NEGATIVE**	6
355	336,664	210,000	19.9%	3,525	627,336	0.97	3.78			506,336	-137,664	-96	-0.21	-0.13	-0.21	**NEGATIVE**	8
356	841,924	300,000	7.5%	8,275	2,580,716	1.66	4.91			2,863,436	1,313,436	912	0.85	0.33	1.30		
357	1,273,992	540,000	9.4%	9,418	2,012,608	0.60	4.22			3,952,308	582,308	404	0.17	0.10	0.70		
358	42,342	90,000	18.5%	550	858,098	10.86	22.13			355,098	276,098	192	3.49	0.57	0.64		
359	333,202	150,000	12.0%	1,675	64,038	0.05	3.90			769,238	-467,762	-325	-0.38	-0.37	-0.96	**NEGATIVE**	10
360	30,164	60,000	65.6%	393	254,276	2.17	12.31			1,276	-115,724	-80	-0.99	-1.27	-0.32	**NEGATIVE**	5
361	64,965	90,000	23.2%	838	217,875	1.15	6.26			233,475	44,475	31	0.24	0.11	0.31		
362	83,489	90,000	14.7%	792	959,951	4.36	14.13			439,951	219,951	153	1.00	0.36	0.51		
363	104,987	90,000	16.6%	899	697,253	1.85	10.22			348,253	-27,747	-19	-0.07	-0.05	-0.06	**NEGATIVE**	1
364	857,668	540,000	10.6%	9,989	3,897,332	2.94	6.09			3,714,332	2,389,332	1,659	1.80	0.47	1.75		
365	1,701,148	300,000	2.1%	7,462	13,164,852	4.27	9.55			12,578,852	9,496,852	6,595	3.08	0.65	3.88		
366	1,172,675	540,000	9.1%	10,981	4,836,325	2.01	6.17			4,209,325	1,806,325	1,254	0.75	0.31	0.78		
367	1,298,234	300,000	9.6%	7,929	395,946	0.20	1.85			1,530,166	-472,934	-328	-0.24	-0.15	-0.80	**NEGATIVE**	2
368	1,595,764	540,000	7.4%	9,981	6,270,236	2.85	5.31			5,199,236	2,999,236	2,083	1.36	0.41	1.39		
369	549,455	150,000	8.9%	1,866	248,985	0.20	2.70			979,585	-253,415	-176	-0.21	-0.15	-0.59	**NEGATIVE**	1
370	15,743	60,000	33.1%	400	116,297	1.22	13.42			105,697	10,697	7	0.11	0.06	0.15		
371	43,327	90,000	36.6%	668	426,913	2.47	13.85			112,733	-60,267	-42	-0.35	-0.24	-0.62	**NEGATIVE**	2
372	22,630	60,000	108.2%	407	552,810	7.47	27.70			-27,190	-101,190	-70	-1.37	-1.83	-0.16	**NEGATIVE**	3
373	215,402	180,000	15.2%	2,496	1,778,038	3.67	10.51			787,738	302,738	210	0.62	0.26	0.35		
374	1,416,330	270,000	3.3%	6,018	6,548,870	2.85	6.25			6,438,870	4,138,870	2,874	1.80	0.51	2.05		
375	350,900	180,000	16.6%	2,380	2,024,540	2.79	7.84			550,540	-175,460	-122	-0.24	-0.16	-0.24	**NEGATIVE**	6
376	114,018	90,000	9.5%	605	1,135,422	3.23	13.05			742,422	390,422	271	1.11	0.41	0.54		
377	479,303	210,000	8.0%	3,645	2,045,697	1.50	7.12			1,920,697	555,697	386	0.41	0.21	0.39		
378	117,432	120,000	13.1%	1,458	889,608	1.32	13.30			682,008	10,008	7	0.01	0.01	0.02		
379	304,248	180,000	16.2%	2,524	1,103,192	1.06	7.03			624,192	-411,808	-286	-0.40	-0.37	-0.95	**NEGATIVE**	3
380	22,978	120,000	111.5%	224	221,662	3.17	12.69			-35,338	-105,338	-73	-1.50	-0.98	-1.33	**NEGATIVE**	3
381	145,898	150,000	10.9%	1,842	1,361,542	3.77	11.81			1,078,042	717,042	498	1.99	0.52	1.24		
382	370,353	150,000	15.1%	1,599	195,087	0.18	3.49			471,087	-626,913	-435	-0.57	-0.63	-0.87	**NEGATIVE**	8
383	28,783	60,000	87.0%	395	72,457	0.31	10.58			-19,843	-251,843	-175	-1.09	-3.65	-0.79	**NEGATIVE**	4
384	167,259	150,000	16.1%	2,019	1,180,181	4.70	8.56			615,681	364,681	253	1.45	0.39	0.51		
385	1,891,753	300,000	4.9%	8,000	2,369,047	0.68	3.10			3,921,047	421,047	292	0.12	0.07	0.28		
386	89,346	120,000	19.2%	1,200	192,694	0.26	10.47			416,694	-326,306	-227	-0.44	-0.52	-0.67	**NEGATIVE**	2
387	48,718	90,000	16.2%	710	732,522	4.85	18.14			417,122	266,122	185	1.76	0.48	0.71		
388	22,273	120,000	45.7%	220	449,567	8.99	22.43			120,167	70,167	49	1.40	0.27	0.32		
389	1,421,030	300,000	4.8%	7,427	4,313,970	1.42	5.17			4,515,970	1,476,970	1,026	0.49	0.24	0.57		
390	57,407	90,000	35.8%	945	15,034	0.05	5.64			104,234	-204,766	-142	-0.66	-0.81	-0.95	**NEGATIVE**	3
391	618,025	270,000	12.2%	5,850	449,975	0.29	3.25			1,316,975	-243,025	-169	-0.16	-0.11	-0.38	**NEGATIVE**	8
392	1,565,540	300,000	7.7%	8,300	1,099,460	0.45	2.26			2,031,460	-405,540	-282	-0.17	-0.10	-0.31	**NEGATIVE**	11
393	1,367,339	240,000	14.8%	5,018	-703,339	-0.31	1.14	**NEGATIVE**	3	12,661	-2,243,339	-1,558	-0.99	-1.38	-3.12	**NEGATIVE**	3
394	42,784	90,000	29.1%	577	299,456	1.39	12.05			176,456	-39,544	-27	-0.18	-0.13	-0.23	**NEGATIVE**	3
395	82,206	120,000	15.6%	987	635,034	1.05	15.06			567,834	-35,166	-24	-0.06	-0.05	-0.06	**NEGATIVE**	4
396	1,151,845	540,000	8.9%	12,560	3,764,755	1.27	5.84			4,359,755	1,402,755	974	0.47	0.23	0.81		
397	104,605	120,000	18.2%	1,230	1,047,835	3.81	12.65			433,835	158,835	110	0.58	0.24	0.37		
398	43,138	90,000	193.8%	552	45,302	0.36	3.95			-86,698	-211,698	-147	-1.69	-4.56	-0.84	**NEGATIVE**	6
399	37,304	60,000	51.8%	432	105,136	0.59	7.59			18,436	-159,564	-111	-0.90	-1.38	-0.63	**NEGATIVE**	2
400	616,134	210,000	11.2%	3,190	1,164,306	0.81	4.22			1,047,306	-387,694	-269	-0.27	-0.21	-0.45	**NEGATIVE**	8
401	33,373	60,000	12.5%	494	987,867	8.59	33.05			385,067	270,067	188	2.35	0.56	0.63		
402	280,839	150,000	14.8%	2,079	381,721	0.70	3.31			580,221	33,221	23	0.06	0.03	0.18		
403	39,277	60,000	34.8%	400	209,163	0.88	11.41			73,163	-165,837	-115	-0.69	-0.96	-4.61	**NEGATIVE**	2
404	66,812	90,000	17.2%	738	736,628	1.28	19.65			366,628	-209,372	-145	-0.36	-0.40	-0.48	**NEGATIVE**	2
405	396,123	180,000	9.0%	3,019	2,219,617	2.31	8.03			1,423,587	461,587	321	0.48	0.23	0.27		
406	1,270,088	240,000	6.0%	4,328	2,207,712	1.14	3.26			2,487,712	550,712	382	0.28	0.14	0.48		

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
407	679,952	150,000	5.9%	2,117	1,637,488	1.19	4.42			1,731,988	360,988	251	0.26	0.14	0.33		
408	118,276	120,000	88.0%	1,500	54,164	0.15	3.53			-101,836	-464,836	-323	-1.28	-3.41	-0.92	**NEGATIVE**	3
409	23,133	60,000	44.9%	250	857	0.00	10.28			50,382	-186,618	-130	-0.79	-1.40	-1.08	**NEGATIVE**	2
410	36,089	60,000	129.2%	325	-138,449	-0.39	5.95	**NEGATIVE**	4	-49,649	-402,649	-280	-1.14	-8.67	-1.55	**NEGATIVE**	4
411	359,688	210,000	16.8%	3,535	617,312	0.61	4.52			681,312	-325,688	-226	-0.32	-0.26	-0.38	**NEGATIVE**	3
412	116,587	150,000	18.7%	1,549	1,120,853	3.69	12.22			535,853	231,853	161	0.76	0.29	0.40		
413	1,389,462	300,000	6.1%	8,330	2,188,538	0.81	3.51			3,215,538	523,538	364	0.19	0.11	0.52		
414	424,904	240,000	12.7%	4,950	1,598,096	1.47	6.31			1,225,096	140,096	97	0.13	0.07	0.24		
415	361,161	210,000	19.9%	3,437	324,239	0.35	3.43			483,639	-431,361	-300	-0.47	-0.41	-0.71	**NEGATIVE**	3
416	1,558,619	300,000	2.6%	6,976	8,460,181	2.12	7.99			9,524,581	5,534,581	3,843	1.39	0.49	2.21		
417	18,782	60,000	12.3%	260	671,658	3.84	45.08			408,658	233,658	162	1.34	0.48	0.54		
418	138,271	120,000	13.2%	1,135	777,169	1.18	10.36			652,169	-3,831	-3	-0.01	0.00	-0.01	**NEGATIVE**	4
419	162,842	150,000	20.6%	2,210	674,298	1.36	7.17			416,248	-77,752	-54	-0.16	-0.11	-0.18	**NEGATIVE**	6
420	59,853	90,000	9.8%	950	1,493,587	10.23	27.39			769,587	623,587	433	4.27	0.68	0.72		
421	106,005	120,000	20.0%	1,236	457,035	1.24	7.78			373,035	5,035	3	0.01	0.01	0.01		
422	112,359	90,000	15.8%	896	647,581	2.36	8.20			366,531	92,531	64	0.34	0.16	0.21		
423	216,866	120,000	7.5%	1,500	1,402,974	2.28	9.30			1,271,974	657,974	457	1.07	0.41	0.91		
424	358,274	210,000	25.4%	3,901	442,926	0.57	3.42			257,926	-524,074	-364	-0.67	-0.63	-1.04	**NEGATIVE**	2
425	54,509	90,000	20.6%	651	847,371	7.37	17.66			292,531	177,531	123	1.54	0.41	0.56		
426	237,132	150,000	9.3%	1,736	2,072,308	3.33	11.36			1,234,308	612,308	425	0.98	0.38	0.43		
427	36,540	60,000	12.4%	478	549,100	2.79	20.42			385,500	188,500	131	0.96	0.39	0.55		
428	1,265,568	300,000	5.4%	8,648	3,031,632	1.26	4.30			4,017,132	1,608,132	1,117	0.67	0.29	1.40		
429	129,166	150,000	25.6%	1,941	228,274	0.71	4.24			307,274	-12,726	-9	-0.04	-0.02	-0.06	**NEGATIVE**	8
430	437,502	180,000	14.9%	2,530	1,525,938	2.25	5.04			589,938	-88,062	-61	-0.13	-0.07	-0.09	**NEGATIVE**	3
431	282,583	120,000	16.2%	1,283	397,857	0.35	5.39			336,857	-788,143	-547	-0.70	-1.07	-1.82	**NEGATIVE**	4
432	105,198	120,000	26.5%	1,271	390,842	1.53	6.15			227,142	-28,858	-20	-0.11	-0.06	-0.10	**NEGATIVE**	3
433	511,103	210,000	18.6%	3,500	236,497	0.32	1.89			407,497	-322,503	-224	-0.44	-0.29	-0.66	**NEGATIVE**	10
434	87,334	90,000	49.6%	621	242,506	1.06	5.39			4,106	-223,894	-155	-0.98	-1.23	-0.50	**NEGATIVE**	2
435	7,626,625	1,080,000	5.2%	24,551	1,909,775	0.14	2.04			12,232,775	-1,439,225	-999	-0.11	-0.07	-0.48	**NEGATIVE**	6
436	16,118	120,000	258.4%	150	-38,678	-0.12	17.08	**NEGATIVE**	2	-89,678	-403,678	-280	-1.29	-8.69	-1.12	**NEGATIVE**	2
437	41,607	90,000	22.1%	650	317,433	1.35	13.30			274,833	38,833	27	0.16	0.10	0.17		
438	72,731	90,000	16.6%	815	917,709	4.39	15.49			378,709	169,709	118	0.81	0.31	0.59		
439	16,749	120,000	421.9%	175	-2,509	-0.04	4.03	**NEGATIVE**	3	-108,309	-178,309	-124	-2.55	-6.27	-1.03	**NEGATIVE**	3
440	1,318,963	540,000	8.9%	12,524	3,973,637	1.94	4.57			4,201,637	2,150,637	1,493	1.05	0.35	1.44		
441	96,121	150,000	28.0%	1,651	208,399	0.83	4.78			289,199	38,199	27	0.15	0.07	0.33		
442	96,664	120,000	38.6%	1,100	45,896	0.24	2.46			94,376	-97,624	-68	-0.51	-0.31	-1.61	**NEGATIVE**	3
443	1,386,183	540,000	8.5%	9,400	3,958,017	1.52	4.73			4,390,017	1,789,017	1,242	0.69	0.28	1.41		
444	146,588	150,000	20.1%	1,864	789,852	1.84	8.32			449,152	19,152	13	0.04	0.03	0.07		
445	2,606,202	960,000	10.6%	21,000	2,611,798	0.52	2.95			5,451,798	385,798	268	0.08	0.04	0.20		
446	48,471	90,000	18.3%	601	672,769	4.20	17.18			353,469	193,469	134	1.21	0.39	0.60		
447	1,250,637	540,000	11.0%	9,351	2,193,243	0.91	3.68			3,116,883	705,883	490	0.29	0.14	0.67		
448	28,021	60,000	10.3%	513	764,419	6.59	31.42			495,719	379,719	264	3.27	0.65	1.05		
449	29,576	60,000	66.3%	364	93,864	0.27	14.97			964	-348,036	-242	-1.00	-3.84	-0.81	**NEGATIVE**	2
450	91,999	120,000	17.5%	1,310	863,441	1.22	17.10			473,441	-236,559	-164	-0.33	-0.35	-0.47	**NEGATIVE**	1
451	136,188	150,000	49.0%	1,565	-111,228	-0.46	0.95	**NEGATIVE**	4	20,173	-219,828	-153	-0.92	-0.72	-3.47	**NEGATIVE**	4
452	78,597	90,000	19.9%	600	491,643	1.58	10.22			284,643	-27,357	-19	-0.09	-0.06	-0.09	**NEGATIVE**	10
453	65,570	90,000	14.3%	865	899,870	4.64	16.68			475,870	281,870	196	1.45	0.45	0.49		
454	50,755	120,000	66.1%	25	907,085	3.13	23.59			10,685	-279,315	-194	-0.96	-1.54	-0.24	**NEGATIVE**	6
455	1,083,419	300,000	6.4%	8,532	3,300,581	1.54	5.03			3,278,581	1,134,581	788	0.53	0.24	0.98		
456	439,148	210,000	13.3%	3,328	1,463,652	1.83	5.15			926,212	126,212	88	0.16	0.08	0.10		
457	9,462	120,000	258.4%	141	122,978	1.41	22.19			-83,022	-170,022	-118	-1.95	-3.66	-0.59	**NEGATIVE**	10
458	141,332	120,000	15.2%	1,258	409,108	0.58	7.93			528,508	-182,492	-127	-0.26	-0.23	-0.35	**NEGATIVE**	4
459	178,173	120,000	23.2%	1,065	539,427	1.11	5.76			218,427	-267,573	-186	-0.55	-0.52	-0.70	**NEGATIVE**	3
460	17,496	120,000	159.5%	214	418,744	6.98	27.36			-62,256	-122,256	-85	-2.04	-1.62	-0.23	**NEGATIVE**	10
461	547,207	240,000	8.8%	4,101	2,161,593	1.67	6.32			1,943,393	645,393	448	0.50	0.24	0.55		
462	106,836	120,000	12.7%	997	1,479,604	5.42	16.40			719,604	446,604	310	1.64	0.47	0.62		
463	993,114	300,000	6.4%	8,726	1,605,686	0.40	5.64			3,379,686	-614,314	-427	-0.15	-0.13	-0.28	**NEGATIVE**	1
464	134,626	90,000	25.5%	641	181,814	0.73	3.20			127,814	-121,186	-84	-0.49	-0.34	-0.84	**NEGATIVE**	3

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
465	55,426	90,000	21.7%	667	728,014	2.64	18.11			270,014	-5,986	-4	-0.02	-0.01	-0.02	**NEGATIVE**	2
466	437,064	240,000	18.3%	4,335	423,936	0.55	2.72			636,936	-130,064	-90	-0.17	-0.10	-0.26	**NEGATIVE**	8
467	83,471	90,000	15.8%	750	547,569	1.70	10.42			396,769	74,769	52	0.23	0.13	0.16		
468	34,708	60,000	129.2%	452	273,732	2.38	11.20			-48,268	-163,268	-113	-1.42	-3.52	-0.38	**NEGATIVE**	3
469	506,455	180,000	18.8%	2,304	156,785	0.17	2.11			268,985	-642,015	-446	-0.70	-0.67	-1.27	**NEGATIVE**	6
470	27,766	60,000	81.7%	286	93,574	0.59	9.11			-14,326	-173,626	-121	-1.09	-2.36	-0.67	**NEGATIVE**	3
471	181,642	150,000	17.9%	2,080	677,798	1.35	6.50			506,798	4,798	3	0.01	0.01	0.01		
472	434,874	240,000	18.2%	4,239	347,726	0.32	3.27			642,726	-432,274	-300	-0.40	-0.33	-0.86	**NEGATIVE**	11
473	1,020,532	210,000	8.6%	3,317	636,668	0.38	2.28			1,206,668	-481,332	-334	-0.29	-0.20	-0.63	**NEGATIVE**	6
474	2,573,899	1,080,000	7.5%	22,973	8,856,101	1.79	5.36			10,713,701	5,767,701	4,005	1.17	0.40	2.67		
475	7,657,125	3,150,000	12.3%	65,000	7,166,755	0.56	2.61			14,757,195	1,976,195	1,372	0.15	0.08	0.81		
476	1,110,670	540,000	10.2%	9,900	2,805,330	1.04	4.95			3,632,330	942,330	654	0.35	0.18	0.59		
477	2,223,789	270,000	3.8%	5,750	3,823,811	1.01	3.42			4,691,811	907,811	630	0.24	0.13	0.66		
478	991,323	540,000	8.4%	10,649	5,610,677	3.67	7.20			4,896,477	3,368,477	2,339	2.20	0.52	1.70		
479	4,930,040	1,650,000	9.6%	38,426	6,758,960	0.77	3.15			10,654,960	1,883,960	1,308	0.21	0.11	0.52		
480	62,247	90,000	22.7%	648	-585,607	-0.52	8.78	**NEGATIVE**	6	243,393	-888,607	-617	-0.78	-2.25	-3.43	**NEGATIVE**	6
481	248,019	150,000	13.3%	1,855	1,109,421	2.04	6.67			728,421	184,421	128	0.34	0.16	0.20		
482	43,571	90,000	25.5%	605	468,869	1.74	16.93			218,869	-50,131	-35	-0.19	-0.14	-0.23	**NEGATIVE**	2
483	296,847	240,000	27.8%	4,400	123,153	0.16	2.93			327,153	-420,847	-292	-0.56	-0.49	-0.84	**NEGATIVE**	2
484	59,971	90,000	9.0%	610	1,035,469	3.95	21.63			850,469	588,469	409	2.25	0.59	1.36		
485	6,951,552	2,940,000	8.5%	63,240	20,265,448	1.84	4.50			24,560,448	13,517,448	9,387	1.22	0.39	2.24		
486	2,957,706	1,500,000	11.8%	28,943	6,238,494	1.33	3.69			8,234,994	3,544,994	2,462	0.76	0.28	1.65		
487	12,893	120,000	181.9%	150	375,127	7.82	32.82			-66,923	-114,923	-80	-2.39	-1.74	-1.90	**NEGATIVE**	5
488	976,397	270,000	10.6%	5,709	231,203	0.13	2.03			1,311,403	-442,597	-307	-0.25	-0.17	-0.95	**NEGATIVE**	6
489	221,136	150,000	15.1%	2,045	462,304	0.62	5.47			620,304	-127,696	-89	-0.17	-0.13	-0.24	**NEGATIVE**	3
490	1,597,689	630,000	12.9%	13,300	1,324,311	0.49	2.53			2,652,111	-69,889	-49	-0.03	-0.01	-0.05	**NEGATIVE**	6
491	486,127	240,000	11.4%	4,809	983,473	0.74	4.76			1,374,473	44,473	31	0.03	0.02	0.06		
492	133,060	90,000	9.1%	800	1,298,380	2.56	13.58			768,380	260,380	181	0.51	0.26	0.36		
493	682,248	150,000	8.2%	1,549	1,425,192	1.56	3.43			1,000,692	85,692	60	0.09	0.05	0.12		
494	20,682	60,000	129.2%	313	165,158	1.53	13.21			-34,242	-142,242	-99	-1.32	-3.06	-0.47	**NEGATIVE**	3
495	20,123	60,000	129.2%	317	348,317	2.74	23.62			-33,683	-160,683	-112	-1.27	-3.46	-0.32	**NEGATIVE**	2
496	237,907	150,000	9.5%	1,820	1,287,533	2.15	7.93			1,197,533	599,533	416	1.00	0.38	1.04		
497	29,554	60,000	11.5%	351	1,038,886	3.86	44.25			433,886	164,886	115	0.61	0.32	0.38		
498	57,265	90,000	193.8%	743	535,175	3.32	12.16			-100,825	-261,825	-182	-1.63	-5.64	-0.33	**NEGATIVE**	11
499	1,856,024	630,000	8.6%	14,000	2,816,976	0.73	3.60			4,803,976	934,976	649	0.24	0.13	0.59		
500	1,215,202	150,000	13.8%	1,765	3,238	0.01	0.51			-274,762	-885,762	-615	-1.45	-0.81	-1.03	**NEGATIVE**	6
501	298,308	150,000	5.6%	2,108	3,181,132	4.31	13.14			2,208,132	1,470,132	1,021	1.99	0.55	1.28		
502	10,348	120,000	216.5%	170	235,092	1.84	35.09			-74,908	-202,908	-141	-1.59	-3.66	-0.47	**NEGATIVE**	4
503	33,123	60,000	14.8%	525	340,317	1.24	18.55			313,317	39,317	27	0.14	0.10	0.14		
504	227,909	120,000	9.6%	1,200	905,131	1.17	7.37			899,131	125,131	87	0.16	0.10	0.18		
505	217,361	180,000	19.2%	2,351	665,679	1.00	6.14			540,979	-128,021	-89	-0.19	-0.14	-0.47	**NEGATIVE**	2
506	51,613	60,000	14.6%	376	570,227	5.18	13.18			300,227	190,227	132	1.73	0.46	0.83		
507	44,576	120,000	62.7%	98	143,864	1.56	5.29			26,764	-65,236	-45	-0.71	-0.34	-0.53	**NEGATIVE**	1
508	675,330	180,000	3.7%	2,465	3,711,710	2.18	8.01			3,955,710	2,255,710	1,566	1.33	0.47	2.01		
509	2,435,406	960,000	8.0%	20,000	6,958,335	1.54	4.72			8,541,961	4,015,961	2,789	0.89	0.34	1.86		
510	128,324	60,000	15.5%	514	252,316	1.03	3.87			198,316	-45,684	-32	-0.19	-0.12	-0.18	**NEGATIVE**	2
511	130,423	120,000	34.0%	1,200	458,017	1.95	5.31			102,017	-132,983	-92	-0.57	-0.38	-0.62	**NEGATIVE**	8
512	53,207	90,000	23.2%	834	808,233	4.81	18.35			245,233	77,233	54	0.46	0.20	0.27		
513	98,288	120,000	28.3%	1,100	787,152	3.48	10.31			206,152	-19,848	-14	-0.09	-0.05	-0.07	**NEGATIVE**	2
514	174,063	180,000	17.5%	2,350	1,393,977	3.61	10.23			672,477	286,477	199	0.74	0.28	0.66		
515	38,166	90,000	23.1%	550	403,674	2.35	15.08			262,074	90,074	63	0.52	0.23	0.31		
516	61,615	90,000	19.9%	715	552,825	2.93	12.04			299,825	110,825	77	0.59	0.25	0.31		
517	120,406	90,000	13.3%	750	440,534	0.36	13.94			466,034	-772,066	-536	-0.62	-1.14	-0.68	**NEGATIVE**	8
518	5,297	120,000	354.6%	83	16,543	0.92	6.52			-91,457	-109,457	-76	-6.08	-3.23	-0.89	**NEGATIVE**	8

	Analysis 4																
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis							
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection as % of Firm Capacity	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Available Capacity for Consumption, Firm Capacity Reserves (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Spare Firm Capacity as Ratio to Maximum Day Demand	Spare Firm Capacity as Ratio to Total Firm Capacity	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
			Ave			Ave	Ave					Ave	Ave	Ave	Ave		
			49%			2.18	9.94					167.22	0.12	-1.65	0.06		
			Max			Max	Max	25	# deficit			Max	Max	Max	Max	241	# deficit
			2667%			35.34	115.86	4.8%	% of systems			9,387.12	5.60	0.74	4.02	46.5%	% of systems
			Median			Median	Median	0.2%	deviation			Median	Median	Median	Median	1.9%	deviation
			15%			1.48	7.13					27.14	0.07	0.04	0.08		
			Min			Min	Min					Min	Min	Min	Min		
			2%			-1.33	-5.01					-6,241.91	-6.08	-283.06	-4.61		
							85% Effective	26	# deficit						85% Effective	251	# deficit
								5.0%	% of systems							48.5%	% of systems

APPENDIX H: ANALYSIS 5 RESULTS

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
1	0	2,300	120	1,956	1,671,220	2.70	7.45			300,560	274,660	191		0.83		
2	0	2,300	120	1,819	2,181,340	3.23	8.67			223,758	194,887	135		0.26		
3	0	900	120	536	632,390	5.45	25.51			24,181	16,958	12	225.00	0.06		
4	0	1,800	120	1,140	966,840	4.60	13.73			42,778	32,420	23	440.00	0.12		
5	0	3,200	120	3,656	1,851,400	2.74	9.47			232,171	198,150	138		0.37		
6	0	1,400	120	860	1,210,040	5.87	17.98			134,556	123,953	86		0.26		
7	0	6,300	180	14,882	10,338,700	3.51	8.60			2,704,923	2,529,375	1,757		1.25		
8	0	1,400	120	863	687,605	3.03	10.49			-2,435	-14,088	-10	285.76	-0.04	NEGATIVE	3
9	0	900	120	447	176,540	0.68	9.92			-44,040	-61,963	-43	293.03	-0.17	NEGATIVE	1
10	0	1,400	120	765	377,840	3.34	9.57			-130,755	-135,897	-94	357.29	-0.79	NEGATIVE	3
11	0	4,500	120	6,665	913,940	1.00	2.91			-67,298	-91,130	-63	400.45	-0.33	NEGATIVE	6
12	0	2,700	120	2,800	1,171,020	1.91	5.80			23,956	-1,547	-1	613.75	0.00	NEGATIVE	1
13	0	1,800	120	983	1,492,440	5.92	22.14			-94,047	-108,480	-75	651.06	-0.18	NEGATIVE	2
14	0	4,500	120	8,600	2,427,100	1.62	3.78			317,299	278,800	194		0.37		
15	0	2,300	120	2,194	3,897,540	2.27	5.52			1,182,482	1,123,987	781		1.30		
16	0	900	120	525	-19,460	-0.04	7.84	NEGATIVE	1	-68,012	-104,713	-73	372.72	-0.24	NEGATIVE	1
17	0	1,400	120	798	1,215,840	5.13	22.21			48,668	34,370	24	520.00	0.08		
18	0	1,400	120	565	378,140	1.01	15.05			69,790	42,867	30	335.00	0.09		
19	0	7,200	240	17,777	8,139,900	1.29	3.94			2,070,601	1,629,850	1,132		0.91		
20	0	1,800	120	1,102	522,040	2.01	10.54			79,737	64,253	45		0.74		
21	0	1,800	120	1,450	1,605,440	2.91	7.08			223,150	202,603	141		0.40		
22	0	1,400	120	623	489,040	3.08	8.83			-44,393	-51,530	-36	385.78	-0.10	NEGATIVE	2
23	0	900	120	296	891,140	7.75	26.40			544	-5,863	-4	344.61	-0.01	NEGATIVE	3
24	0	3,200	120	3,301	2,316,800	3.00	9.01			127,431	91,667	64	1050.00	0.08		
25	0	1,400	120	648	989,040	3.13	13.15			80,349	62,287	43	300.00	0.14		
26	0	1,800	120	1,400	731,240	2.16	8.03			-168,422	-185,487	-129	519.85	-0.37	NEGATIVE	3
27	0	5,400	180	11,188	4,160,600	1.07	3.64			1,367,467	1,156,925	803		0.73		
28	0	1,800	120	1,127	1,137,920	3.81	19.81			426,315	407,443	283		1.86		
29	0	3,200	120	3,319	2,823,400	1.05	4.05			62,474	-47,450	-33	1248.52	-0.04	NEGATIVE	6
30	0	1,400	120	571	397,680	2.33	14.62			8,878	-2,130	-1	257.48	-0.01	NEGATIVE	9
31	0	1,400	120	778	1,424,760	3.70	12.29			72,512	52,697	37	560.00	0.07		
32	0	900	120	446	602,540	3.12	28.49			-18,707	-32,463	-23	333.82	-0.11	NEGATIVE	3
33	0	6,300	180	15,464	6,069,700	2.11	4.32			947,286	846,000	588		0.42		
34	0	2,300	120	1,887	2,002,140	1.93	12.62			53,525	-13,047	-9	811.15	-0.01	NEGATIVE	4
35	0	2,300	120	1,947	1,010,140	2.49	7.73			11,867	-6,630	-5	508.37	-0.02	NEGATIVE	4
36	0	6,300	180	13,500	2,413,900	0.63	5.12			14,335	-313,975	-218	1218.04	-0.22	NEGATIVE	10
37	0	1,400	120	875	735,640	2.65	6.76			31,427	20,753	14	300.00	0.05		
38	0	1,400	120	976	909,240	5.14	17.12			42,531	33,070	23	420.00	0.12		
39	0	4,000	120	5,371	4,087,000	2.47	7.21			340,116	268,667	187	1400.00	0.17		
40	0	1,400	120	688	579,640	4.05	12.30			-49,475	-56,497	-39	466.68	-0.44	NEGATIVE	2
41	0	1,400	120	901	1,155,040	2.16	12.93			106,229	72,537	50	500.00	0.10		
42	0	1,800	120	1,218	1,259,640	1.58	4.67			167,404	137,787	96	650.00	0.19		
43	0	1,800	120	1,374	997,640	2.34	14.86			-1,862	-29,380	-20	529.15	-0.06	NEGATIVE	1
44	0	3,200	120	3,608	2,131,800	2.30	5.66			488,977	456,917	317		0.91		
45	0	1,800	120	1,231	1,382,240	2.08	5.23			306,524	283,703	197		0.39		
46	0	1,400	120	802	1,084,840	6.20	16.86			206,112	197,757	137		0.69		
47	0	3,200	120	3,364	1,540,360	2.89	6.86			755,899	736,663	512		4.37		
48	0	1,400	120	770	310,440	1.89	9.26			-82,150	-91,547	-64	323.57	-0.24	NEGATIVE	1
49	0	1,400	120	650	1,040,334	3.87	27.33			21,172	2,748	2	420.00	0.01		
50	0	900	120	459	429,540	4.17	15.60			-20,726	-26,463	-18	318.38	-0.06	NEGATIVE	2
51	0	1,800	120	1,450	1,485,440	4.66	17.92			111,131	92,937	65	500.00	0.17		
52	0	3,200	120	3,228	3,133,240	4.98	12.88			713,784	685,703	476		0.79		
53	0	900	120	339	253,540	2.24	13.83			24,912	17,703	12	150.00	0.08		
54	0	1,800	120	1,043	385,840	1.14	6.29			-489	-19,130	-13	343.28	-0.04	NEGATIVE	3
55	0	1,400	120	672	325,240	2.14	12.83			-61,180	-70,747	-49	255.07	-0.55	NEGATIVE	1
56	0	1,400	120	872	877,590	8.20	13.12			-53,160	-55,822	-39	352.86	-0.18	NEGATIVE	2
57	0	2,700	120	2,937	1,362,060	0.90	3.37			37,885	-16,957	-12	783.20	-0.02	NEGATIVE	6
58	0	1,400	120	598	1,203,040	2.18	8.38			-10,149	-38,763	-27	466.92	-0.06	NEGATIVE	3
59	0	2,700	120	2,692	836,140	1.95	5.54			-210,894	-227,630	-158	667.76	-0.45	NEGATIVE	3

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
60	0	3,200	120	3,165	1,719,840	2.67	8.92			190,431	158,853	110	620.00	0.18		
61	0	250	120	140	1,441,940	0.36	1.77			16,930	-60,372	-42	1651.60	-0.03	**NEGATIVE**	8
62	0	8,100	240	21,900	14,942,240	1.84	5.75			4,480,373	3,796,357	2,636		2.78		
63	0	1,400	120	789	1,009,640	3.94	17.94			38,642	23,187	16	470.00	0.06		
64	0	6,300	180	12,741	12,979,700	3.51	11.35			1,976,240	1,697,250	1,179		0.62		
65	0	1,400	120	561	491,040	1.40	15.12			-103,522	-128,130	-89	505.71	-0.44	**NEGATIVE**	5
66	0	900	120	256	228,478	3.69	14.66			-17,067	-20,582	-14	144.29	-0.11	**NEGATIVE**	1
67	0	900	120	495	345,860	1.52	10.03			-33,150	-47,380	-33	211.47	-0.19	**NEGATIVE**	5
68	0	250	120	80	552,290	8.91	44.40			196,757	192,743	134		0.54		
69	0	5,400	180	9,958	4,061,600	0.74	4.93			2,395,956	1,955,375	1,358		1.23		
70	0	2,300	120	1,881	1,169,140	1.92	5.00			369,459	348,287	242		0.64		
71	0	900	120	438	702,540	3.21	14.10			-50,025	-62,830	-44	718.16	-0.44	**NEGATIVE**	10
72	0	1,800	120	1,352	1,750,640	3.40	19.14			119,255	86,203	60	400.00	0.15		
73	0	1,400	120	779	2,368,040	3.28	16.47			124,592	80,137	56	1000.00	0.06		
74	0	1,800	120	1,101	874,640	1.64	7.93			165,327	135,703	94		0.31		
75	0	2,300	120	1,573	1,233,340	2.65	7.90			84,203	63,370	44	480.00	0.10		
76	0	2,300	120	1,930	1,073,140	2.88	9.61			70,984	52,520	36	500.00	0.15		
77	0	1,400	120	640	228,840	1.36	6.76			-100,774	-109,880	-76	296.31	-0.35	**NEGATIVE**	3
78	0	1,400	120	703	451,840	4.15	10.25			-82,440	-86,963	-60	380.39	-0.19	**NEGATIVE**	3
79	0	1,800	120	1,005	739,640	3.63	12.46			-114,191	-124,880	-87	386.72	-0.29	**NEGATIVE**	3
80	0	1,800	120	1,144	1,192,640	1.84	9.21			112,450	75,037	52	650.00	0.13		
81	0	900	120	263	671,540	10.33	35.46			-6,411	-10,097	-7	258.76	-0.04	**NEGATIVE**	2
82	0	5,400	180	10,770	3,978,000	1.59	4.41			448,122	319,175	222		0.30		
83	0	2,300	120	1,887	1,267,140	2.05	9.25			122,627	88,037	61	400.00	0.17		
84	0	1,400	120	711	616,240	2.10	8.27			-99,953	-115,280	-80	1000.35	-1.00	**NEGATIVE**	3
85	0	900	120	306	276,300	1.95	7.56			-33,292	-40,513	-28	257.13	-0.12	**NEGATIVE**	3
86	0	2,300	120	1,931	1,299,140	2.03	7.24			211,798	180,787	126		0.25		
87	0	3,200	120	3,764	2,158,800	1.74	4.80			655,003	610,500	424		0.85		
88	0	6,300	180	12,925	5,882,700	0.69	3.93			1,727,508	1,116,375	775		0.62		
89	0	900	120	509	697,340	1.15	18.58			29,960	-14,930	-10	582.33	-0.04	**NEGATIVE**	8
90	0	1,800	120	1,061	455,640	0.34	2.63			-32,440	-86,547	-60	672.12	-0.12	**NEGATIVE**	8
91	0	1,800	120	1,365	1,347,640	2.57	14.69			4,502	-28,547	-20	620.69	-0.03	**NEGATIVE**	2
92	0	2,300	120	1,876	2,708,140	4.40	13.88			40,170	8,870	6	1550.00	0.01		
93	0	3,600	120	4,567	4,056,000	4.04	11.58			340,398	293,133	204		0.41		
94	0	900	120	385	2,519,740	2.48	11.68			247,909	188,620	131	980.00	0.17		
95	0	900	120	440	626,540	3.23	25.32			-20,580	-34,047	-24	523.64	-0.05	**NEGATIVE**	1
96	0	900	120	435	402,340	1.56	14.54			67,436	49,720	35	320.00	0.11		
97	0	2,300	120	1,600	430,740	2.01	5.40			5,174	-2,713	-2	67.04	-0.03	**NEGATIVE**	2
98	0	1,400	120	852	614,040	0.48	6.35			137,410	56,287	39	600.00	0.08		
99	0	1,800	120	1,155	954,240	2.59	11.17			-31,955	-52,830	-37	372.69	-0.15	**NEGATIVE**	1
100	0	900	120	367	572,140	1.78	5.18			-59,878	-72,313	-50	505.72	-0.26	**NEGATIVE**	2
101	0	3,600	120	4,748	2,663,400	3.38	6.69			356,031	333,417	232		0.46		
102	0	1,400	120	714	1,090,040	4.16	22.48			43,108	26,287	18	500.00	0.06		
103	0	1,800	120	1,390	404,640	0.66	9.59			57,256	14,870	10	400.00	0.10		
104	0	3,600	120	4,152	2,645,600	3.34	9.34			173,943	138,600	96	1100.00	0.13		
105	0	900	120	500	568,540	9.80	25.97			-64,890	-67,713	-47	447.02	-0.12	**NEGATIVE**	2
106	0	2,300	120	1,958	826,140	1.42	9.04			-23,338	-58,713	-41	567.96	-0.14	**NEGATIVE**	1
107	0	1,800	120	1,041	937,640	2.93	9.49			34,076	18,453	13	400.00	0.04		
108	0	3,200	120	3,100	1,144,640	1.34	4.47			121,238	87,187	61	600.00	0.15		
109	0	2,300	120	2,156	2,323,740	6.37	14.48			174,244	159,303	111	710.00	0.17		
110	0	2,300	120	1,983	1,606,140	0.83	5.93			124,416	13,037	9	750.00	0.01		
111	0	250	120	176	248,990	1.14	5.47			112,389	101,270	70		2.34		
112	0	900	120	477	476,540	4.22	22.95			-15,521	-22,797	-16	221.11	-0.11	**NEGATIVE**	3
113	0	900	120	477	805,140	12.03	39.54			-72,968	-76,705	-53	424.57	-0.21	**NEGATIVE**	5
114	0	1,400	120	621	1,660,840	6.20	30.55			29,659	12,587	9	820.00	0.02		
115	0	5,400	180	12,000	1,787,000	0.99	4.53			-148,791	-275,750	-191	929.13	-0.26	**NEGATIVE**	6
116	0	2,300	120	1,596	1,041,140	3.69	12.79			-152,501	-167,380	-116	666.05	-0.33	**NEGATIVE**	3
117	0	2,700	120	2,235	1,376,940	1.95	7.06			251,561	217,370	151		0.30		
118	0	2,300	120	1,617	1,987,140	4.91	13.98			392,359	372,870	259		0.74		

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
119	0	4,500	120	7,997	3,401,500	2.34	5.68			336,807	286,833	199	1600.00	0.23		
120	0	4,500	120	8,128	4,900,500	2.49	6.84			1,650,282	1,570,083	1,090		1.82		
121	0	2,300	120	2,000	1,467,940	3.31	8.62			42,829	24,320	17	560.00	0.03		
122	0	7,200	240	20,332	2,802,600	0.41	2.65			566,311	36,300	25	1200.00	0.03		
123	0	3,200	120	3,518	-358,200	-0.20	2.67	NEGATIVE	8	-420,126	-525,417	-365	1364.87	-0.36	NEGATIVE	8
124	0	1,800	120	1,038	548,040	1.51	12.24			25,110	987	1	275.00	0.00		
125	0	900	120	266	383,540	4.85	47.96			-16,884	-22,663	-16	265.74	-0.06	NEGATIVE	5
126	0	3,200	120	3,882	1,449,200	1.83	4.64			118,182	92,567	64	440.00	0.20		
127	0	1,400	120	834	474,440	1.61	10.29			70,095	51,820	36	200.00	0.22		
128	0	2,300	120	1,716	795,580	1.80	6.74			12,441	-9,030	-6	379.31	-0.02	NEGATIVE	6
129	0	250	120	150	210,910	1.90	11.46			23,340	16,430	11	100.00	0.13		
130	0	1,400	120	670	384,040	0.67	6.95			30,663	-5,547	-4	279.24	-0.02	NEGATIVE	4
131	0	900	120	442	214,640	0.80	17.44			69,819	49,895	35	195.00	0.18		
132	0	2,300	120	1,968	2,311,140	3.50	13.47			237,337	200,720	139		0.28		
133	0	2,300	120	1,728	815,740	1.66	8.34			58,464	30,603	21	395.00	0.08		
134	0	1,800	120	1,374	1,705,640	2.26	10.06			99,753	57,287	40	950.00	0.11		
135	0	900	120	447	159,940	3.14	6.90			-63,628	-65,330	-45	155.37	-0.41	NEGATIVE	3
136	0	3,200	120	3,806	1,788,000	1.42	4.89			425,346	372,193	258		0.64		
137	0	12,600	420	61,150	29,259,320	1.57	5.14			13,634,770	10,927,477	7,589		3.99		
138	0	1,800	120	1,451	567,240	1.68	9.87			-4,524	-25,047	-17	187.96	-0.14	NEGATIVE	4
139	0	3,600	120	4,936	3,493,400	4.55	10.68			344,756	314,083	218		0.26		
140	0	900	120	275	745,740	5.70	18.72			170,217	163,220	113		1.13		
141	0	1,400	120	635	371,840	3.91	11.20			-24,352	-28,797	-20	144.00	-0.20	NEGATIVE	2
142	0	1,800	120	1,056	3,212,440	8.59	22.76			414,791	396,753	276		0.45		
143	0	4,500	120	7,500	3,028,500	1.35	4.34			491,955	405,817	282		0.35		
144	0	1,400	120	810	701,240	3.94	13.67			-80,238	-89,713	-62	515.28	-0.36	NEGATIVE	6
145	0	2,700	120	2,844	943,740	2.04	4.77			41,567	27,537	19	450.00	0.08		
146	0	1,400	120	841	2,100,240	9.77	36.02			156,764	144,203	100	600.00	0.17		
147	0	2,300	120	1,611	1,746,140	3.90	17.23			70,209	43,487	30	750.00	0.05		
148	0	900	120	496	157,540	1.45	6.55			-66,270	-71,963	-50	199.97	-0.33	NEGATIVE	3
149	0	900	120	536	583,540	4.35	21.29			157,811	149,453	104		1.04		
150	0	3,200	120	3,487	1,806,400	2.41	6.49			279,210	249,667	173		0.32		
151	0	900	120	260	189,140	3.00	12.34			-64,583	-68,130	-47	187.31	-0.34	NEGATIVE	5
152	0	900	120	504	391,740	1.34	15.84			33,417	12,603	9	200.00	0.05		
153	0	900	120	302	79,540	0.11	8.94			-70,398	-123,463	-86	610.74	-0.16	NEGATIVE	8
154	0	1,800	120	1,100	504,940	2.16	8.39			22,181	9,995	7	170.00	0.04		
155	0	2,700	120	2,378	1,902,740	2.90	10.64			76,071	41,453	29	1000.00	0.06		
156	0	900	120	300	149,540	1.05	18.42			-32,699	-43,213	-30	105.01	-0.40	NEGATIVE	4
157	0	6,300	180	15,485	5,290,700	1.28	4.66			737,704	474,625	330		0.27		
158	0	2,300	120	1,809	2,443,340	4.59	16.62			26,904	-2,513	-2	1255.13	0.00	NEGATIVE	3
159	0	9,900	300	37,757	15,784,900	1.93	4.31			6,684,874	6,140,375	4,264		5.33		
160	0	2,300	120	1,839	2,007,260	1.38	5.63			818,708	748,797	520		1.16		
161	0	1,400	120	768	1,423,240	8.52	28.40			75,554	66,303	46	500.00	0.10		
162	0	900	120	320	239,540	1.16	11.11			-66,229	-80,130	-56	330.65	-0.20	NEGATIVE	1
163	0	5,400	180	12,046	5,761,600	1.75	4.69			969,409	800,000	556		0.46		
164	0	1,800	120	983	179,040	1.39	7.24			-84,424	-91,630	-64	173.63	-0.58	NEGATIVE	3
165	0	1,800	120	1,482	1,456,040	3.14	12.37			65,783	40,053	28	580.00	0.05		
166	0	4,500	120	7,012	1,685,500	0.63	5.64			865,386	705,833	490		0.49		
167	0	1,800	120	1,039	1,826,640	2.88	12.66			106,913	70,203	49	450.00	0.12		
168	0	2,300	120	1,975	1,173,140	2.34	8.65			103,975	78,287	54	450.00	0.12		
169	0	900	120	299	963,140	7.41	52.44			-10,317	-19,413	-13	373.67	-0.04	NEGATIVE	2
170	0	1,800	120	1,427	1,121,640	1.84	8.97			389,043	354,453	246		0.82		
171	0	1,400	120	567	831,040	3.25	20.29			-36,444	-53,313	-37	687.02	-0.06	NEGATIVE	1
172	0	900	120	264	240,540	2.61	11.96			-38,197	-43,547	-30	205.24	-0.17	NEGATIVE	3
173	0	2,300	120	2,060	1,011,140	1.97	7.11			336,269	311,453	216		0.72		
174	0	6,300	180	15,864	3,713,500	1.03	4.48			910,935	664,975	462		0.56		
175	0	1,800	120	1,356	2,774,640	2.95	14.82			352,727	295,287	205		0.27		
176	0	900	120	436	673,540	7.24	22.43			-39,327	-44,230	-31	280.72	-0.12	NEGATIVE	8

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
177	0	900	120	382	317,540	1.30	15.65			6,125	-11,297	-8	307.84	-0.03	**NEGATIVE**	11
178	0	1,800	120	1,102	2,333,640	10.33	26.28			-145,996	-156,713	-109	1835.31	-0.31	**NEGATIVE**	3
179	0	250	120	150	74,590	1.18	10.83			14,061	9,870	7	60.00	0.11		
180	0	1,400	120	928	520,040	4.91	8.46			-105,047	-107,713	-75	274.80	-0.37	**NEGATIVE**	2
181	0	1,400	120	803	247,040	0.76	12.74			-29,410	-52,597	-37	186.53	-0.24	**NEGATIVE**	2
182	0	5,400	180	11,098	5,059,880	2.03	5.35			272,081	136,810	95	1000.00	0.10		
183	0	7,200	240	19,723	5,740,800	1.69	4.54			-557,247	-787,333	-547	2146.76	-0.34	**NEGATIVE**	3
184	0	900	120	385	494,940	7.73	23.24			-52,285	-55,613	-39	218.62	-0.21	**NEGATIVE**	3
185	0	1,800	120	1,406	421,640	0.57	7.39			84,197	35,487	25	240.00	0.12		
186	0	250	120	207	540,190	10.19	29.45			33,242	30,503	21	225.00	0.14		
187	0	6,300	180	15,128	6,907,700	1.30	7.91			2,079,245	1,607,500	1,116		0.53		
188	0	1,800	120	1,064	595,640	0.68	9.76			44,532	-16,047	-11	462.54	-0.03	**NEGATIVE**	1
189	0	3,600	120	5,064	1,877,200	2.46	5.80			156,426	130,733	91		0.25		
190	0	1,800	120	1,079	697,640	1.57	8.55			141,998	116,120	81		1.61		
191	0	900	120	534	273,700	2.76	8.94			-8,876	-13,650	-9	95.07	-0.12	**NEGATIVE**	10
192	0	3,200	120	3,500	1,003,040	1.52	8.42			478,077	439,687	305		1.56		
193	0	2,300	120	1,614	763,340	1.57	9.33			-69,842	-99,263	-69	513.39	-0.22	**NEGATIVE**	4
194	0	900	120	462	229,540	0.91	10.51			-66,707	-83,963	-58	358.31	-0.19	**NEGATIVE**	4
195	0	1,400	120	950	859,040	2.85	9.85			59,910	44,637	31	350.00	0.10		
196	0	5,400	180	11,419	3,521,000	1.24	3.73			355,045	212,550	148	1250.00	0.21		
197	0	4,500	120	8,219	4,297,300	1.86	6.74			1,337,595	1,226,967	852		0.77		
198	0	900	120	385	359,540	2.61	15.14			-52,118	-60,880	-42	342.28	-0.14	**NEGATIVE**	9
199	0	900	120	251	2,151,840	36.66	120.07			-64,414	-67,772	-47	1547.06	-0.03	**NEGATIVE**	2
200	0	900	120	407	248,940	2.39	10.93			-58,370	-64,347	-45	261.71	-0.74	**NEGATIVE**	2
201	0	2,300	120	2,193	1,859,140	2.52	6.49			427,510	399,443	277		0.69		
202	0	1,800	120	1,171	1,130,040	8.83	14.10			-7,315	-10,547	-7	445.62	-0.02	**NEGATIVE**	3
203	0	1,400	120	799	691,040	4.40	15.47			19,552	11,037	8	350.00	0.08		
204	0	1,800	120	1,176	449,920	1.24	9.02			-76,272	-99,010	-69	551.09	-0.59	**NEGATIVE**	2
205	0	1,800	120	1,325	1,019,240	1.48	9.20			269,030	227,020	158		0.38		
206	0	900	120	443	161,040	0.93	6.79			-37,742	-48,130	-33	208.42	-0.19	**NEGATIVE**	1
207	0	2,300	120	1,950	778,140	0.81	7.57			-25,036	-85,963	-60	1059.70	-0.06	**NEGATIVE**	12
208	0	900	120	450	722,940	3.87	12.77			71,883	62,237	43	275.00	0.18		
209	0	900	120	256	956,020	6.73	58.92			-24,893	-35,173	-24	556.28	-0.11	**NEGATIVE**	2
210	0	4,500	120	6,984	3,137,300	1.20	7.04			212,549	63,500	44	1270.00	0.04		
211	0	3,200	120	3,732	2,057,500	1.35	6.51			341,515	260,413	181		0.33		
212	0	2,700	120	2,415	752,940	1.98	6.05			-35,891	-52,030	-36	338.71	-0.13	**NEGATIVE**	1
213	0	6,300	180	14,170	4,436,900	1.30	4.33			1,551,577	1,351,150	938		0.63		
214	0	6,300	180	14,187	5,188,700	1.09	5.19			1,839,617	1,484,625	1,031		1.15		
215	0	1,800	120	1,146	789,840	2.62	11.28			162,465	145,437	101		0.46		
216	0	250	120	170	483,290	14.87	34.95			-8,610	-10,088	-7	347.01	-0.02	**NEGATIVE**	4
217	0	1,800	120	1,244	1,074,840	2.86	12.59			174,120	152,387	106		0.32		
218	0	1,800	120	1,298	758,640	1.55	8.85			-63,833	-92,830	-64	468.76	-0.17	**NEGATIVE**	6
219	0	250	120	150	205,190	1.75	20.78			10,528	2,070	1	100.00	0.01		
220	0	1,800	120	997	902,840	6.69	14.88			55,809	50,370	35	280.00	0.14		
221	0	1,400	120	600	435,840	0.81	17.53			-11,096	-51,063	-35	406.41	-0.16	**NEGATIVE**	4
222	0	250	120	200	787,190	21.87	53.30			-4,167	-5,880	-4	554.08	-0.01	**NEGATIVE**	1
223	0	4,000	120	6,034	2,878,200	2.13	5.56			249,151	199,850	139	1100.00	0.16		
224	0	12,600	420	61,110	18,893,400	0.87	3.01			9,685,627	7,280,250	5,056		1.20		
225	0	4,500	120	7,541	5,463,500	2.22	6.64			1,505,280	1,399,783	972		1.02		
226	0	2,300	120	1,901	1,062,940	1.92	8.23			106,164	76,437	53	525.00	0.17		
227	0	900	120	440	152,740	1.26	6.43			-56,229	-62,763	-44	137.80	-0.97	**NEGATIVE**	2
228	0	2,700	120	2,622	2,088,940	2.16	12.56			1,067,061	1,006,903	699		2.50		
229	0	6,300	180	13,430	3,688,700	1.67	4.01			427,404	335,600	233		0.39		
230	0	900	120	400	68,540	0.19	14.43			-42,895	-70,963	-49	299.28	-0.20	**NEGATIVE**	4
231	0	900	120	450	869,140	10.73	28.84			8,175	4,170	3	350.00	0.01		
232	0	3,200	120	3,345	2,429,200	2.13	8.00			465,307	407,250	283		0.63		
233	0	2,700	120	2,801	3,047,740	4.86	11.30			180,021	154,870	108	850.00	0.13		

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
234	0	3,200	120	3,540	4,268,800	6.10	11.45			182,844	160,667	112	1150.00	0.11		
235	0	900	120	500	772,340	5.99	27.18			-6,243	-14,230	-10	310.98	-0.04	NEGATIVE	11
236	0	4,000	120	6,000	3,834,640	1.49	4.85			739,625	635,553	441		0.33		
237	0	900	120	430	881,140	12.59	39.09			-1,968	-5,773	-4	355.61	-0.02	NEGATIVE	5
238	0	2,300	120	2,010	-336,860	-0.13	1.83	NEGATIVE	6	-150,663	-261,713	-182	1531.75	-0.13	NEGATIVE	6
239	0	4,000	120	5,400	1,492,000	2.47	5.87			-179,749	-200,333	-139	958.68	-0.28	NEGATIVE	10
240	0	11,700	360	53,000	24,750,060	0.91	4.34			7,461,216	3,642,840	2,530		1.03		
241	0	3,200	120	3,826	2,162,000	2.87	7.40			138,760	108,767	76	800.00	0.15		
242	0	1,400	120	780	783,040	2.47	17.26			-27,991	-49,097	-34	482.96	-0.14	NEGATIVE	2
243	0	250	120	25	1,495,510	4.53	12.51			205,157	189,820	132	568.00	0.24		
244	0	1,800	120	1,470	2,566,040	0.93	4.50			499,706	367,987	256		0.29		
245	0	4,500	120	7,107	5,383,150	1.88	6.15			1,724,810	1,598,025	1,110		1.11		
246	0	2,700	120	2,381	2,052,740	2.08	6.91			88,004	42,537	30	925.00	0.03		
247	0	4,000	120	5,137	5,813,000	4.23	9.11			666,258	617,417	429		0.33		
248	0	3,600	120	4,021	2,834,800	1.67	5.84			443,512	366,700	255		0.30		
249	0	900	120	450	217,540	0.67	7.51			-77,923	-99,130	-69	418.84	-0.20	NEGATIVE	11
250	0	1,400	120	950	381,640	1.62	7.16			4,927	-7,547	-5	295.24	-0.02	NEGATIVE	3
251	0	900	120	323	265,940	3.28	9.61			-38,890	-42,630	-30	214.60	-0.16	NEGATIVE	2
252	0	1,800	120	1,200	538,640	0.77	3.01			-247,024	-271,223	-188	1048.35	-0.22	NEGATIVE	8
253	0	1,400	120	585	1,105,240	2.22	5.31			109,957	93,620	65	630.00	0.24		
254	0	900	120	320	-91,460	-0.21	12.57	NEGATIVE	8	-65,124	-98,713	-69	268.55	-0.34	NEGATIVE	8
255	0	900	120	429	487,540	3.43	15.79			1,297	-7,213	-5	355.01	-0.01	NEGATIVE	3
256	0	250	120	130	320,390	8.66	44.32			-8,052	-10,463	-7	237.27	-0.03	NEGATIVE	5
257	0	5,400	180	10,583	4,842,600	2.18	5.45			737,800	622,000	432		0.33		
258	0	1,400	120	570	199,040	0.56	9.49			-60,271	-85,213	-59	359.18	-0.20	NEGATIVE	1
259	0	2,700	120	2,968	2,807,140	2.38	11.43			293,309	224,130	156	1000.00	0.16		
260	0	900	120	268	343,340	6.36	14.70			-38,132	-40,380	-28	248.04	-0.13	NEGATIVE	6
261	0	2,700	120	2,410	732,740	1.41	4.95			42,040	19,787	14	300.00	0.05		
262	0	1,400	120	631	957,040	6.34	17.54			-41,146	-48,463	-34	383.66	-0.10	NEGATIVE	6
263	0	900	120	374	600,540	6.13	30.08			-64,815	-71,047	-49	499.34	-0.11	NEGATIVE	2
264	0	1,800	120	1,308	343,840	1.54	5.77			-24,273	-34,663	-24	133.33	-0.48	NEGATIVE	2
265	0	1,800	120	1,223	1,146,640	5.14	12.66			66,101	56,537	39	500.00	0.16		
266	0	2,300	120	2,052	576,440	1.33	4.20			4,256	-11,813	-8	237.31	-0.05	NEGATIVE	6
267	0	900	120	474	541,540	2.12	20.21			-49,365	-67,330	-47	377.42	-0.22	NEGATIVE	2
268	0	21,600	600	200,814	43,834,800	0.81	3.04			25,884,172	16,724,733	11,614		5.05		
269	0	250	120	121	532,190	11.09	54.98			36,741	33,620	23	350.00	0.07		
270	0	1,800	120	1,205	2,694,840	8.61	17.88			333,198	321,137	223		0.55		
271	0	250	120	122	277,190	21.32	58.44			-17,394	-18,063	-13	112.54	-0.13	NEGATIVE	3
272	0	2,300	120	1,695	1,371,740	2.72	8.20			181,758	158,820	110		0.36		
273	0	900	120	400	506,540	4.22	23.66			-65,087	-72,880	-51	450.61	-0.13	NEGATIVE	5
274	0	1,800	120	1,348	829,640	1.38	5.24			112,387	85,120	59	450.00	0.20		
275	0	1,800	120	1,496	1,015,640	3.02	8.77			-730	-15,880	-11	411.03	-0.03	NEGATIVE	2
276	0	3,200	120	3,513	1,183,800	1.70	7.01			-76,374	-112,083	-78	693.40	-0.16	NEGATIVE	6
277	0	7,200	240	18,708	6,794,144	2.04	4.66			2,404,201	2,212,188	1,536		3.66		
278	0	250	120	88	9,060	0.10	18.25			11,612	4,633	3	35.00	0.09		
279	0	900	120	382	580,140	3.77	11.89			-6,227	-13,913	-10	320.70	-0.07	NEGATIVE	3
280	0	3,600	120	4,143	3,041,800	2.43	8.47			510,966	448,783	312		0.35		
281	0	4,000	120	5,187	3,330,600	2.61	7.10			330,508	278,350	193		0.30		
282	0	1,800	120	1,377	1,570,720	4.35	14.07			237,920	219,277	152		0.30		
283	0	4,000	120	5,897	3,892,000	2.43	9.24			829,467	745,500	518		0.52		
284	0	3,600	120	4,010	626,800	0.34	4.18			426,815	323,133	224		1.00		
285	0	1,400	120	845	502,640	1.39	4.01			36,184	24,037	17	315.00	0.13		
286	0	900	120	524	76,740	0.33	7.82			-56,583	-72,697	-50	163.10	-0.63	NEGATIVE	1
287	0	5,400	180	11,100	4,633,400	0.97	3.28			2,606,369	2,369,350	1,645		1.65		
288	0	6,300	180	14,055	5,365,700	1.43	4.58			1,043,137	822,400	571		0.44		
289	0	1,400	120	760	765,040	2.68	14.90			-2,751	-20,630	-14	340.52	-0.05	NEGATIVE	3
290	0	5,400	180	10,353	5,715,320	2.42	8.77			-99,927	-280,450	-195	2144.04	-0.16	NEGATIVE	3
291	0	1,400	120	589	429,040	5.30	16.80			-22,210	-26,430	-18	163.36	-0.17	NEGATIVE	2
292	0	900	120	392	534,540	2.83	23.61			-42,934	-56,130	-39	488.98	-0.09	NEGATIVE	2

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
293	0	6,300	180	16,129	5,726,100	1.27	4.63			1,412,666	1,124,800	781		0.59		
294	0	900	120	277	93,540	0.93	11.42			-58,300	-65,297	-45	95.34	-0.91	NEGATIVE	3
295	0	1,800	120	1,146	731,840	4.11	11.41			-121,426	-129,613	-90	396.44	-0.32	NEGATIVE	2
296	0	4,000	120	5,419	4,187,200	4.80	10.54			337,983	305,333	212	1130.00	0.21		
297	0	900	120	275	217,540	2.56	8.16			-65,970	-69,963	-49	223.59	-0.28	NEGATIVE	6
298	0	2,700	120	2,428	1,941,740	3.15	8.59			101,299	74,703	52	750.00	0.07		
299	0	1,400	120	557	1,089,240	3.18	12.15			21,800	3,037	2	455.00	0.00		
300	0	1,800	120	1,422	1,122,640	2.52	11.03			-22,226	-47,547	-33	534.76	-0.07	NEGATIVE	2
301	0	2,700	120	2,667	1,604,820	1.82	8.69			417,284	367,620	255		0.57		
302	0	4,500	120	8,908	4,141,500	1.48	8.27			863,042	699,667	486		0.37		
303	0	5,400	180	10,241	6,254,000	2.28	4.96			1,298,015	1,182,100	821		0.83		
304	0	1,800	120	1,329	588,040	1.17	6.91			28,953	120	0	310.00	0.00		
305	0	1,400	120	666	676,440	3.25	13.33			-24,010	-35,813	-25	470.83	-0.21	NEGATIVE	8
306	0	1,800	120	1,140	1,274,440	3.67	16.65			138,106	117,303	81		0.33		
307	0	1,400	120	887	660,720	1.27	11.34			72,197	37,463	26	449.00	0.13		
308	0	900	120	400	1,147,540	7.55	23.46			-2,996	-11,047	-8	510.96	-0.02	NEGATIVE	2
309	0	3,600	120	4,134	2,278,200	1.80	5.93			850,454	794,633	552		1.62		
310	0	1,400	120	558	1,592,040	9.71	38.63			-27,668	-37,547	-26	740.56	-0.06	NEGATIVE	3
311	0	250	120	168	31,790	0.14	9.47			21,809	4,870	3	140.00	0.02		
312	0	4,000	120	6,009	2,315,880	1.90	6.11			314,804	261,417	182		0.35		
313	0	250	120	209	396,990	10.45	26.86			74,071	72,253	50	220.00	0.23		
314	0	4,000	120	6,312	3,929,000	3.24	7.31			874,400	831,917	578		0.72		
315	0	1,800	120	1,286	1,694,640	2.67	10.83			120,198	85,203	59	1050.00	0.18		
316	0	4,500	120	8,000	3,036,500	1.71	6.68			531,562	443,683	308		0.43		
317	0	1,400	120	844	1,102,240	1.76	16.46			50,462	6,887	5	500.00	0.02		
318	0	2,700	120	2,761	1,684,540	2.62	8.04			203,985	174,537	121		0.30		
319	0	2,700	120	2,557	2,635,740	3.87	11.40			502,065	469,570	326		0.59		
320	0	900	120	375	210,140	0.89	7.72			-34,768	-49,690	-35	284.51	-0.14	NEGATIVE	4
321	0	1,400	120	570	172,640	0.92	10.98			-125,608	-138,463	-96	311.16	-0.45	NEGATIVE	2
322	0	9,000	300	30,046	5,753,985	0.85	3.70			1,957,734	1,248,510	867		0.96		
323	0	2,300	120	1,899	1,212,940	3.23	7.72			42,375	28,270	20	350.00	0.06		
324	0	3,200	120	3,412	3,214,600	3.55	8.01			348,056	315,400	219		0.27		
325	0	1,800	120	1,495	726,640	1.78	8.20			-8,426	-30,963	-22	359.94	-0.11	NEGATIVE	4
326	0	4,500	120	7,162	2,429,020	0.73	2.54			801,814	713,127	495		0.74		
327	0	4,000	120	6,312	1,855,600	0.55	4.54			176,130	-7,867	-5	1107.51	-0.01	NEGATIVE	8
328	0	2,300	120	2,079	1,340,032	2.39	5.57			206,433	188,113	131		0.36		
329	0	900	120	308	166,540	2.14	12.56			-19,502	-24,380	-17	116.93	-0.17	NEGATIVE	6
330	0	250	120	50	83,590	2.70	22.87			-2,398	-4,563	-3	33.17	-0.11	NEGATIVE	8
331	0	3,600	120	4,292	1,907,400	2.09	6.61			246,460	205,917	143		0.41		
332	0	1,400	120	649	481,840	4.42	13.34			-54,570	-59,963	-42	361.64	-0.13	NEGATIVE	5
333	0	1,400	120	653	808,840	4.99	25.57			-6,044	-16,380	-11	334.56	-0.05	NEGATIVE	3
334	0	900	120	311	525,540	1.17	44.74			-42,197	-77,880	-54	679.08	-0.09	NEGATIVE	4
335	0	1,800	120	1,015	1,757,840	1.95	22.89			454,542	389,220	270		0.54		
336	0	5,400	180	12,545	8,374,800	2.28	6.76			1,819,314	1,583,850	1,100		0.76		
337	0	3,600	120	4,505	3,372,000	3.71	10.71			361,489	318,967	222		0.26		
338	0	2,700	120	2,892	1,636,740	1.78	8.19			130,076	79,287	55	500.00	0.11		
339	0	900	120	253	141,840	7.88	23.05			-107,648	-108,570	-75	185.40	-0.69	NEGATIVE	10
340	0	3,200	120	3,177	430,840	0.72	3.95			-20,442	-48,763	-34	267.09	-0.16	NEGATIVE	1
341	0	6,300	180	15,224	7,281,900	0.93	6.54			2,510,737	1,820,150	1,264		0.53		
342	0	900	120	476	104,140	0.59	8.69			-38,586	-50,713	-35	175.22	-0.25	NEGATIVE	3
343	0	2,700	120	2,680	1,537,940	2.84	8.57			30,901	5,953	4	430.00	0.01		
344	0	4,500	120	6,592	3,245,500	1.96	6.56			517,937	442,200	307		0.36		
345	0	1,800	120	1,250	1,883,040	5.02	20.96			100,343	78,070	54	900.00	0.12		
346	0	2,700	120	2,554	1,017,740	1.26	5.87			214,240	173,037	120		0.60		
347	0	1,400	120	936	471,440	1.63	4.50			149,227	139,237	97		2.76		
348	0	1,400	120	945	530,640	2.06	10.80			-143,355	-158,697	-110	580.41	-0.61	NEGATIVE	6
349	0	2,300	120	1,775	246,500	0.21	7.19			-66,679	-147,613	-103	589.17	-0.27	NEGATIVE	3
350	0	2,300	120	2,074	1,425,340	2.50	10.09			122,239	91,137	63	450.00	0.18		

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
351	0	2,700	120	2,993	1,284,940	0.85	3.81			311,083	245,753	171		0.39		
352	0	250	120	165	323,190	2.02	19.96			13,103	1,787	1	300.00	0.00		
353	0	3,600	120	4,071	1,070,400	2.83	7.41			-130,293	-145,500	-101	501.04	-0.25	NEGATIVE	6
354	0	1,400	120	929	609,040	2.68	7.27			-87,467	-96,797	-67	543.05	-0.45	NEGATIVE	6
355	0	3,200	120	3,525	1,170,800	1.82	5.39			46,945	21,333	15	500.00	0.03		
356	0	4,500	120	8,275	3,718,140	2.40	6.26			1,126,120	1,067,113	741		1.06		
357	0	5,400	180	9,418	3,821,200	1.13	5.64			930,651	668,650	464		0.80		
358	0	1,400	120	550	989,040	12.52	25.22			-81,409	-84,463	-59	478.21	-0.20	NEGATIVE	2
359	0	2,300	120	1,675	544,940	0.44	5.35			89,353	14,037	10	345.00	0.03		
360	0	900	120	393	343,540	2.94	15.27			-20,394	-27,630	-19	269.19	-0.08	NEGATIVE	5
361	0	1,400	120	838	371,440	1.97	8.63			-17,294	-27,630	-19	131.11	-0.19	NEGATIVE	4
362	0	1,400	120	792	1,132,040	5.15	16.19			41,163	29,787	21	500.00	0.07		
363	0	1,400	120	899	890,840	2.37	12.07			-90,229	-112,813	-78	613.54	-0.23	NEGATIVE	1
364	0	5,400	180	9,989	5,289,600	3.99	7.71			662,292	603,875	419		0.44		
365	0	4,500	120	7,462	15,161,500	4.92	10.72			10,598,238	10,483,167	7,280		4.28		
366	0	5,400	180	10,981	6,543,600	2.72	7.63			802,916	649,125	451		0.28		
367	0	4,500	120	7,929	1,989,680	0.99	3.08			520,014	461,275	320		0.78		
368	0	5,400	180	9,981	8,400,600	3.82	6.64			1,123,529	1,048,000	728		0.49		
369	0	2,300	120	1,866	946,140	0.77	3.97			280,132	223,170	155		0.52		
370	0	900	120	400	191,140	2.01	18.18			4,808	-1,797	-1	66.62	-0.02	NEGATIVE	3
371	0	1,400	120	668	558,840	3.23	16.89			-16,631	-27,437	-19	418.62	-0.28	NEGATIVE	2
372	0	900	120	407	634,540	8.57	31.31			-55,766	-60,047	-42	491.70	-0.09	NEGATIVE	3
373	0	2,700	120	2,496	2,170,740	4.48	12.33			47,870	25,403	18	1000.00	0.03		
374	0	4,000	120	6,018	8,231,200	3.58	7.44			2,141,572	2,067,933	1,436		1.03		
375	0	2,700	120	2,380	2,552,740	3.52	9.34			66,878	35,620	25	1500.00	0.05		
376	0	1,400	120	605	1,338,040	3.80	14.82			107,618	87,787	61	500.00	0.12		
377	0	3,200	120	3,645	2,731,800	2.00	8.55			206,058	132,250	92	1000.00	0.09		
378	0	1,800	120	1,458	1,125,240	1.67	15.30			98,334	52,120	36	590.00	0.08		
379	0	2,700	120	2,524	1,584,740	1.53	8.61			361,766	300,787	209		0.70		
380	0	250	120	224	364,390	5.21	18.90			1,805	-2,113	-1	231.00	-0.03	NEGATIVE	3
381	0	2,300	120	1,842	1,655,140	4.58	13.82			94,462	76,537	53	425.00	0.13		
382	0	2,300	120	1,599	713,140	0.65	4.89			23,257	-37,380	-26	578.55	-0.05	NEGATIVE	8
383	0	900	120	395	160,340	0.69	13.63			-42,779	-59,713	-41	261.47	-0.19	NEGATIVE	4
384	0	2,300	120	2,019	1,495,140	5.96	10.44			-18,318	-25,297	-18	569.32	-0.04	NEGATIVE	3
385	0	4,500	120	8,000	4,556,300	1.30	4.26			1,626,754	1,492,733	1,037		0.98		
386	0	1,800	120	1,200	400,240	0.54	12.80			-47,525	-101,997	-71	422.91	-0.21	NEGATIVE	2
387	0	1,400	120	710	869,840	5.76	20.95			39,260	30,737	21	310.00	0.08		
388	0	250	120	220	591,590	11.83	28.81			31,264	28,953	20	260.00	0.13		
389	0	4,500	120	7,427	6,030,500	1.98	6.38			1,882,581	1,747,750	1,214		0.67		
390	0	1,400	120	945	161,041	0.52	8.19			-120,463	-141,429	-98	248.21	-0.65	NEGATIVE	3
391	0	4,000	120	5,850	1,334,000	0.86	4.68			23,498	-55,000	-38	488.19	-0.08	NEGATIVE	8
392	0	4,500	120	8,300	2,960,500	1.21	3.45			190,538	117,917	82	1000.00	0.09		
393	0	3,600	120	5,018	900,400	0.40	2.31			414,055	340,000	236		0.47		
394	0	1,400	120	577	430,840	1.99	15.12			-22,045	-36,480	-25	272.50	-0.21	NEGATIVE	3
395	0	1,800	120	987	835,440	1.39	17.50			-34,931	-78,330	-54	511.25	-0.12	NEGATIVE	4
396	0	5,400	180	12,560	5,451,200	1.84	7.30			664,219	438,575	305		0.25		
397	0	1,800	120	1,230	1,270,640	4.62	14.78			36,403	22,203	15	600.00	0.05		
398	0	1,400	120	552	177,040	1.42	7.00			-126,475	-133,297	-93	267.57	-0.53	NEGATIVE	6
399	0	900	120	432	201,540	1.13	10.17			3,311	-8,413	-6	180.84	-0.03	NEGATIVE	2
400	0	3,200	120	3,190	1,987,240	1.38	5.55			50,776	-17,463	-12	1071.22	-0.02	NEGATIVE	8
401	0	900	120	494	1,080,340	9.39	35.82			-29,661	-36,463	-25	536.78	-0.08	NEGATIVE	3
402	0	2,300	120	2,079	810,260	1.48	4.83			283,977	261,797	182		1.45		
403	0	900	120	400	307,540	1.29	13.92			26,847	10,203	7		0.28		
404	0	1,400	120	738	892,040	1.55	21.97			-47,448	-89,880	-62	785.24	-0.21	NEGATIVE	2
405	0	2,700	120	3,019	2,793,040	2.90	9.48			57,380	10,223	7	1200.00	0.01		
406	0	3,600	120	4,328	3,714,200	1.92	4.45			991,559	935,983	650		0.82		

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
407	0	2,300	120	2,117	2,465,140	1.80	5.64			313,957	256,370	178	850.00	0.24		
408	0	1,800	120	1,500	290,640	0.80	5.53			-90,736	-111,130	-77	427.17	-0.22	NEGATIVE	3
409	0	900	120	250	83,090	0.35	13.84			22,267	4,445	3	120.00	0.03		
410	0	900	120	325	-43,260	-0.12	8.58	NEGATIVE	4	-65,887	-92,297	-64	244.09	-0.36	NEGATIVE	4
411	0	3,200	120	3,535	1,183,800	1.18	6.09			45,026	-8,917	-6	631.45	-0.01	NEGATIVE	3
412	0	2,300	120	1,549	1,385,140	4.56	14.49			-12,596	-28,213	-20	629.39	-0.05	NEGATIVE	2
413	0	4,500	120	8,330	3,873,500	1.44	4.73			1,609,211	1,500,667	1,042		1.49		
414	0	3,600	120	4,950	2,259,400	2.08	7.87			432,591	377,583	262		0.66		
415	0	3,200	120	3,437	892,200	0.98	5.00			86,303	40,150	28	490.00	0.07		
416	0	4,500	120	6,976	10,314,300	2.59	9.18			3,743,715	3,541,100	2,459		1.41		
417	0	900	120	260	749,540	4.28	49.22			-19,445	-32,463	-23	322.54	-0.08	NEGATIVE	4
418	0	1,800	120	1,135	1,033,640	1.58	12.22			54,597	11,453	8	525.00	0.02		
419	0	2,300	120	2,210	984,840	1.99	9.08			35,600	8,003	6	500.00	0.02		
420	0	1,400	120	950	1,642,040	11.25	29.87			-46,868	-54,047	-38	637.53	-0.06	NEGATIVE	2
421	0	1,800	120	1,236	681,240	1.85	9.90			-9,914	-31,747	-22	322.81	-0.08	NEGATIVE	8
422	0	1,400	120	896	848,540	3.10	9.99			-5,793	-19,263	-13	391.72	-0.04	NEGATIVE	2
423	0	1,800	120	1,500	1,738,040	2.83	10.85			106,248	73,153	51	500.00	0.10		
424	0	3,200	120	3,901	1,008,000	1.29	5.00			-89,256	-124,567	-87	810.65	-0.25	NEGATIVE	2
425	0	1,400	120	651	990,480	8.61	20.28			-27,222	-32,263	-22	502.44	-0.10	NEGATIVE	3
426	0	2,300	120	1,736	2,457,140	3.95	12.98			4,359	-27,713	-19	1019.25	-0.02	NEGATIVE	4
427	0	900	120	478	644,740	3.27	23.04			52,875	39,503	27	240.00	0.11		
428	0	4,500	120	8,648	4,592,700	1.91	5.53			1,168,636	1,073,350	745		0.93		
429	0	2,300	120	1,941	505,140	1.58	6.39			-31,644	-47,547	-33	183.02	-0.22	NEGATIVE	8
430	0	2,700	120	2,530	2,140,740	3.16	6.44			-12,339	-32,380	-22	1138.05	-0.03	NEGATIVE	3
431	0	1,800	120	1,283	798,640	0.71	6.81			102,571	32,370	22	800.00	0.07		
432	0	1,800	120	1,271	614,240	2.40	8.27			-50,946	-63,513	-44	338.81	-0.21	NEGATIVE	3
433	0	3,200	120	3,500	954,400	1.31	3.30			121,208	102,967	72	350.00	0.21		
434	0	1,400	120	621	418,440	1.84	7.40			4,842	-6,880	-5	314.78	-0.02	NEGATIVE	2
435	0	8,100	240	24,551	10,608,300	0.78	3.18			2,712,296	1,704,733	1,184		0.56		
436	0	250	120	150	97,190	0.31	25.51			13,777	-11,047	-8	257.67	-0.03	NEGATIVE	2
437	0	1,400	120	650	447,640	1.90	16.43			22,453	6,253	4	180.00	0.03		
438	0	1,400	120	815	1,079,040	5.16	17.71			102,059	90,703	63		0.31		
439	0	250	120	175	133,990	1.91	12.18			-4,276	-8,713	-6	126.05	-0.05	NEGATIVE	3
440	0	5,400	180	12,524	5,827,200	2.84	5.97			368,830	277,325	193	1200.00	0.19		
441	0	2,300	120	1,651	452,220	1.80	7.32			-82,650	-95,557	-66	192.10	-0.83	NEGATIVE	3
442	0	1,800	120	1,100	260,760	1.36	4.68			-135	-8,080	-6	94.09	-0.13	NEGATIVE	3
443	0	5,400	180	9,400	5,878,800	2.26	6.12			1,416,127	1,264,275	878		1.00		
444	0	2,300	120	1,864	1,084,140	2.52	10.33			192,204	168,587	117		0.59		
445	0	7,200	240	21,000	6,170,800	1.22	4.31			915,633	505,667	351		0.26		
446	0	1,400	120	601	809,840	5.06	20.01			21,581	12,287	9	320.00	0.04		
447	0	5,400	180	9,351	3,978,480	1.65	5.11			1,060,110	915,065	635		0.87		
448	0	900	120	513	851,540	7.34	34.53			142,085	134,753	94		0.37		
449	0	900	120	364	182,540	0.52	17.97			-21,245	-47,863	-33	333.24	-0.11	NEGATIVE	2
450	0	1,800	120	1,310	1,073,640	1.51	19.39			-1,547	-53,047	-37	828.94	-0.11	NEGATIVE	1
451	0	2,300	120	1,565	172,660	0.72	3.03			-138,069	-146,720	-102	215.52	-2.32	NEGATIVE	4
452	0	1,400	120	600	658,840	2.11	12.35			-13,030	-32,480	-23	385.88	-0.10	NEGATIVE	10
453	0	1,400	120	865	1,054,040	5.43	19.03			-71,344	-82,047	-57	485.54	-0.14	NEGATIVE	2
454	0	250	120	25	1,077,590	3.72	26.95			145,890	125,953	87	810.00	0.11		
455	0	4,500	120	8,532	4,679,500	2.18	6.30			995,715	907,333	630		0.79		
456	0	3,200	120	3,328	2,109,600	2.64	6.63			40,684	10,613	7	901.00	0.01		
457	0	250	120	141	252,190	2.90	35.85			14,332	7,870	5	200.00	0.03		
458	0	1,800	120	1,258	668,640	0.94	9.76			85,542	38,070	26	390.00	0.07		
459	0	1,800	120	1,065	835,800	1.72	7.42			-64,048	-89,700	-62	679.77	-0.24	NEGATIVE	3
460	0	250	120	214	555,990	9.27	35.21			42,462	38,920	27	370.00	0.07		
461	0	3,600	120	4,101	2,945,200	2.27	7.75			259,799	197,233	137	1010.00	0.17		
462	0	1,800	120	997	1,704,640	6.24	18.51			60,217	46,370	32	700.00	0.06		
463	0	4,500	120	8,726	2,894,300	0.72	6.94			261,641	11,567	8	1500.00	0.01		
464	0	1,400	120	641	405,040	1.63	4.86			-26,099	-35,630	-25	249.49	-0.25	NEGATIVE	3

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
465	0	1,400	120	667	872,040	3.16	20.71			-22,499	-40,880	-28	570.97	-0.14	NEGATIVE	2
466	0	3,600	120	4,335	1,097,400	1.43	4.27			53,578	26,083	18	350.00	0.05		
467	0	1,400	120	750	719,640	2.23	12.48			-28,436	-48,313	-34	353.55	-0.10	NEGATIVE	2
468	0	900	120	452	367,540	3.20	13.90			-65,772	-72,463	-50	350.32	-0.17	NEGATIVE	3
469	0	2,700	120	2,304	840,540	0.92	3.46			125,915	92,203	64	520.00	0.18		
470	0	900	120	286	180,440	1.13	12.24			-38,194	-49,155	-34	214.14	-0.19	NEGATIVE	3
471	0	2,300	120	2,080	1,007,140	2.01	8.31			-15,017	-41,713	-29	480.67	-0.07	NEGATIVE	4
472	0	3,600	120	4,239	1,019,000	0.95	4.82			136,560	83,217	58	500.00	0.17		
473	0	3,200	120	3,317	1,864,000	1.10	3.48			641,556	585,933	407		0.77		
474	0	8,100	240	22,973	12,501,900	2.53	6.78			1,584,617	1,189,267	826		0.55		
475	0	13,500	420	65,000	17,960,380	1.41	4.01			9,288,832	7,794,368	5,413		3.21		
476	0	5,400	180	9,900	4,450,600	1.65	6.43			612,666	415,250	288		0.26		
477	0	4,000	120	5,750	6,313,600	1.67	4.54			1,418,484	1,288,467	895		0.94		
478	0	5,400	180	10,649	7,136,600	4.67	8.74			638,385	571,300	397		0.29		
479	0	9,900	300	38,426	13,329,100	1.52	4.48			3,547,908	2,747,708	1,908		0.76		
480	0	1,400	120	648	-434,760	-0.38	11.20	NEGATIVE	6	-16,467	-105,613	-73	281.49	-0.41	NEGATIVE	6
481	0	2,300	120	1,855	1,505,140	2.77	8.26			3,452	-21,213	-15	639.73	-0.02	NEGATIVE	2
482	0	1,400	120	605	601,040	2.23	19.97			-18,511	-37,297	-26	410.43	-0.17	NEGATIVE	2
483	0	3,600	120	4,400	656,400	0.88	4.73			-54,737	-92,333	-64	414.12	-0.18	NEGATIVE	2
484	0	1,400	120	610	1,184,040	4.52	24.11			34,122	17,287	12	300.00	0.04		
485	0	12,600	420	63,240	30,144,400	2.73	5.92			7,191,464	5,998,125	4,165		0.99		
486	0	9,000	300	28,943	10,687,200	2.28	5.20			2,616,311	2,255,417	1,566		1.05		
487	0	250	120	150	507,770	10.58	43.11			-21,864	-24,790	-17	479.36	-0.41	NEGATIVE	5
488	0	4,000	120	5,709	1,473,600	0.84	3.31			221,034	156,233	108		0.33		
489	0	2,300	120	2,045	831,140	1.11	7.14			200,692	156,787	109		0.29		
490	0	6,300	180	13,300	3,545,700	1.30	3.92			-290,611	-431,150	-299	1231.03	-0.32	NEGATIVE	6
491	0	3,600	120	4,809	1,706,000	1.28	6.25			321,289	250,967	174		0.35		
492	0	1,400	120	800	1,520,040	2.99	15.24			151,032	119,787	83	700.00	0.17		
493	0	2,300	120	1,549	2,255,140	2.46	4.65			178,766	159,370	111	900.00	0.22		
494	0	900	120	313	244,940	2.27	17.07			-64,603	-71,880	-50	259.92	-0.24	NEGATIVE	3
495	0	900	120	317	427,540	3.37	27.56			-64,557	-73,463	-51	401.02	-0.15	NEGATIVE	2
496	0	2,300	120	1,820	1,673,140	2.80	9.55			760,294	730,287	507		1.27		
497	0	900	120	351	1,127,540	4.19	47.25			15,657	-4,297	-3	605.97	-0.01	NEGATIVE	4
498	0	1,400	120	743	681,040	4.23	14.70			-127,652	-136,297	-95	644.65	-0.17	NEGATIVE	11
499	0	6,300	180	14,000	5,296,700	1.37	4.94			757,997	506,375	352		0.32		
500	0	2,300	120	1,765	1,366,140	2.24	1.63			-80,147	-29,797	-21	620.69	-0.03	NEGATIVE	6
501	0	2,300	120	2,108	3,627,140	4.91	14.63			374,261	337,620	234		0.29		
502	0	250	120	170	365,190	2.85	47.66			23,258	13,453	9	300.00	0.03		
503	0	900	120	525	432,540	1.58	21.33			30,360	10,287	7	200.00	0.04		
504	0	1,800	120	1,200	1,251,240	1.62	8.89			363,928	318,420	221		0.45		
505	0	2,700	120	2,351	1,060,340	1.58	7.96			344,107	306,470	213		1.12		
506	0	900	120	376	680,940	6.19	15.32			87,019	82,153	57		0.36		
507	0	250	120	98	308,190	3.35	8.98			44,105	40,153	28		0.33		
508	0	2,700	120	2,465	4,564,340	2.68	9.28			746,642	661,253	459		0.59		
509	0	7,200	240	20,000	10,346,541	2.29	6.11			2,483,466	2,135,034	1,483		0.99		
510	0	900	120	514	439,740	1.80	5.33			-3,974	-13,613	-9	210.50	-0.05	NEGATIVE	2
511	0	1,800	120	1,200	706,640	3.01	7.22			-73,749	-82,463	-57	552.71	-0.38	NEGATIVE	8
512	0	1,400	120	834	950,040	5.66	21.01			-49,314	-58,880	-41	602.22	-0.20	NEGATIVE	8
513	0	1,800	120	1,100	1,003,640	4.44	12.51			-65,071	-75,713	-53	694.59	-0.26	NEGATIVE	2
514	0	2,700	120	2,350	1,745,340	4.52	12.24			-26,085	-43,747	-30	825.95	-0.10	NEGATIVE	3
515	0	1,400	120	550	530,440	3.08	18.40			-46,261	-57,413	-40	251.86	-0.20	NEGATIVE	11
516	0	1,400	120	715	703,040	3.72	14.48			-53,015	-63,630	-44	353.03	-0.18	NEGATIVE	3
517	0	1,400	120	750	649,540	0.52	15.68			497,086	403,945	281		0.36		
518	0	250	120	83	141,590	7.87	30.13			2,079	1,020	1	85.00	0.01		

	Analysis 5															
	Reserve capacities				Analysis on Total Basis					Analysis on Firm Basis						
Point Number	Reserve Capacity based on % of average day (gallons)	Fire Protection Reserve based on population (gallons)	Fire Protection Duration (min)	Population (based on DNR database)	Spare Total Capacity on Maximum Day (gallons)	Spare Total Capacity as Ratio to Maximum Day Demand	Ratio Total Capacity to Ave Day	Check of Spare Total Capacity, Value = NEGATIVE if < 0%	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Spare Firm Capacity on Average Day (gallons)	Spare Firm Capacity on Maximum Day (gallons)	Spare Firm Capacity as Equivalent Flow Rate (gpm)	Additional capacity as equivalent well capacity needed for SE < 0.25	SE: Ratio of Surplus Firm Capacity to Largest Available	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction
						Ave	Ave			183		Ave	Ave	Ave		
						2.99	12.39			35%		229.25	515.35	0.21		
						Max	Max	6	# deficit	it ave day plus fire		Max	Max	Max	216	# deficit
						36.66	120.07	1.2%	% of systems			11,614.40	2,146.76	5.33	41.7%	% of systems
						Median	Median	1.2%	deviation			Median	Median	Median	4.4%	deviation
						2.18	9.19					16.40	428.59	0.06		
						Min	Min					Min	Min	Min		
						-0.38	1.63					-546.76	33.17	-2.32		
													Count	85% Effective	239	# deficit
													356		46.1%	% of systems
														57,000,000.00	1.157625	
														65984625		

APPENDIX I: ANALYSIS 6 RESULTS & RATIOS

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
1	Analysis 5		0.83			0.86	2.19	**EXCEED**	1.42	4.3		8.7		0
2	Analysis 5		0.26			0.63	1.51	**EXCEED**	1.77	3.3		6.8		0
3	Analysis 5	225.00	0.06			0.94	4.38	**EXCEED**	2.62	1.1		4.4		0
4	Analysis 5	440.00	0.12			1.16	3.80		1.31	2.3		5.5		0
5	Analysis 5		0.37			0.80	2.43	**EXCEED**	1.75	3.3		8.4		0
6	Analysis 5		0.26			1.31	4.15		2.28	1.7		4.4		0
7	Analysis 5		1.25			1.05	2.23		2.56	3.8		7.2		0
8	Analysis 5	285.76	-0.04	**NEGATIVE**	3	0.63	2.14	**EXCEED**	1.59	2.8		7.2		0
9	Analysis 1	381.99	-0.53	**NEGATIVE**	1	0.26	1.72	**EXCEED**	0.01	2.9		17.2		0
10	Analysis 5	357.29	-0.79	**NEGATIVE**	3	0.24	0.60	**EXCEED**	1.54	2.7		5.9		0
11	Analysis 5	400.45	-0.33	**NEGATIVE**	6	0.49	0.93	**EXCEED**	0.99	11.3		16.5		0
12	Analysis 5	613.75	0.00	**NEGATIVE**	1	0.54	1.27	**EXCEED**	0.88	5.2		10.4		0
13	Analysis 5	651.06	-0.18	**NEGATIVE**	2	0.21	0.87	**EXCEED**	3.55	1.1		3.6		0
14	Analysis 5		0.37			0.51	0.84	**EXCEED**	1.43	8.1		11.7		0
15	Analysis 5		1.30			0.78	1.56	**EXCEED**	1.35	5.9		10.0		0
16	Analysis 1	616.36	-1.05	**NEGATIVE**	1	0.09	0.89	**EXCEED**	0.00	3.4		27.8	**EXCEED**	0
17	Analysis 5	520.00	0.08			0.76	3.02	**EXCEED**	2.13	1.3		4.5		0
18	Analysis 1	425.09	-0.27	**NEGATIVE**	4	0.65	5.54	**EXCEED**	0.00	2.5		18.5		0
19	Analysis 5		0.91			0.47	0.91	**EXCEED**	1.37	7.9		13.6		1
20	Analysis 5		0.74			1.04	4.15		1.47	3.7		12.9		1
21	Analysis 5		0.40			0.65	1.35	**EXCEED**	2.28	4.2		7.5		0
22	Analysis 5	385.78	-0.10	**NEGATIVE**	2	0.82	2.17	**EXCEED**	0.01	3.5		7.5		0
23	Analysis 5	344.61	-0.01	**NEGATIVE**	3	0.66	2.80	**EXCEED**	3.77	1.0		3.0		0
24	Analysis 5	1050.00	0.08			0.58	1.61	**EXCEED**	1.40	3.2		7.1		0
25	Analysis 5	300.00	0.14			0.64	2.62	**EXCEED**	2.06	2.2		7.0		0
26	Analysis 5	519.85	-0.37	**NEGATIVE**	3	0.05	0.16	**EXCEED**	1.50	3.0		7.7		0
27	Analysis 5		0.73			0.55	1.06	**EXCEED**	0.98	9.3		16.5		0
28	Analysis 5		1.86			2.11	9.26		0.74	2.4		9.7		0
29	Analysis 5	1248.52	-0.04	**NEGATIVE**	6	0.10	0.23	**EXCEED**	1.30	6.3		12.4		0
30	Analysis 5	257.48	-0.01	**NEGATIVE**	9	1.05	5.37		0.01	2.5		11.1		0
31	Analysis 5	560.00	0.07			0.48	1.72	**EXCEED**	2.07	2.2		5.8		0
32	Analysis 5	333.82	-0.11	**NEGATIVE**	3	0.35	3.38	**EXCEED**	1.50	0.9		6.4		0
33	Analysis 5		0.42			0.59	0.92	**EXCEED**	1.75	7.0		9.8		0
34	Analysis 5	811.15	-0.01	**NEGATIVE**	4	0.20	1.43	**EXCEED**	1.59	2.1		8.9		0
35	Analysis 5	508.37	-0.02	**NEGATIVE**	4	0.67	1.71	**EXCEED**	0.98	3.9		8.7		0
36	Analysis 5	1218.04	-0.22	**NEGATIVE**	10	0.21	0.79	**EXCEED**	1.02	5.5		17.2		0
37	Analysis 5	300.00	0.05			0.65	1.56	**EXCEED**	1.38	4.4		8.2		0
38	Analysis 5	420.00	0.12			1.09	3.36		1.51	1.7		4.9		0
39	Analysis 5	1400.00	0.17			0.38	0.98	**EXCEED**	1.83	3.8		7.9		0
40	Analysis 5	466.68	-0.44	**NEGATIVE**	2	0.79	2.13	**EXCEED**	0.92	2.4		5.7		0
41	Analysis 5	500.00	0.10			0.42	2.20	**EXCEED**	1.35	2.2		8.9		0
42	Analysis 5	650.00	0.19			0.45	0.85	**EXCEED**	0.91	6.4		11.5		0
43	Analysis 5	529.15	-0.06	**NEGATIVE**	1	0.42	2.01	**EXCEED**	1.19	1.9		8.3		0
44	Analysis 5		0.91			0.88	1.92	**EXCEED**	1.40	6.0		10.3		0
45	Analysis 5		0.39			0.74	1.32	**EXCEED**	1.08	6.3		10.6		0
46	Analysis 5		0.69			2.04	5.25		1.65	2.1		4.9		0
47	Analysis 5		4.37			2.11	4.19		0.90	8.8		15.5		0
48	Analysis 5	323.57	-0.24	**NEGATIVE**	1	0.55	2.09	**EXCEED**	0.01	3.3		10.5		0
49	Analysis 5	420.00	0.01			0.55	3.63	**EXCEED**	2.01	1.0		5.6		0
50	Analysis 5	318.38	-0.06	**NEGATIVE**	2	0.87	3.05	**EXCEED**	0.01	1.9		5.7		0
51	Analysis 5	500.00	0.17			0.85	2.87	**EXCEED**	2.46	1.6		5.1		0
52	Analysis 5		0.79			1.57	3.85		2.52	2.6		5.7		0
53	Analysis 5	150.00	0.08			1.19	5.86		0.01	2.9		12.5		0
54	Analysis 1	408.17	-0.24	**NEGATIVE**	3	0.66	2.47	**EXCEED**	0.00	5.8		17.1		0
55	Analysis 5	255.07	-0.55	**NEGATIVE**	1	0.65	3.05	**EXCEED**	0.86	2.4		9.9		0
56	Analysis 5	352.86	-0.18	**NEGATIVE**	2	0.77	1.23	**EXCEED**	4.32	2.0		2.9		0
57	Analysis 5	783.20	-0.02	**NEGATIVE**	6	0.21	0.41	**EXCEED**	0.94	8.1		14.4		0
58	Analysis 5	466.92	-0.06	**NEGATIVE**	3	0.16	0.52	**EXCEED**	1.85	3.0		8.0		0
59	Analysis 5	667.76	-0.45	**NEGATIVE**	3	0.21	0.46	**EXCEED**	1.18	4.7		8.8		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
60	Analysis 5	620.00	0.18			0.81	2.30	EXCEED	1.39	3.6		8.6		0
61	Analysis 1	2340.93	-0.46	NEGATIVE	8	0.01	0.02	EXCEED	0.77	13.7	EXCEED	17.8		0
62	Analysis 5		2.78			0.60	1.50	EXCEED	1.62	5.5		11.1		0
63	Analysis 5	470.00	0.06			0.70	3.09	EXCEED	1.52	1.6		5.8		0
64	Analysis 5		0.62			0.49	2.02	EXCEED	3.23	2.4		6.0		0
65	Analysis 5	505.71	-0.44	NEGATIVE	5	0.13	0.98	EXCEED	0.82	1.7		10.6		0
66	Analysis 5	144.29	-0.11	NEGATIVE	1	1.49	5.92		0.02	2.5		7.9		0
67	Analysis 5	211.47	-0.19	NEGATIVE	5	0.26	1.11	EXCEED	1.11	2.7		10.7		0
68	Analysis 1		0.46			3.67	19.35		0.02	0.9		4.1		0
69	Analysis 5		1.23			0.56	1.88	EXCEED	0.81	7.6		21.4	EXCEED	0
70	Analysis 5		0.64			1.03	2.06		0.89	7.9		13.5		0
71	Analysis 5	718.16	-0.44	NEGATIVE	10	0.23	0.90	EXCEED	0.66	1.8		6.1		0
72	Analysis 5	400.00	0.15			0.44	2.13	EXCEED	2.80	1.4		6.1		0
73	Analysis 5	1000.00	0.06			0.26	2.36	EXCEED	2.00	1.6		6.0		0
74	Analysis 5		0.31			0.68	2.66	EXCEED	0.81	4.2		12.7		0
75	Analysis 5	480.00	0.10			0.70	1.81	EXCEED	1.40	3.8		8.3		0
76	Analysis 5	500.00	0.15			0.89	2.40	EXCEED	0.97	3.3		8.3		0
77	Analysis 5	296.31	-0.35	NEGATIVE	3	0.43	1.44	EXCEED	0.01	4.4		12.7		0
78	Analysis 5	380.39	-0.19	NEGATIVE	3	0.83	1.84	EXCEED	0.01	2.8		5.7		0
79	Analysis 5	386.72	-0.29	NEGATIVE	3	0.35	1.14	EXCEED	2.12	2.1		5.7		0
80	Analysis 5	650.00	0.13			0.46	3.81	EXCEED	0.89	3.2		10.3		0
81	Analysis 5	258.76	-0.04	NEGATIVE	2	1.22	4.24		4.45	0.8		2.4		0
82	Analysis 5		0.30			0.45	0.85	EXCEED	1.53	6.7		11.5		0
83	Analysis 5	400.00	0.17			0.55	1.97	EXCEED	1.51	3.2		9.8		0
84	Analysis 5	1000.35	-1.00	NEGATIVE	3	0.23	0.73	EXCEED	0.40	3.2		8.4		0
85	Analysis 1	271.61	-0.19	NEGATIVE	3	0.56	1.75	EXCEED	0.01	4.0		10.3		0
86	Analysis 5		0.25			0.70	2.13	EXCEED	1.13	4.5		10.7		1
87	Analysis 5		0.85			0.80	1.70	EXCEED	1.04	7.4		12.9		0
88	Analysis 5		0.62			0.24	0.71	EXCEED	1.21	7.2		16.8		0
89	Analysis 1	740.47	-0.32	NEGATIVE	8	0.18	2.02	EXCEED	0.62	1.4		12.4		0
90	Analysis 1	955.47	-0.59	NEGATIVE	8	0.14	0.35	EXCEED	0.54	10.3		20.1	EXCEED	0
91	Analysis 5	620.69	-0.03	NEGATIVE	2	0.31	1.83	EXCEED	1.58	1.8		7.4		0
92	Analysis 5	1550.00	0.01			0.44	1.36	EXCEED	1.29	1.9		4.9		0
93	Analysis 5		0.41			0.58	1.60	EXCEED	2.67	2.4		5.5		0
94	Analysis 5	980.00	0.17			0.22	5.90	EXCEED	1.85	2.2		7.4		0
95	Analysis 1	571.22	-0.14	NEGATIVE	1	0.46	3.54	EXCEED	0.01	1.1		6.5		0
96	Analysis 1	373.79	-0.17	NEGATIVE	4	0.69	4.85	EXCEED	0.01	2.4		13.4		0
97	Analysis 5	67.04	-0.03	NEGATIVE	2	1.26	2.45		1.18	8.3		14.8		0
98	Analysis 1	832.13	-0.39	NEGATIVE	8	0.21	3.50	EXCEED	0.57	4.5		19.2		0
99	Analysis 5	372.69	-0.15	NEGATIVE	1	0.37	1.39	EXCEED	1.92	2.4		7.5		0
100	Analysis 5	505.72	-0.26	NEGATIVE	2	0.12	0.28	EXCEED	0.85	4.9		9.1		0
101	Analysis 5		0.46			0.90	1.55	EXCEED	1.83	4.6		7.1		0
102	Analysis 5	500.00	0.06			0.69	3.36	EXCEED	1.65	1.3		5.5		0
103	Analysis 1	954.33	-1.39	NEGATIVE	4	0.44	2.77	EXCEED	0.24	3.5		20.5	EXCEED	0
104	Analysis 5	1100.00	0.13			0.67	1.67	EXCEED	1.60	3.1		6.7		0
105	Analysis 5	447.02	-0.12	NEGATIVE	2	0.78	2.28	EXCEED	0.02	1.0		2.4		0
106	Analysis 5	567.96	-0.14	NEGATIVE	1	0.40	1.87	EXCEED	0.75	3.2		12.1		0
107	Analysis 5	400.00	0.04			0.70	2.23	EXCEED	1.35	3.2		7.6		0
108	Analysis 5	600.00	0.15			0.58	1.28	EXCEED	0.69	7.4		14.1		0
109	Analysis 5	710.00	0.17			0.99	2.13	EXCEED	3.48	1.9		3.8		0
110	Analysis 5	750.00	0.01			0.14	1.11	EXCEED	1.12	4.4		14.3		0
111	Analysis 1		2.09			0.62	1.86	EXCEED	0.80	6.5		16.5		0
112	Analysis 5	221.11	-0.11	NEGATIVE	3	0.68	3.67	EXCEED	1.92	1.2		5.4		0
113	Analysis 5	424.57	-0.21	NEGATIVE	5	0.10	1.00	EXCEED	5.40	0.6		1.9		1
114	Analysis 5	820.00	0.02			0.58	2.91	EXCEED	2.15	0.9		3.7		0
115	Analysis 5	929.13	-0.26	NEGATIVE	6	0.39	1.04	EXCEED	0.97	6.8		15.4		0
116	Analysis 5	666.05	-0.33	NEGATIVE	3	0.32	0.99	EXCEED	1.79	2.0		5.5		0
117	Analysis 5		0.30			0.77	2.16	EXCEED	1.02	4.8		11.4		0
118	Analysis 5		0.74			1.48	4.09		2.49	2.4		5.6		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
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119	Analysis 5	1600.00	0.23			0.56	1.09	**EXCEED**	1.14	5.2		8.8		0
120	Analysis 5		1.82			1.05	2.48		1.24	5.3		10.3		0
121	Analysis 5	560.00	0.03			0.61	1.43	**EXCEED**	1.82	3.3		6.6		0
122	Analysis 5	1200.00	0.03			0.29	0.66	**EXCEED**	0.84	11.7		21.9	**EXCEED**	0
123	Analysis 1	2247.22	-1.25	**NEGATIVE**	8	0.00	0.23	**EXCEED**	0.00	9.0		30.1	**EXCEED**	0
124	Analysis 5	275.00	0.00			0.62	3.29	**EXCEED**	0.74	2.7		13.2		0
125	Analysis 5	265.74	-0.06	**NEGATIVE**	5	1.16	11.81		0.02	0.6		5.2		0
126	Analysis 5	440.00	0.20			0.57	1.04	**EXCEED**	1.40	6.6		10.9		0
127	Analysis 5	200.00	0.22			0.77	3.46	**EXCEED**	0.79	3.4		13.6		0
128	Analysis 5	379.31	-0.02	**NEGATIVE**	6	0.61	1.80	**EXCEED**	0.92	4.7		11.3		0
129	Analysis 5	100.00	0.13			0.41	2.10	**EXCEED**	1.15	2.5		9.8		0
130	Analysis 1	298.34	-0.08	**NEGATIVE**	4	0.31	1.61	**EXCEED**	0.63	4.4		18.1		0
131	Analysis 1	254.21	-0.30	**NEGATIVE**	4	0.67	11.25	**EXCEED**	0.01	2.3		22.7	**EXCEED**	1
132	Analysis 5		0.28			0.71	2.64	**EXCEED**	1.09	2.2		6.5		0
133	Analysis 5	395.00	0.08			0.64	2.56	**EXCEED**	0.79	3.9		12.3		0
134	Analysis 5	950.00	0.11			0.36	1.65	**EXCEED**	1.05	2.7		8.4		0
135	Analysis 5	155.37	-0.41	**NEGATIVE**	3	0.92	1.80	**EXCEED**	0.03	4.6		7.7		0
136	Analysis 5		0.64			0.61	1.53	**EXCEED**	0.92	6.8		13.7		0
137	Analysis 5		3.99			0.76	1.86	**EXCEED**	1.39	7.0		13.9		0
138	Analysis 5	187.96	-0.14	**NEGATIVE**	4	0.53	2.27	**EXCEED**	1.39	3.1		11.5		0
139	Analysis 5		0.26			0.82	1.83	**EXCEED**	2.82	2.7		5.2		0
140	Analysis 5		1.13			2.06	8.67		1.11	1.9		5.4		1
141	Analysis 5	144.00	-0.20	**NEGATIVE**	2	1.42	3.60		1.53	3.1		7.2		1
142	Analysis 5		0.45			1.37	4.53		4.20	1.3		3.0		0
143	Analysis 5		0.35			0.40	0.80	**EXCEED**	1.24	6.8		12.6		0
144	Analysis 5	515.28	-0.36	**NEGATIVE**	6	0.40	1.30	**EXCEED**	1.42	1.9		5.3		0
145	Analysis 5	450.00	0.08			0.78	1.40	**EXCEED**	0.78	7.0		11.0		0
146	Analysis 5	600.00	0.17			1.07	3.99		5.57	0.7		2.5		0
147	Analysis 5	750.00	0.05			0.65	2.67	**EXCEED**	1.77	1.6		5.7		0
148	Analysis 5	199.97	-0.33	**NEGATIVE**	3	0.41	1.22	**EXCEED**	0.01	4.5		12.0		0
149	Analysis 5		1.04			1.91	9.11		1.09	1.9		7.4		0
150	Analysis 5		0.32			0.84	1.95	**EXCEED**	1.06	5.1		9.7		0
151	Analysis 5	187.31	-0.34	**NEGATIVE**	5	0.71	2.57	**EXCEED**	0.02	2.4		7.4		0
152	Analysis 5	200.00	0.05			0.42	5.10	**EXCEED**	0.89	1.9		12.8		0
153	Analysis 1	997.61	-0.90	**NEGATIVE**	8	0.06	1.41	**EXCEED**	0.00	2.9		23.0	**EXCEED**	0
154	Analysis 5	170.00	0.04			0.96	2.81	**EXCEED**	1.05	4.3		11.5		1
155	Analysis 5	1000.00	0.06			0.55	1.79	**EXCEED**	1.10	2.7		7.3		0
156	Analysis 5	105.01	-0.40	**NEGATIVE**	4	0.48	5.74	**EXCEED**	0.77	1.7		15.7		0
157	Analysis 5		0.27			0.33	0.81	**EXCEED**	1.50	6.1		12.5		0
158	Analysis 5	1255.13	0.00	**NEGATIVE**	3	0.46	2.44	**EXCEED**	1.71	1.6		4.7		0
159	Analysis 5		5.33			1.03	1.66		1.42	9.1		13.4		0
160	Analysis 5		1.16			0.72	3.20	**EXCEED**	0.84	6.4		15.1		0
161	Analysis 5	500.00	0.10			1.16	3.92		3.93	1.0		2.9		0
162	Analysis 1	386.50	-0.41	**NEGATIVE**	1	0.22	1.36	**EXCEED**	0.01	2.4		12.5		0
163	Analysis 5		0.46			0.45	0.89	**EXCEED**	1.73	6.2		10.6		0
164	Analysis 5	173.63	-0.58	**NEGATIVE**	3	1.05	3.41		0.01	6.4		19.4		0
165	Analysis 5	580.00	0.05			0.48	1.73	**EXCEED**	1.80	2.2		6.7		0
166	Analysis 1	1000.00	0.07			0.50	2.83	**EXCEED**	0.54	6.5		22.4	**EXCEED**	0
167	Analysis 5	450.00	0.12			0.33	1.36	**EXCEED**	2.50	2.1		6.8		0
168	Analysis 5	450.00	0.12			0.68	2.08	**EXCEED**	1.29	3.6		9.3		0
169	Analysis 5	373.67	-0.04	**NEGATIVE**	2	0.44	3.43	**EXCEED**	3.94	0.5		3.0		0
170	Analysis 5		0.82			0.96	3.94	**EXCEED**	0.71	4.3		13.5		0
171	Analysis 1	732.40	-0.13	**NEGATIVE**	1	0.53	3.22	**EXCEED**	0.01	1.4		6.6		0
172	Analysis 5	205.24	-0.17	**NEGATIVE**	3	0.78	3.48	**EXCEED**	0.02	2.6		8.7		0
173	Analysis 5		0.72			1.16	4.21		0.85	5.9		14.2		0
174	Analysis 5		0.56			0.50	1.52	**EXCEED**	1.00	7.4		16.2		0
175	Analysis 5		0.27			0.45	3.91	**EXCEED**	2.07	1.9		7.0		0
176	Analysis 5	280.72	-0.12	**NEGATIVE**	8	0.45	1.43	**EXCEED**	3.89	1.1		3.1		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
177	Analysis 1	387.89	-0.29	NEGATIVE	11	0.48	3.56	EXCEED	0.01	2.0		13.6		0
178	Analysis 5	1835.31	-0.31	NEGATIVE	3	0.16	0.43	EXCEED	2.24	0.9		2.2		0
179	Analysis 1	71.50	-0.19	NEGATIVE	1	0.71	4.73	EXCEED	0.02	3.5		17.2		0
180	Analysis 5	274.80	-0.37	NEGATIVE	2	0.42	0.68	EXCEED	2.73	3.1		4.4		0
181	Analysis 5	186.53	-0.24	NEGATIVE	2	0.38	3.89	EXCEED	0.67	2.5		17.9		0
182	Analysis 5	1000.00	0.10			0.31	0.62	EXCEED	2.11	5.0		8.9		0
183	Analysis 5	2146.76	-0.34	NEGATIVE	3	0.13	0.27	EXCEED	1.87	5.6		9.4		0
184	Analysis 5	218.62	-0.21	NEGATIVE	3	0.56	1.66	EXCEED	4.07	1.1		3.0		0
185	Analysis 5	240.00	0.12			0.36	2.21	EXCEED	0.70	4.4		20.6	EXCEED	0
186	Analysis 5	225.00	0.14			0.88	3.01	EXCEED	4.10	0.9		2.3		0
187	Analysis 5		0.53			0.49	2.46	EXCEED	1.18	4.0		13.7		0
188	Analysis 1	509.03	-0.13	NEGATIVE	1	0.26	1.94	EXCEED	0.66	3.0		17.2		0
189	Analysis 5		0.25			0.71	1.35	EXCEED	1.36	5.3		9.0		0
190	Analysis 5		1.61			0.71	2.73	EXCEED	1.46	4.0		13.4		0
191	Analysis 5	95.07	-0.12	NEGATIVE	10	0.91	2.50	EXCEED	1.53	3.7		8.7		0
192	Analysis 5		1.56			1.30	7.03		0.43	6.6		22.1	EXCEED	0
193	Analysis 5	513.39	-0.22	NEGATIVE	4	0.37	1.68	EXCEED	0.92	3.1		11.1		0
194	Analysis 1	443.44	-0.48	NEGATIVE	4	0.18	1.61	EXCEED	0.01	2.5		14.0		0
195	Analysis 5	350.00	0.10			0.67	2.25	EXCEED	1.44	3.0		7.7		0
196	Analysis 5	1250.00	0.21			0.39	0.71	EXCEED	1.17	8.0		13.3		0
197	Analysis 5		0.77			0.74	2.23	EXCEED	1.29	5.0		11.8		0
198	Analysis 1	354.21	-0.18	NEGATIVE	9	0.42	2.02	EXCEED	0.01	1.8		7.6		1
199	Analysis 5	1547.06	-0.03	NEGATIVE	2	0.77	2.76	EXCEED	0.02	0.2		0.7		1
200	Analysis 5	261.71	-0.74	NEGATIVE	2	0.43	1.71	EXCEED	0.84	2.5		8.2		1
201	Analysis 5		0.69			0.87	1.84	EXCEED	1.58	5.1		9.4		0
202	Analysis 5	445.62	-0.02	NEGATIVE	3	1.41	2.28		3.39	2.0		2.9		0
203	Analysis 5	350.00	0.08			1.15	3.93		0.93	2.0		5.8		0
204	Analysis 5	551.09	-0.59	NEGATIVE	2	0.37	1.66	EXCEED	0.46	3.2		13.1		0
205	Analysis 5		0.38			0.65	3.56	EXCEED	0.88	3.7		13.7		0
206	Analysis 1	243.27	-0.39	NEGATIVE	1	0.43	1.71	EXCEED	0.01	4.7		16.5		0
207	Analysis 1	1478.86	-0.48	NEGATIVE	12	0.28	1.61	EXCEED	0.00	3.8		16.0		0
208	Analysis 5	275.00	0.18			0.84	2.62	EXCEED	1.82	2.3		6.1		0
209	Analysis 5	556.28	-0.11	NEGATIVE	2	0.41	3.71	EXCEED	2.21	0.4		3.3		0
210	Analysis 5	1270.00	0.04			0.21	1.12	EXCEED	1.27	3.8		12.2		0
211	Analysis 5		0.33			0.42	1.49	EXCEED	1.09	4.6		12.7		0
212	Analysis 5	338.71	-0.13	NEGATIVE	1	0.71	1.67	EXCEED	1.06	5.4		10.9		0
213	Analysis 5		0.63			0.75	1.63	EXCEED	0.81	8.7		16.4		0
214	Analysis 5		1.15			0.52	1.94	EXCEED	1.24	6.4		15.9		0
215	Analysis 5		0.46			1.20	4.44		1.06	3.3		10.4		0
216	Analysis 5	347.01	-0.02	NEGATIVE	4	0.69	1.83	EXCEED	0.04	0.7		1.6		1
217	Analysis 5		0.32			0.96	3.61	EXCEED	1.27	2.6		8.6		0
218	Analysis 5	468.76	-0.17	NEGATIVE	6	0.24	1.15	EXCEED	1.11	3.0		10.5		0
219	Analysis 5	100.00	0.01			0.25	2.53	EXCEED	1.24	1.3		9.7		0
220	Analysis 5	280.00	0.14			1.83	3.98		2.68	2.2		4.2		0
221	Analysis 1	440.33	-0.26	NEGATIVE	4	0.25	3.06	EXCEED	0.59	1.6		15.6		0
222	Analysis 1	555.25	-0.01	NEGATIVE	1	0.75	2.33	EXCEED	0.04	0.5		1.1		1
223	Analysis 5	1100.00	0.16			0.47	1.06	EXCEED	1.44	5.2		9.2		0
224	Analysis 5		1.20			0.61	1.12	EXCEED	0.90	12.4	EXCEED	20.1	EXCEED	0
225	Analysis 5		1.02			0.74	1.89	EXCEED	1.58	4.8		10.0		0
226	Analysis 5	525.00	0.17			0.65	2.22	EXCEED	0.84	3.9		10.9		0
227	Analysis 5	137.80	-0.97	NEGATIVE	2	0.37	1.18	EXCEED	1.02	4.6		12.9		1
228	Analysis 5		2.50			1.40	6.77		0.76	3.7		14.9		1
229	Analysis 5		0.39			0.64	1.06	EXCEED	1.18	8.2		12.2		0
230	Analysis 1	456.99	-0.83	NEGATIVE	4	0.18	2.84	EXCEED	0.00	2.0		24.4	EXCEED	0
231	Analysis 5	350.00	0.01			1.11	3.02		4.28	0.9		2.3		0
232	Analysis 5		0.63			0.65	2.30	EXCEED	1.51	3.9		10.0		0
233	Analysis 5	850.00	0.13			0.57	1.27	EXCEED	3.28	2.4		4.6		0

	Analysis 6													
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234	Analysis 5	1150.00	0.11			0.51	0.92	EXCEED	4.17	2.3		3.7		0
235	Analysis 5	310.98	-0.04	NEGATIVE	11	0.56	2.42	EXCEED	3.03	1.0		3.8		0
236	Analysis 5		0.33			0.41	0.90	EXCEED	1.25	6.1		11.8		0
237	Analysis 5	355.61	-0.02	NEGATIVE	5	1.11	3.46		5.16	0.7		1.9		1
238	Analysis 1	2949.69	-1.18	NEGATIVE	6	0.09	0.26	EXCEED	0.00	14.8	EXCEED	31.2	EXCEED	0
239	Analysis 5	958.68	-0.28	NEGATIVE	10	0.45	1.15	EXCEED	1.19	4.8		8.1		0
240	Analysis 5		1.03			0.20	0.63	EXCEED	1.36	6.2		14.2		0
241	Analysis 5	800.00	0.15			0.60	1.28	EXCEED	1.68	3.9		7.5		0
242	Analysis 5	482.96	-0.14	NEGATIVE	2	0.36	2.31	EXCEED	1.14	1.6		7.8		0
243	Analysis 5	568.00	0.24			0.55	1.63	EXCEED	2.45	2.2		4.9		0
244	Analysis 5		0.29			0.20	0.74	EXCEED	1.19	6.0		14.0		0
245	Analysis 5		1.11			0.71	1.80	EXCEED	1.44	5.4		11.5		0
246	Analysis 5	925.00	0.03			0.34	1.08	EXCEED	1.35	4.0		8.9		0
247	Analysis 5		0.33			0.65	1.33	EXCEED	2.72	3.1		5.3		0
248	Analysis 5		0.30			0.45	1.20	EXCEED	1.24	5.1		11.1		0
249	Analysis 1	551.08	-0.57	NEGATIVE	11	0.11	0.68	EXCEED	0.00	3.4		15.5		0
250	Analysis 1	327.89	-0.13	NEGATIVE	3	0.76	2.46	EXCEED	0.01	4.9		13.5		1
251	Analysis 5	214.60	-0.16	NEGATIVE	2	0.89	2.16	EXCEED	0.02	3.2		7.3		0
252	Analysis 1	1344.94	-0.56	NEGATIVE	8	0.00	0.01	EXCEED	0.00	8.0		13.6		0
253	Analysis 5	630.00	0.24			0.54	0.97	EXCEED	0.80	5.6		9.2		0
254	Analysis 1	466.36	-1.33	NEGATIVE	8	0.10	2.10	EXCEED	0.00	2.2		35.7	EXCEED	0
255	Analysis 1	369.49	-0.06	NEGATIVE	3	0.79	3.23	EXCEED	0.01	1.9		6.7		0
256	Analysis 1	239.07	-0.04	NEGATIVE	5	0.61	3.21	EXCEED	0.04	0.6		2.7		0
257	Analysis 5		0.33			0.65	1.23	EXCEED	1.55	5.7		9.8		0
258	Analysis 1	469.49	-0.56	NEGATIVE	1	0.31	3.18	EXCEED	0.00	3.2		19.8		0
259	Analysis 5	1000.00	0.16			0.41	2.14	EXCEED	1.71	2.4		8.2		0
260	Analysis 5	248.04	-0.13	NEGATIVE	6	1.33	3.21		0.03	2.0		4.1		1
261	Analysis 5	300.00	0.05			0.68	1.59	EXCEED	0.83	7.0		14.4		0
262	Analysis 5	383.66	-0.10	NEGATIVE	6	0.60	1.84	EXCEED	3.35	1.5		3.6		0
263	Analysis 5	499.34	-0.11	NEGATIVE	2	0.46	2.52	EXCEED	0.01	0.9		3.6		0
264	Analysis 5	133.33	-0.48	NEGATIVE	2	0.81	1.96	EXCEED	1.07	6.4		14.5		0
265	Analysis 5	500.00	0.16			1.17	2.66		1.62	2.4		4.9		0
266	Analysis 5	237.31	-0.05	NEGATIVE	6	0.62	1.37	EXCEED	0.90	8.1		14.5		0
267	Analysis 5	377.42	-0.22	NEGATIVE	2	0.14	0.99	EXCEED	1.22	1.2		8.1		0
268	Analysis 5		5.05			0.54	1.08	EXCEED	1.02	11.8		19.8		0
269	Analysis 1	350.00	0.04			1.41	7.87		0.03	0.5		2.3		0
270	Analysis 5		0.55			1.28	2.74		6.24	1.6		2.9		0
271	Analysis 5	112.54	-0.13	NEGATIVE	3	0.07	0.21	EXCEED	11.19	0.4		1.1		0
272	Analysis 5		0.36			0.81	2.30	EXCEED	1.69	3.8		8.5		0
273	Analysis 1	451.08	-0.13	NEGATIVE	5	0.38	2.17	EXCEED	0.01	1.1		5.0		0
274	Analysis 5	450.00	0.20			0.53	1.53	EXCEED	0.72	6.1		13.3		0
275	Analysis 5	411.03	-0.03	NEGATIVE	2	0.54	1.41	EXCEED	1.72	3.2		7.0		0
276	Analysis 5	693.40	-0.16	NEGATIVE	6	0.39	1.13	EXCEED	1.03	4.1		10.6		0
277	Analysis 5		3.66			1.11	1.88		1.43	8.7		13.3		0
278	Analysis 1	66.77	-0.91	NEGATIVE	4	0.47	11.54	EXCEED	0.02	2.5		41.3	EXCEED	1
279	Analysis 5	320.70	-0.07	NEGATIVE	3	0.58	1.61	EXCEED	1.32	2.3		5.8		0
280	Analysis 5		0.35			0.65	1.79	EXCEED	1.68	3.6		8.8		0
281	Analysis 5		0.30			0.49	1.25	EXCEED	2.21	4.0		7.8		0
282	Analysis 5		0.30			1.11	3.32		2.13	2.2		5.8		0
283	Analysis 5		0.52			0.70	2.22	EXCEED	1.75	3.4		9.1		0
284	Analysis 1		0.47			0.44	1.56	EXCEED	0.64	9.0		28.1	EXCEED	0
285	Analysis 5	315.00	0.13			0.57	1.12	EXCEED	0.50	8.1		13.6		0
286	Analysis 5	163.10	-0.63	NEGATIVE	1	0.19	1.34	EXCEED	0.50	3.6		21.5	EXCEED	0
287	Analysis 1		1.50			0.74	1.37	EXCEED	0.72	12.5	EXCEED	20.8	EXCEED	1
288	Analysis 5		0.44			0.50	1.13	EXCEED	1.19	6.8		12.8		0
289	Analysis 5	340.52	-0.05	NEGATIVE	3	0.47	2.44	EXCEED	1.52	1.9		7.6		0
290	Analysis 5	2144.04	-0.16	NEGATIVE	3	0.15	0.48	EXCEED	2.12	2.9		7.4		0
291	Analysis 5	163.36	-0.17	NEGATIVE	2	1.67	4.82		1.97	2.0		5.4		1
292	Analysis 1	533.38	-0.19	NEGATIVE	2	0.36	2.55	EXCEED	0.01	1.1		7.0		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
293	Analysis 5		0.59			0.47	1.20	**EXCEED**	1.25	6.7		13.7		0
294	Analysis 5	95.34	-0.91	**NEGATIVE**	3	0.45	3.42	**EXCEED**	0.73	2.8		16.7		0
295	Analysis 5	396.44	-0.32	**NEGATIVE**	2	0.38	0.93	**EXCEED**	2.27	2.3		5.1		0
296	Analysis 5	1130.00	0.21			0.72	1.49	**EXCEED**	3.14	2.6		4.8		0
297	Analysis 5	223.59	-0.28	**NEGATIVE**	6	0.53	1.37	**EXCEED**	0.02	3.5		8.0		0
298	Analysis 5	750.00	0.07			0.58	1.36	**EXCEED**	1.75	3.3		6.9		0
299	Analysis 5	455.00	0.00			0.43	2.02	**EXCEED**	1.79	2.2		6.5		0
300	Analysis 5	534.76	-0.07	**NEGATIVE**	2	0.33	1.24	**EXCEED**	1.54	2.4		7.6		0
301	Analysis 5		0.57			0.77	3.07	**EXCEED**	1.23	3.9		12.2		0
302	Analysis 5		0.37			0.43	1.68	**EXCEED**	1.18	3.6		12.0		0
303	Analysis 5		0.83			0.67	1.17	**EXCEED**	1.94	6.2		9.4		0
304	Analysis 5	310.00	0.00			0.45	1.56	**EXCEED**	0.79	4.5		14.3		0
305	Analysis 5	470.83	-0.21	**NEGATIVE**	8	0.65	2.47	**EXCEED**	0.84	2.2		6.8		0
306	Analysis 5		0.33			0.96	3.75	**EXCEED**	1.04	1.9		6.6		0
307	Analysis 1	463.87	-0.03	**NEGATIVE**	1	0.43	2.77	**EXCEED**	0.55	2.7		13.4		0
308	Analysis 5	510.96	-0.02	**NEGATIVE**	2	0.44	2.71	**EXCEED**	3.33	1.1		3.0		0
309	Analysis 5		1.62			0.94	2.27	**EXCEED**	1.32	6.5		13.7		0
310	Analysis 5	740.56	-0.06	**NEGATIVE**	3	0.55	2.26	**EXCEED**	3.96	0.7		2.4		0
311	Analysis 1	261.92	-0.87	**NEGATIVE**	4	0.23	2.19	**EXCEED**	0.01	3.3		27.3	**EXCEED**	0
312	Analysis 5		0.35			0.59	1.53	**EXCEED**	1.21	5.1		10.7		0
313	Analysis 1	220.00	0.22			2.77	8.14		0.04	1.2		2.9		0
314	Analysis 5		0.72			0.99	1.90	**EXCEED**	2.14	4.4		7.6		0
315	Analysis 5	1050.00	0.18			0.50	1.74	**EXCEED**	0.74	2.6		7.7		0
316	Analysis 5		0.43			0.51	1.65	**EXCEED**	1.57	4.5		11.2		0
317	Analysis 5	500.00	0.02			0.25	2.00	**EXCEED**	1.33	1.6		9.7		0
318	Analysis 5		0.30			0.70	1.72	**EXCEED**	1.91	3.8		8.4		0
319	Analysis 5		0.59			1.05	2.91		2.33	2.8		6.5		0
320	Analysis 1	359.46	-0.44	**NEGATIVE**	4	0.33	1.71	**EXCEED**	0.01	3.8		15.7		0
321	Analysis 1	312.61	-0.45	**NEGATIVE**	2	0.24	1.52	**EXCEED**	0.01	2.5		14.4		0
322	Analysis 5		0.96			0.58	1.37	**EXCEED**	0.99	10.0		20.0	**EXCEED**	0
323	Analysis 5	350.00	0.06			0.72	1.59	**EXCEED**	2.10	3.8		7.0		0
324	Analysis 5		0.27			0.67	1.43	**EXCEED**	2.22	3.6		6.3		0
325	Analysis 5	359.94	-0.11	**NEGATIVE**	4	0.44	1.55	**EXCEED**	1.15	3.5		10.5		0
326	Analysis 5		0.74			0.38	0.67	**EXCEED**	0.98	12.5	**EXCEED**	18.3		0
327	Analysis 5	1107.51	-0.01	**NEGATIVE**	8	0.15	0.68	**EXCEED**	0.92	5.9		17.3		0
328	Analysis 5		0.36			0.83	1.53	**EXCEED**	0.93	5.9		9.7		0
329	Analysis 5	116.93	-0.17	**NEGATIVE**	6	1.15	6.43		0.02	3.2		12.9		0
330	Analysis 5	33.17	-0.11	**NEGATIVE**	8	0.78	7.17	**EXCEED**	1.44	1.4		8.5		0
331	Analysis 5		0.41			0.69	1.96	**EXCEED**	1.10	4.8		10.3		0
332	Analysis 5	361.64	-0.13	**NEGATIVE**	5	1.07	2.86		0.01	2.3		5.7		0
333	Analysis 5	334.56	-0.05	**NEGATIVE**	3	0.83	4.02	**EXCEED**	2.23	1.1		4.7		0
334	Analysis 1	889.63	-0.42	**NEGATIVE**	4	0.15	4.06	**EXCEED**	0.00	0.6		12.0		0
335	Analysis 5		0.54			0.64	16.62	**EXCEED**	1.45	1.4		10.7		0
336	Analysis 5		0.76			0.56	1.39	**EXCEED**	2.09	4.4		9.0		0
337	Analysis 5		0.26			0.69	1.96	**EXCEED**	2.60	2.7		6.1		0
338	Analysis 5	500.00	0.11			0.39	1.50	**EXCEED**	1.56	3.5		10.2		0
339	Analysis 5	185.40	-0.69	**NEGATIVE**	10	0.05	0.14	**EXCEED**	0.08	1.0		2.7		0
340	Analysis 5	267.09	-0.16	**NEGATIVE**	1	0.60	1.56	**EXCEED**	0.51	9.9		22.7	**EXCEED**	0
341	Analysis 5		0.53			0.38	2.05	**EXCEED**	1.01	4.7		15.9		0
342	Analysis 1	212.61	-0.52	**NEGATIVE**	3	0.40	2.89	**EXCEED**	0.01	3.8		21.0	**EXCEED**	0
343	Analysis 5	430.00	0.01			0.51	1.33	**EXCEED**	2.13	3.3		7.3		0
344	Analysis 5		0.36			0.55	1.66	**EXCEED**	1.48	4.6		10.2		0
345	Analysis 5	900.00	0.12			0.72	3.11	**EXCEED**	1.77	1.3		4.6		0
346	Analysis 1	650.00	0.08			0.67	2.32	**EXCEED**	0.36	6.1		15.8		0
347	Analysis 5		2.76			1.09	2.15		0.68	9.9		16.8		0
348	Analysis 5	580.41	-0.61	**NEGATIVE**	6	0.04	0.15	**EXCEED**	1.01	2.2		7.9		0
349	Analysis 1	836.56	-0.80	**NEGATIVE**	3	0.15	1.20	**EXCEED**	0.47	3.9		23.0	**EXCEED**	0
350	Analysis 5	450.00	0.18			0.58	1.85	**EXCEED**	1.72	2.9		8.4		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
351	Analysis 1	740.00	0.24			0.40	1.10	EXCEED	0.70	8.3		17.1		0
352	Analysis 1	378.86	-0.26	NEGATIVE	4	0.28	2.51	EXCEED	0.01	1.3		8.9		0
353	Analysis 5	501.04	-0.25	NEGATIVE	6	0.71	1.52	EXCEED	1.52	4.1		7.9		0
354	Analysis 5	543.05	-0.45	NEGATIVE	6	0.32	0.90	EXCEED	0.96	3.6		7.2		0
355	Analysis 5	500.00	0.03			0.63	1.39	EXCEED	1.01	5.9		11.3		0
356	Analysis 5		1.06			0.99	2.07	EXCEED	1.60	5.7		10.4		0
357	Analysis 5		0.80			0.45	1.57	EXCEED	1.26	5.6		14.7		0
358	Analysis 5	478.21	-0.20	NEGATIVE	2	0.68	2.15	EXCEED	5.49	1.0		1.9		1
359	Analysis 5	345.00	0.03			0.25	1.13	EXCEED	0.76	5.6		20.7	EXCEED	0
360	Analysis 5	269.19	-0.08	NEGATIVE	5	0.77	3.54	EXCEED	0.01	2.0		7.8		0
361	Analysis 5	131.11	-0.19	NEGATIVE	4	0.71	2.81	EXCEED	1.34	3.8		11.0		1
362	Analysis 5	500.00	0.07			0.82	2.46	EXCEED	1.97	1.7		4.6		0
363	Analysis 5	613.54	-0.23	NEGATIVE	1	0.12	0.73	EXCEED	1.33	2.1		7.4		0
364	Analysis 5		0.44			0.95	1.59	EXCEED	2.91	3.9		6.1		0
365	Analysis 5		4.28			3.56	8.44		1.17	6.8		12.2		0
366	Analysis 5		0.28			0.56	1.35	EXCEED	1.90	3.8		7.7		0
367	Analysis 5		0.78			0.49	0.86	EXCEED	1.07	10.8		16.6		0
368	Analysis 5		0.49			0.72	1.23	EXCEED	2.62	4.3		6.0		0
369	Analysis 5		0.52			0.41	1.08	EXCEED	0.95	8.1		18.3		0
370	Analysis 5	66.62	-0.02	NEGATIVE	3	1.14	10.59		0.77	2.3		13.6		1
371	Analysis 5	418.62	-0.28	NEGATIVE	2	0.85	5.41	EXCEED	0.57	1.8		7.3		0
372	Analysis 5	491.70	-0.09	NEGATIVE	3	0.73	2.96	EXCEED	0.02	0.8		2.7		0
373	Analysis 5	1000.00	0.03			0.66	1.71	EXCEED	1.78	2.2		5.0		0
374	Analysis 5		1.03			0.98	1.92	EXCEED	2.55	4.2		6.9		0
375	Analysis 5	1500.00	0.05			0.50	1.24	EXCEED	0.99	2.9		6.0		0
376	Analysis 5	500.00	0.12			0.64	2.29	EXCEED	2.05	1.9		5.9		0
377	Analysis 5	1000.00	0.09			0.33	1.18	EXCEED	1.58	3.2		9.1		0
378	Analysis 5	590.00	0.08			0.40	2.60	EXCEED	0.97	1.9		10.8		0
379	Analysis 1	1000.00	0.17			0.65	2.92	EXCEED	0.42	3.9		13.3		0
380	Analysis 5	231.00	-0.03	NEGATIVE	3	0.39	1.41	EXCEED	1.15	1.4		4.2		0
381	Analysis 5	425.00	0.13			0.81	2.28	EXCEED	3.00	2.1		5.1		0
382	Analysis 1	631.40	-0.15	NEGATIVE	8	0.25	1.26	EXCEED	0.66	5.9		17.4		0
383	Analysis 1	333.24	-0.51	NEGATIVE	4	0.29	2.87	EXCEED	0.01	2.2		17.5		0
384	Analysis 5	569.32	-0.04	NEGATIVE	3	0.84	1.30	EXCEED	2.87	2.7		4.0		0
385	Analysis 5		0.98			0.57	1.28	EXCEED	1.18	7.7		14.3		0
386	Analysis 1	433.61	-0.24	NEGATIVE	2	0.18	1.75	EXCEED	0.66	2.2		17.9		0
387	Analysis 5	310.00	0.08			1.19	4.32		2.49	1.4		4.4		0
388	Analysis 5	260.00	0.13			0.90	2.36	EXCEED	4.35	0.9		2.0		1
389	Analysis 5		0.67			0.73	1.78	EXCEED	1.33	5.1		11.0		0
390	Analysis 5	248.21	-0.65	NEGATIVE	3	0.11	0.65	EXCEED	0.70	3.2		17.1		0
391	Analysis 5	488.19	-0.08	NEGATIVE	8	0.26	0.84	EXCEED	1.15	6.1		15.3		0
392	Analysis 5	1000.00	0.09			0.24	0.54	EXCEED	1.36	7.9		12.3		0
393	Analysis 1	1883.33	-0.88	NEGATIVE	3	0.40	1.04	EXCEED	0.32	15.2	EXCEED	25.1	EXCEED	0
394	Analysis 5	272.50	-0.21	NEGATIVE	3	0.63	3.60	EXCEED	0.81	2.1		10.4		0
395	Analysis 5	511.25	-0.12	NEGATIVE	4	0.22	1.86	EXCEED	1.05	1.5		11.2		0
396	Analysis 5		0.25			0.40	1.27	EXCEED	1.65	3.9		10.0		0
397	Analysis 5	600.00	0.05			0.82	3.35	EXCEED	1.58	1.9		5.1		0
398	Analysis 5	267.57	-0.53	NEGATIVE	6	0.36	1.28	EXCEED	0.01	4.1		11.8		0
399	Analysis 1	218.24	-0.25	NEGATIVE	2	0.64	3.75	EXCEED	0.01	3.5		16.9		0
400	Analysis 5	1071.22	-0.02	NEGATIVE	8	0.25	0.67	EXCEED	1.05	4.9		11.4		0
401	Analysis 5	536.78	-0.08	NEGATIVE	3	0.39	1.53	EXCEED	3.77	0.7		2.4		0
402	Analysis 5		1.45			1.00	2.18	EXCEED	0.85	8.9		17.4		0
403	Analysis 1	712.22	-1.85	NEGATIVE	2	0.56	4.04	EXCEED	0.16	2.4		14.4		0
404	Analysis 5	785.24	-0.21	NEGATIVE	2	0.16	1.64	EXCEED	0.75	1.2		10.1		0
405	Analysis 5	1200.00	0.01			0.28	0.82	EXCEED	1.80	2.7		6.7		0
406	Analysis 5		0.82			0.67	1.18	EXCEED	1.39	7.2		11.1		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
407	Analysis 5	850.00	0.24			0.34	0.85	EXCEED	1.52	4.9		9.9		0
408	Analysis 1	507.33	-0.45	NEGATIVE	3	0.37	1.37	EXCEED	0.00	5.6		17.2		0
409	Analysis 1	191.86	-0.60	NEGATIVE	2	0.56	6.55	EXCEED	0.01	3.2		32.6	EXCEED	0
410	Analysis 1	392.89	-1.18	NEGATIVE	4	0.13	1.58	EXCEED	0.00	3.3		32.5	EXCEED	0
411	Analysis 5	631.45	-0.01	NEGATIVE	3	0.38	1.22	EXCEED	0.86	4.9		13.7		0
412	Analysis 5	629.39	-0.05	NEGATIVE	2	0.74	2.04	EXCEED	1.90	1.9		5.1		0
413	Analysis 5		1.49			0.75	1.65	EXCEED	1.07	7.7		15.0		0
414	Analysis 5		0.66			0.75	2.40	EXCEED	1.00	4.2		10.6		0
415	Analysis 5	490.00	0.07			0.49	1.72	EXCEED	0.66	6.6		16.8		0
416	Analysis 5		1.41			0.95	4.22	EXCEED	1.91	3.7		9.5		1
417	Analysis 5	322.54	-0.08	NEGATIVE	4	0.31	3.68	EXCEED	2.48	0.5		4.9		0
418	Analysis 5	525.00	0.02			0.34	1.80	EXCEED	1.04	2.3		10.9		1
419	Analysis 5	500.00	0.02			0.58	2.66	EXCEED	0.89	3.4		10.2		0
420	Analysis 5	637.53	-0.06	NEGATIVE	2	0.37	1.02	EXCEED	5.93	0.8		2.0		0
421	Analysis 5	322.81	-0.08	NEGATIVE	8	0.49	1.95	EXCEED	1.14	3.0		10.4		0
422	Analysis 5	391.72	-0.04	NEGATIVE	2	0.49	1.42	EXCEED	1.58	2.8		6.8		0
423	Analysis 5	500.00	0.10			0.37	1.84	EXCEED	2.25	2.5		7.0		0
424	Analysis 5	810.65	-0.25	NEGATIVE	2	0.36	0.88	EXCEED	0.70	5.8		12.7		0
425	Analysis 5	502.44	-0.10	NEGATIVE	3	1.03	2.41		2.77	1.3		2.8		1
426	Analysis 5	1019.25	-0.02	NEGATIVE	4	0.29	1.04	EXCEED	2.32	2.0		5.2		0
427	Analysis 5	240.00	0.11			0.69	4.09	EXCEED	1.76	1.3		6.8		0
428	Analysis 5		0.93			0.61	1.51	EXCEED	1.71	5.7		10.8		0
429	Analysis 5	183.02	-0.22	NEGATIVE	8	0.70	1.84	EXCEED	1.13	5.4		13.3		0
430	Analysis 5	1138.05	-0.03	NEGATIVE	3	0.40	0.74	EXCEED	1.38	4.2		6.5		0
431	Analysis 1	1514.00	-0.89	NEGATIVE	4	0.27	1.48	EXCEED	0.39	4.3		17.0		0
432	Analysis 5	338.81	-0.21	NEGATIVE	3	0.58	1.76	EXCEED	1.19	3.6		8.7		0
433	Analysis 5	350.00	0.21			0.68	1.20	EXCEED	0.87	10.8		15.4		0
434	Analysis 1	342.33	-0.10	NEGATIVE	2	0.79	2.36	EXCEED	0.01	4.7		12.2		0
435	Analysis 5		0.56			0.21	0.49	EXCEED	1.32	8.7		15.6		0
436	Analysis 1	435.81	-0.74	NEGATIVE	2	0.14	3.21	EXCEED	0.00	1.1		20.8	EXCEED	0
437	Analysis 5	180.00	0.03			0.74	5.39	EXCEED	0.98	2.0		11.5		0
438	Analysis 5		0.31			1.21	4.83		1.38	1.7		5.0		0
439	Analysis 1	148.86	-0.24	NEGATIVE	3	0.39	2.11	EXCEED	0.02	2.3		9.6		0
440	Analysis 5	1200.00	0.19			0.42	0.71	EXCEED	2.54	4.6		7.1		0
441	Analysis 5	192.10	-0.83	NEGATIVE	3	0.68	1.97	EXCEED	1.45	4.5		11.7		0
442	Analysis 5	94.09	-0.13	NEGATIVE	3	1.13	2.90		0.50	10.8		21.5	EXCEED	0
443	Analysis 5		1.00			0.78	1.74	EXCEED	1.65	5.3		10.0		0
444	Analysis 5		0.59			1.06	3.56		0.67	3.5		10.2		0
445	Analysis 5		0.26			0.37	0.88	EXCEED	1.41	6.8		13.3		0
446	Analysis 5	320.00	0.04			1.04	3.66		2.03	1.5		4.9		0
447	Analysis 5		0.87			0.75	1.74	EXCEED	1.29	6.8		13.2		0
448	Analysis 5		0.37			1.92	9.64		3.12	0.9		3.9		0
449	Analysis 1	479.49	-0.60	NEGATIVE	2	0.26	3.55	EXCEED	0.00	1.6		19.3		0
450	Analysis 5	828.94	-0.11	NEGATIVE	1	0.25	2.37	EXCEED	0.71	1.4		10.7		0
451	Analysis 5	215.52	-2.32	NEGATIVE	4	0.56	1.07	EXCEED	0.71	12.3	EXCEED	21.7	EXCEED	0
452	Analysis 5	385.88	-0.10	NEGATIVE	10	0.43	2.59	EXCEED	1.02	2.3		9.1		0
453	Analysis 5	485.54	-0.14	NEGATIVE	2	0.28	1.19	EXCEED	2.98	1.3		3.9		0
454	Analysis 1	885.39	-0.09	NEGATIVE	6	0.62	5.07	EXCEED	0.00	1.0		6.0		0
455	Analysis 5		0.79			0.63	1.41	EXCEED	1.54	4.9		9.7		0
456	Analysis 5	901.00	0.01			0.45	0.92	EXCEED	1.52	4.2		7.6		0
457	Analysis 1	228.17	-0.14	NEGATIVE	10	0.52	5.58	EXCEED	0.02	0.8		7.2		0
458	Analysis 5	390.00	0.07			0.38	2.84	EXCEED	0.73	3.1		15.8		0
459	Analysis 5	679.77	-0.24	NEGATIVE	3	0.28	0.98	EXCEED	0.79	3.6		9.9		0
460	Analysis 1	370.00	0.03			1.23	4.88		0.02	0.8		2.7		0
461	Analysis 5	1010.00	0.17			0.43	1.18	EXCEED	1.68	3.6		8.6		0
462	Analysis 5	700.00	0.06			0.82	2.39	EXCEED	2.64	1.5		3.8		0
463	Analysis 5	1500.00	0.01			0.14	0.63	EXCEED	1.03	3.8		15.2		0
464	Analysis 5	249.49	-0.25	NEGATIVE	3	0.54	1.12	EXCEED	0.87	6.4		11.8		0

	Analysis 6													
	Analysis on Firm Basis					Ratios of Interest								
Point Number	Controlling Analysis	Additional capacity as equivalent well capacity needed for SE < 0.25	Minimum SE by Analysis 1 or Analysis 5	Check of SE: NEGATIVE if SE < 0	Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction	Ratio of Effective Storage to Average Day	Ratio of Effective Storage to Minimum Month Average Day	Ave Day Pumpage Exceeds Effective Storage (WDNR)	Ratio of Firm Well to Max Day	Hours Pumping Ave Day	Ave Day Pumpage Exceeds 12 Hours (10 State Stds)	Hour Pumping Max Day	Max Day Pumpage Exceeds 20 Hours (10 State Stds)	Maximum Day Data Corrected for Error in database
465	Analysis 5	570.97	-0.14	NEGATIVE	2	0.46	2.64	EXCEED	1.05	1.3		6.6		0
466	Analysis 5	350.00	0.05			0.59	1.14	EXCEED	1.13	7.7		13.5		0
467	Analysis 5	353.55	-0.10	NEGATIVE	2	0.34	1.60	EXCEED	1.44	2.2		8.4		0
468	Analysis 5	350.32	-0.17	NEGATIVE	3	0.39	1.67	EXCEED	0.01	1.9		6.4		0
469	Analysis 1	520.00	0.09			0.49	1.04	EXCEED	0.55	9.7		17.4		0
470	Analysis 1	239.63	-0.33	NEGATIVE	3	0.45	3.05	EXCEED	0.01	2.6		14.7		1
471	Analysis 5	480.67	-0.07	NEGATIVE	4	0.45	1.48	EXCEED	1.22	3.5		9.6		0
472	Analysis 5	500.00	0.17			0.50	1.51	EXCEED	0.72	7.0		17.2		0
473	Analysis 5		0.77			0.59	1.18	EXCEED	0.86	10.0		16.5		0
474	Analysis 5		0.55			0.38	0.81	EXCEED	2.53	4.0		7.7		0
475	Analysis 5		3.21			1.08	2.03		0.92	11.9		19.8		0
476	Analysis 5		0.26			0.45	1.31	EXCEED	1.51	4.6		11.1		0
477	Analysis 5		0.94			0.43	0.84	EXCEED	1.47	6.4		10.9		1
478	Analysis 5		0.29			0.70	1.18	EXCEED	3.51	3.2		4.9		0
479	Analysis 5		0.76			0.57	1.16	EXCEED	1.40	7.1		12.7		0
480	Analysis 1	768.18	-2.84	NEGATIVE	6	0.12	2.55	EXCEED	0.23	2.7		49.5	EXCEED	1
481	Analysis 5	639.73	-0.02	NEGATIVE	2	0.41	1.06	EXCEED	1.66	3.3		7.2		0
482	Analysis 5	410.43	-0.17	NEGATIVE	2	0.50	3.60	EXCEED	0.81	1.4		8.9		0
483	Analysis 5	414.12	-0.18	NEGATIVE	2	0.48	1.70	EXCEED	0.67	7.1		17.8		0
484	Analysis 5	300.00	0.04			0.52	2.72	EXCEED	3.30	1.1		4.8		0
485	Analysis 5		0.99			0.57	1.12	EXCEED	2.55	4.9		7.7		0
486	Analysis 5		1.05			0.89	1.59	EXCEED	1.82	6.6		10.5		0
487	Analysis 5	479.36	-0.41	NEGATIVE	5	0.08	0.61	EXCEED	1.29	0.6		2.1		0
488	Analysis 5		0.33			0.35	0.74	EXCEED	1.10	9.2		16.6		0
489	Analysis 5		0.29			0.60	2.26	EXCEED	0.72	4.9		16.6		0
490	Analysis 5	1231.03	-0.32	NEGATIVE	6	0.18	0.37	EXCEED	1.61	6.7		11.4		0
491	Analysis 5		0.35			0.51	1.63	EXCEED	1.07	5.1		13.9		0
492	Analysis 5	700.00	0.17			0.53	3.34	EXCEED	1.42	1.8		7.0		0
493	Analysis 5	900.00	0.22			0.43	0.71	EXCEED	1.58	6.0		8.0		0
494	Analysis 5	259.92	-0.24	NEGATIVE	3	0.42	2.81	EXCEED	0.01	1.6		8.5		0
495	Analysis 1	405.94	-0.16	NEGATIVE	2	0.35	2.55	EXCEED	0.01	1.0		6.0		0
496	Analysis 5		1.27			1.69	5.01		0.97	5.0		12.4		0
497	Analysis 5	605.97	-0.01	NEGATIVE	4	0.33	4.18	EXCEED	1.61	0.5		5.0		0
498	Analysis 5	644.65	-0.17	NEGATIVE	11	0.28	0.95	EXCEED	0.01	1.7		4.9		0
499	Analysis 5		0.32			0.36	0.91	EXCEED	1.53	5.8		12.2		0
500	Analysis 5	620.69	-0.03	NEGATIVE	6	0.37	0.24	EXCEED	1.42	16.9	EXCEED	8.5		0
501	Analysis 5		0.29			0.67	2.13	EXCEED	2.93	1.9		4.6		0
502	Analysis 1	350.39	-0.17	NEGATIVE	4	0.42	8.05	EXCEED	0.01	0.6		7.1		0
503	Analysis 5	200.00	0.04			0.43	4.51	EXCEED	1.06	1.4		11.4		0
504	Analysis 5		0.45			0.70	2.75	EXCEED	0.91	3.8		13.0		0
505	Analysis 1		0.98			0.99	3.53	EXCEED	0.41	5.2		16.1		0
506	Analysis 5		0.36			1.64	4.54		2.11	2.1		4.5		0
507	Analysis 5		0.33			0.73	1.83	EXCEED	1.35	3.3		6.8		0
508	Analysis 5		0.59			0.47	2.35	EXCEED	2.36	3.0		7.6		0
509	Analysis 5		0.99			0.70	1.70	EXCEED	1.94	5.1		9.5		0
510	Analysis 5	210.50	-0.05	NEGATIVE	2	0.37	0.89	EXCEED	1.22	5.3		10.0		1
511	Analysis 5	552.71	-0.38	NEGATIVE	8	0.57	1.23	EXCEED	0.93	3.9		7.1		0
512	Analysis 5	602.22	-0.20	NEGATIVE	8	0.59	2.20	EXCEED	1.72	1.3		4.0		0
513	Analysis 5	694.59	-0.26	NEGATIVE	2	0.60	1.68	EXCEED	1.28	2.2		5.0		0
514	Analysis 5	825.95	-0.10	NEGATIVE	3	0.64	1.60	EXCEED	2.02	2.2		5.0		0
515	Analysis 5	251.86	-0.20	NEGATIVE	11	0.59	3.29	EXCEED	1.68	1.5		7.0		0
516	Analysis 5	353.03	-0.18	NEGATIVE	3	0.48	1.68	EXCEED	1.91	1.9		5.7		0
517	Analysis 1	1180.04	-0.49	NEGATIVE	8	0.55	17.65	EXCEED	0.00	2.5		26.1	EXCEED	1
518	Analysis 5	85.00	0.01			1.80	8.92		0.08	1.0		3.5		1

	Analysis 6													
	Analysis on Firm Basis					**Ratios of Interest**								
Point Number	**Controlling Analysis**	**Additional capacity as equivalent well capacity needed for SE < 0.25**	**Minimum SE by Analysis 1 or Analysis 5**	**Check of SE: NEGATIVE if SE < 0**	**Cause of Max Day, 1=equipment_failure, 2=main break, 3=hydrant flushing, 4=reservoir_maint, 5=fire, 6=weather, 7=filling_tower, 8=industry_use/resale, 9=fill_reservoir, 10=unknown, 11=watermain_constr, 12=vandalism, 13=road_construction**	**Ratio of Effective Storage to Average Day**	**Ratio of Effective Storage to Minimum Month Average Day**	**Ave Day Pumpage Exceeds Effective Storage (WDNR)**	**Ratio of Firm Well to Max Day**	**Hours Pumping Ave Day**	**Ave Day Pumpage Exceeds 12 Hours (10 State Stds)**	**Hour Pumping Max Day**	**Max Day Pumpage Exceeds 20 Hours (10 State Stds)**	**Maximum Day Data Corrected for Error in database**
	maximum	Ave	Ave			Ave								
	minimum	553.12	0.15			0.62								
	average	Max	Max	234	# deficit	Max		453	# deficit		8		33	34
	median	2,949.69	5.33	45.2%	% of systems	3.67		87.5%	% of systems		1.5%		6.4%	
		Median	Median	4.2%	deviation	Median								
		456.99	0.03			0.56								
		Min	Min			Min								
		33.17	-2.84			0.00								
		Count	85% Effective	256	# deficit									
		363		49.4%	% of systems									
			560											
			1000											
			364											
			$203,840,000.00											
			1.259712											
			##########											

APPENDIX J: SUMMARY ANALYSIS 1 TO 6

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
159	10.28	1	100.00%	5,561	37,757	1.66	0
268	9.19	2	99.80%	32,225	200,814	1.08	0
277	8.47	3	99.60%	2,171	18,708	1.88	0
137	7.78	4	99.40%	9,320	61,150	1.86	0
62	7.27	5	99.20%	4,010	21,900	1.50	0
190	7.23	6	99.00%	133	1,079	2.73	0
47	6.37	7	98.80%	302	3,364	4.19	0
475	5.27	8	98.60%	7,657	65,000	2.03	0
365	4.70	9	98.40%	1,701	7,462	8.44	0
20	4.55	10	98.20%	74	1,102	4.15	0
347	4.40	11	98.00%	169	936	2.15	0
474	4.36	12	97.80%	2,574	22,973	0.81	0
240	4.31	13	97.60%	11,978	53,000	0.63	0
485	3.87	14	97.40%	6,952	63,240	1.12	0
7	3.82	15	97.20%	1,545	14,882	2.23	0
486	3.73	16	97.00%	2,958	28,943	1.59	0
64	3.67	17	96.90%	1,470	12,741	2.02	0
97	3.58	18	96.70%	119	1,600	2.45	0
270	3.50	19	96.50%	168	1,205	2.74	0
509	3.43	20	96.30%	2,435	20,000	1.70	0
309	3.27	21	96.10%	598	4,134	2.27	0
93	3.15	22	95.90%	437	4,567	1.60	0
303	3.07	23	95.70%	1,813	10,241	1.17	0
322	3.00	24	95.50%	3,390	30,046	1.37	0
120	2.95	25	95.30%	1,005	8,128	2.48	0
416	2.95	26	95.10%	1,559	6,976	4.22	0
19	2.94	27	94.90%	3,668	17,777	0.91	0
443	2.93	28	94.70%	1,386	9,400	1.74	0
336	2.90	29	94.50%	1,782	12,545	1.39	0
374	2.89	30	94.30%	1,416	6,018	1.92	0
357	2.87	31	94.10%	1,274	9,418	1.57	0
214	2.80	32	94.00%	1,915	14,187	1.94	0
228	2.78	33	93.80%	243	2,622	6.77	0
508	2.77	34	93.60%	675	2,465	2.35	0
364	2.77	35	93.40%	858	9,989	1.59	0
428	2.75	36	93.20%	1,266	8,648	1.51	0
264	2.72	37	93.00%	98	1,308	1.96	0
440	2.68	38	92.80%	1,319	12,524	0.71	0
402	2.58	39	92.60%	281	2,079	2.18	0
182	2.52	40	92.40%	1,412	11,098	0.62	0
28	2.52	41	92.20%	73	1,127	9.26	0
477	2.49	42	92.00%	2,224	5,750	0.84	0
478	2.47	43	91.80%	991	10,649	1.18	0
441	2.47	44	91.60%	96	1,651	1.97	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
159	8.84	1	100.00%	5,561	37,757	1.66	0
268	7.02	2	99.80%	32,225	200,814	1.08	0
277	6.88	3	99.60%	2,171	18,708	1.88	0
137	6.71	4	99.40%	9,320	61,150	1.86	0
62	6.48	5	99.20%	4,010	21,900	1.50	0
190	5.56	6	99.00%	133	1,079	2.73	0
47	5.12	7	98.80%	302	3,364	4.19	0
365	4.57	8	98.60%	1,701	7,462	8.44	0
475	3.97	9	98.40%	7,657	65,000	2.03	0
474	3.86	10	98.20%	2,574	22,973	0.81	0
240	3.65	11	98.00%	11,978	53,000	0.63	0
7	3.51	12	97.80%	1,545	14,882	2.23	0
64	3.44	13	97.60%	1,470	12,741	2.02	0
485	3.38	14	97.40%	6,952	63,240	1.12	0
270	3.29	15	97.20%	168	1,205	2.74	0
20	3.16	16	97.00%	74	1,102	4.15	0
486	3.03	17	96.90%	2,958	28,943	1.59	0
509	2.99	18	96.70%	2,435	20,000	1.70	0
416	2.83	19	96.50%	1,559	6,976	4.22	0
93	2.81	20	96.30%	437	4,567	1.60	0
309	2.78	21	96.10%	598	4,134	2.27	0
374	2.76	22	95.90%	1,416	6,018	1.92	0
303	2.69	23	95.70%	1,813	10,241	1.17	0
336	2.65	24	95.50%	1,782	12,545	1.39	0
347	2.62	25	95.30%	169	936	2.15	0
508	2.61	26	95.10%	675	2,465	2.35	0
120	2.61	27	94.90%	1,005	8,128	2.48	0
443	2.51	28	94.70%	1,386	9,400	1.74	0
428	2.49	29	94.50%	1,266	8,648	1.51	0
19	2.41	30	94.30%	3,668	17,777	0.91	0
364	2.37	31	94.10%	858	9,989	1.59	0
228	2.33	32	94.00%	243	2,622	6.77	0
440	2.32	33	93.80%	1,319	12,524	0.71	0
214	2.31	34	93.60%	1,915	14,187	1.94	0
477	2.29	35	93.40%	2,224	5,750	0.84	0
357	2.22	36	93.20%	1,274	9,418	1.57	0
478	2.20	37	93.00%	991	10,649	1.18	0
225	2.16	38	92.80%	1,193	7,541	1.89	0
182	2.14	39	92.60%	1,412	11,098	0.62	0
356	2.14	40	92.40%	842	8,275	2.07	0
368	2.13	41	92.20%	1,596	9,981	1.23	0
118	2.09	42	92.00%	171	1,617	4.09	0
15	2.08	43	91.80%	1,018	2,194	1.56	0
245	2.08	44	91.60%	1,341	7,107	1.80	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
356	2.44	45	91.40%	842	8,275	2.07	0
435	2.40	46	91.20%	7,627	24,551	0.49	0
118	2.39	47	91.10%	171	1,617	4.09	0
368	2.38	48	90.90%	1,596	9,981	1.23	0
225	2.38	49	90.70%	1,193	7,541	1.89	0
1	2.38	50	90.50%	307	1,956	2.19	0
447	2.36	51	90.30%	1,251	9,351	1.74	0
479	2.35	52	90.10%	4,930	38,426	1.16	0
44	2.34	53	89.90%	540	3,608	1.92	0
281	2.30	54	89.70%	649	5,187	1.25	0
245	2.28	55	89.50%	1,341	7,107	1.80	0
82	2.27	56	89.30%	1,469	10,770	0.85	0
15	2.26	57	89.10%	1,018	2,194	1.56	0
52	2.25	58	88.90%	292	3,228	3.85	0
163	2.24	59	88.70%	1,929	12,046	0.89	0
314	2.24	60	88.50%	703	6,312	1.90	0
413	2.20	61	88.30%	1,389	8,330	1.65	0
455	2.19	62	88.20%	1,083	8,532	1.41	0
499	2.16	63	88.00%	1,856	14,000	0.91	0
88	2.13	64	87.80%	3,676	12,925	0.71	0
21	2.11	65	87.60%	304	1,450	1.35	0
229	2.09	66	87.40%	1,470	13,430	1.06	0
111	2.09	67	87.20%	86	176	1.86	0
319	2.05	68	87.00%	291	2,557	2.91	0
232	2.05	69	86.80%	446	3,345	2.30	0
445	2.03	70	86.60%	2,606	21,000	0.88	0
167	2.01	71	86.40%	194	1,039	1.36	0
72	2.00	72	86.20%	118	1,352	2.13	0
157	1.98	73	86.00%	2,018	15,485	0.81	0
140	1.98	74	85.80%	47	275	8.67	0
442	1.97	75	85.60%	97	1,100	2.90	0
5	1.96	76	85.40%	267	3,656	2.43	0
142	1.95	77	85.20%	158	1,056	4.53	0
33	1.92	78	85.10%	2,070	15,464	0.92	0
367	1.90	79	84.90%	1,298	7,929	0.86	0
101	1.89	80	84.70%	516	4,748	1.55	0
14	1.87	81	84.50%	1,038	8,600	0.84	0
149	1.86	82	84.30%	34	536	9.11	0
201	1.86	83	84.10%	400	2,193	1.84	0
316	1.84	84	83.90%	720	8,000	1.65	0
224	1.84	85	83.70%	13,479	61,110	1.12	0
406	1.81	86	83.50%	1,270	4,328	1.18	0
318	1.79	87	83.30%	290	2,761	1.72	0
396	1.79	88	83.10%	1,152	12,560	1.27	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
435	2.05	45	91.40%	7,627	24,551	0.49	0
281	2.01	46	91.20%	649	5,187	1.25	0
52	2.01	47	91.10%	292	3,228	3.85	0
314	2.00	48	90.90%	703	6,312	1.90	0
28	1.97	49	90.70%	73	1,127	9.26	0
163	1.93	50	90.50%	1,929	12,046	0.89	0
44	1.93	51	90.30%	540	3,608	1.92	0
455	1.93	52	90.10%	1,083	8,532	1.41	0
1	1.92	53	89.90%	307	1,956	2.19	0
413	1.90	54	89.70%	1,389	8,330	1.65	0
479	1.89	55	89.50%	4,930	38,426	1.16	0
21	1.87	56	89.30%	304	1,450	1.35	0
447	1.85	57	89.10%	1,251	9,351	1.74	0
97	1.85	58	88.90%	119	1,600	2.45	0
322	1.84	59	88.70%	3,390	30,046	1.37	0
319	1.82	60	88.50%	291	2,557	2.91	0
142	1.81	61	88.30%	158	1,056	4.53	0
167	1.80	62	88.20%	194	1,039	1.36	0
72	1.79	63	88.00%	118	1,352	2.13	0
88	1.78	64	87.80%	3,676	12,925	0.71	0
82	1.77	65	87.60%	1,469	10,770	0.85	0
499	1.76	66	87.40%	1,856	14,000	0.91	0
402	1.74	67	87.20%	281	2,079	2.18	0
232	1.72	68	87.00%	446	3,345	2.30	0
234	1.64	69	86.80%	434	3,540	0.92	0
157	1.61	70	86.60%	2,018	15,485	0.81	0
33	1.61	71	86.40%	2,070	15,464	0.92	0
247	1.60	72	86.20%	789	5,137	1.33	0
406	1.60	73	86.00%	1,270	4,328	1.18	0
201	1.60	74	85.80%	400	2,193	1.84	0
5	1.57	75	85.60%	267	3,656	2.43	0
101	1.56	76	85.40%	516	4,748	1.55	0
140	1.56	77	85.20%	47	275	8.67	0
316	1.55	78	85.10%	720	8,000	1.65	0
296	1.54	79	84.90%	480	5,419	1.49	0
445	1.54	80	84.70%	2,606	21,000	0.88	0
501	1.54	81	84.50%	298	2,108	2.13	0
337	1.52	82	84.30%	400	4,505	1.96	0
385	1.52	83	84.10%	1,892	8,000	1.28	0
484	1.50	84	83.90%	60	610	2.72	0
381	1.50	85	83.70%	146	1,842	2.28	0
318	1.48	86	83.50%	290	2,761	1.72	0
396	1.48	87	83.30%	1,152	12,560	1.27	0
14	1.47	88	83.10%	1,038	8,600	0.84	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
234	1.79	89	82.90%	434	3,540	0.92	0
381	1.76	90	82.70%	146	1,842	2.28	0
247	1.75	91	82.50%	789	5,137	1.33	0
296	1.73	92	82.30%	480	5,419	1.49	0
138	1.73	93	82.20%	92	1,451	2.27	0
337	1.72	94	82.00%	400	4,505	1.96	0
488	1.72	95	81.80%	976	5,709	0.74	0
496	1.71	96	81.60%	238	1,820	5.01	0
385	1.71	97	81.40%	1,892	8,000	1.28	0
293	1.71	98	81.20%	2,213	16,129	1.20	0
484	1.71	99	81.00%	60	610	2.72	0
192	1.70	100	80.80%	197	3,500	7.03	0
290	1.69	101	80.60%	922	10,353	0.48	0
272	1.69	102	80.40%	229	1,695	2.30	0
126	1.67	103	80.20%	483	3,882	1.04	0
501	1.67	104	80.00%	298	2,108	2.13	0
139	1.65	105	79.80%	399	4,936	1.83	0
476	1.64	106	79.60%	1,111	9,900	1.31	0
46	1.63	107	79.40%	75	802	5.25	0
490	1.62	108	79.30%	1,598	13,300	0.37	0
283	1.62	109	79.10%	594	5,897	2.22	0
11	1.60	110	78.90%	629	6,665	0.93	0
189	1.57	111	78.70%	456	5,064	1.35	0
196	1.57	112	78.50%	1,710	11,419	0.71	0
343	1.55	113	78.30%	243	2,680	1.33	0
366	1.53	114	78.10%	1,173	10,981	1.35	0
174	1.51	115	77.90%	1,633	15,864	1.52	0
197	1.50	116	77.70%	980	8,219	2.23	0
287	1.50	117	77.50%	2,866	11,100	1.37	0
514	1.48	118	77.30%	174	2,350	1.60	0
323	1.48	119	77.10%	206	1,899	1.59	0
183	1.47	120	76.90%	2,011	19,723	0.27	0
233	1.46	121	76.70%	325	2,801	1.27	0
87	1.45	122	76.50%	708	3,764	1.70	0
324	1.45	123	76.40%	514	3,412	1.43	0
331	1.44	124	76.20%	426	4,292	1.96	0
350	1.43	125	76.00%	198	2,074	1.85	0
257	1.43	126	75.80%	1,298	10,583	1.23	0
146	1.40	127	75.60%	64	841	3.99	0
414	1.40	128	75.40%	425	4,950	2.40	0
344	1.40	129	75.20%	747	6,592	1.66	0
361	1.39	130	75.00%	65	838	2.81	0
51	1.38	131	74.80%	101	1,450	2.87	0
56	1.38	132	74.60%	75	872	1.23	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
139	1.46	89	82.90%	399	4,936	1.83	0
496	1.45	90	82.70%	238	1,820	5.01	0
149	1.44	91	82.50%	34	536	9.11	0
283	1.43	92	82.30%	594	5,897	2.22	0
367	1.39	93	82.20%	1,298	7,929	0.86	0
111	1.39	94	82.00%	86	176	1.86	0
290	1.38	95	81.80%	922	10,353	0.48	0
293	1.38	96	81.60%	2,213	16,129	1.20	0
229	1.36	97	81.40%	1,470	13,430	1.06	0
272	1.35	98	81.20%	229	1,695	2.30	0
224	1.35	99	81.00%	13,479	61,110	1.12	0
46	1.32	100	80.80%	75	802	5.25	0
197	1.32	101	80.60%	980	8,219	2.23	0
233	1.31	102	80.40%	325	2,801	1.27	0
146	1.30	103	80.20%	64	841	3.99	0
476	1.30	104	80.00%	1,111	9,900	1.31	0
366	1.29	105	79.80%	1,173	10,981	1.35	0
324	1.27	106	79.60%	514	3,412	1.43	0
343	1.23	107	79.40%	243	2,680	1.33	0
175	1.22	108	79.30%	251	1,356	3.91	0
423	1.22	109	79.10%	217	1,500	1.84	0
126	1.21	110	78.90%	483	3,882	1.04	0
109	1.19	111	78.70%	186	2,156	2.13	0
335	1.19	112	78.50%	116	1,015	16.62	0
441	1.17	113	78.30%	96	1,651	1.97	0
51	1.16	114	78.10%	101	1,450	2.87	0
87	1.16	115	77.90%	708	3,764	1.70	0
323	1.15	116	77.70%	206	1,899	1.59	0
344	1.15	117	77.50%	747	6,592	1.66	0
490	1.15	118	77.30%	1,598	13,300	0.37	0
350	1.14	119	77.10%	198	2,074	1.85	0
488	1.14	120	76.90%	976	5,709	0.74	0
257	1.14	121	76.70%	1,298	10,583	1.23	0
448	1.13	122	76.50%	28	513	9.64	0
287	1.13	123	76.40%	2,866	11,100	1.37	0
389	1.12	124	76.20%	1,421	7,427	1.78	0
189	1.10	125	76.00%	456	5,064	1.35	0
56	1.10	126	75.80%	75	872	1.23	0
280	1.10	127	75.60%	507	4,143	1.79	0
39	1.10	128	75.40%	797	5,371	0.98	0
301	1.07	129	75.20%	286	2,667	3.07	0
493	1.07	130	75.00%	682	1,549	0.71	0
514	1.07	131	74.80%	174	2,350	1.60	0
138	1.06	132	74.60%	92	1,451	2.27	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
423	1.38	133	74.40%	217	1,500	1.84	0
288	1.37	134	74.20%	1,994	14,055	1.13	0
335	1.36	135	74.00%	116	1,015	16.62	0
109	1.35	136	73.80%	186	2,156	2.13	0
291	1.35	137	73.60%	30	589	4.82	0
301	1.35	138	73.50%	286	2,667	3.07	0
241	1.34	139	73.30%	394	3,826	1.28	0
175	1.33	140	73.10%	251	1,356	3.91	0
220	1.32	141	72.90%	70	997	3.98	0
99	1.31	142	72.70%	118	1,155	1.39	0
506	1.31	143	72.50%	52	376	4.54	0
83	1.30	144	72.30%	204	1,887	1.97	0
448	1.30	145	72.10%	28	513	9.64	0
27	1.30	146	71.90%	2,215	11,188	1.06	0
312	1.29	147	71.70%	578	6,009	1.53	0
141	1.29	148	71.50%	42	635	3.60	0
280	1.28	149	71.30%	507	4,143	1.79	0
493	1.27	150	71.10%	682	1,549	0.71	0
39	1.27	151	70.90%	797	5,371	0.98	0
69	1.26	152	70.70%	1,928	9,958	1.88	0
160	1.26	153	70.50%	614	1,839	3.20	0
143	1.26	154	70.40%	1,217	7,500	0.80	0
2	1.24	155	70.20%	330	1,819	1.51	0
25	1.24	156	70.00%	99	648	2.62	0
191	1.23	157	69.80%	42	534	2.50	0
389	1.23	158	69.60%	1,421	7,427	1.78	0
429	1.23	159	69.40%	129	1,941	1.84	0
461	1.23	160	69.20%	547	4,101	1.18	0
326	1.23	161	69.00%	2,270	7,162	0.67	0
338	1.22	162	68.80%	313	2,892	1.50	0
370	1.20	163	68.60%	16	400	10.59	0
173	1.19	164	68.40%	214	2,060	4.21	0
215	1.19	165	68.20%	97	1,146	4.44	0
187	1.19	166	68.00%	1,546	15,128	2.46	0
13	1.18	167	67.80%	79	983	0.87	0
203	1.17	168	67.60%	55	799	3.93	0
438	1.15	169	67.50%	73	815	4.83	0
6	1.14	170	67.30%	79	860	4.15	0
136	1.13	171	67.10%	624	3,806	1.53	0
392	1.13	172	66.90%	1,566	8,300	0.54	0
4	1.13	173	66.70%	86	1,140	3.80	0
202	1.12	174	66.50%	89	1,171	2.28	0
282	1.12	175	66.30%	137	1,377	3.32	0
265	1.11	176	66.10%	108	1,223	2.66	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
183	1.06	133	74.40%	2,011	19,723	0.27	0
264	1.06	134	74.20%	98	1,308	1.96	0
506	1.05	135	74.00%	52	376	4.54	0
241	1.05	136	73.80%	394	3,826	1.28	0
2	1.05	137	73.60%	330	1,819	1.51	0
196	1.04	138	73.50%	1,710	11,419	0.71	0
288	1.04	139	73.30%	1,994	14,055	1.13	0
25	1.03	140	73.10%	99	648	2.62	0
160	1.03	141	72.90%	614	1,839	3.20	0
461	1.02	142	72.70%	547	4,101	1.18	0
83	1.00	143	72.50%	204	1,887	1.97	0
143	1.00	144	72.30%	1,217	7,500	0.80	0
220	0.98	145	72.10%	70	997	3.98	0
187	0.98	146	71.90%	1,546	15,128	2.46	0
414	0.98	147	71.70%	425	4,950	2.40	0
99	0.98	148	71.50%	118	1,155	1.39	0
174	0.98	149	71.30%	1,633	15,864	1.52	0
13	0.98	150	71.10%	79	983	0.87	0
338	0.97	151	70.90%	313	2,892	1.50	0
407	0.96	152	70.70%	680	2,117	0.85	0
331	0.96	153	70.50%	426	4,292	1.96	0
27	0.96	154	70.40%	2,215	11,188	1.06	0
282	0.96	155	70.20%	137	1,377	3.32	0
192	0.95	156	70.00%	197	3,500	7.03	0
94	0.95	157	69.80%	303	385	5.90	0
6	0.95	158	69.60%	79	860	4.15	0
312	0.94	159	69.40%	578	6,009	1.53	0
69	0.92	160	69.20%	1,928	9,958	1.88	0
326	0.91	161	69.00%	2,270	7,162	0.67	0
161	0.91	162	68.80%	56	768	3.92	0
392	0.90	163	68.60%	1,566	8,300	0.54	0
237	0.86	164	68.40%	24	430	3.46	0
231	0.86	165	68.20%	33	450	3.02	0
81	0.85	166	68.00%	21	263	4.24	0
173	0.85	167	67.60%	214	2,060	4.21	0
202	0.85	167	67.60%	89	1,171	2.28	0
388	0.84	169	67.50%	22	220	2.36	0
438	0.84	170	67.30%	73	815	4.83	0
387	0.84	171	67.10%	49	710	4.32	0
186	0.84	172	66.90%	20	207	3.01	0
17	0.83	173	66.70%	65	798	3.02	0
215	0.81	174	66.50%	97	1,146	4.44	0
420	0.79	175	66.30%	60	950	1.02	0
259	0.79	176	66.10%	349	2,968	2.14	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
407	1.10	177	65.90%	680	2,117	0.85	0
444	1.10	178	65.70%	147	1,864	3.56	0
466	1.09	179	65.50%	437	4,335	1.14	0
387	1.08	180	65.30%	49	710	4.32	0
491	1.08	181	65.10%	486	4,809	1.63	0
38	1.07	182	64.90%	63	976	3.36	0
81	1.05	183	64.70%	21	263	4.24	0
451	1.05	184	64.60%	136	1,565	1.07	0
161	1.04	185	64.40%	56	768	3.92	0
266	1.04	186	64.20%	240	2,052	1.37	0
70	1.04	187	64.00%	356	1,881	2.06	0
17	1.04	188	63.80%	65	798	3.02	0
369	1.03	189	63.60%	549	1,866	1.08	0
231	1.03	190	63.40%	33	450	3.02	0
237	1.03	191	63.20%	24	430	3.46	0
446	1.02	192	63.00%	48	601	3.66	0
425	1.02	193	62.80%	55	651	2.41	0
158	1.01	194	62.60%	179	1,809	2.44	0
94	1.00	195	62.40%	303	385	5.90	0
223	1.00	196	62.20%	761	6,034	1.06	0
391	1.00	197	62.00%	618	5,850	0.84	0
505	0.98	198	61.80%	217	2,351	3.53	0
388	0.98	199	61.70%	22	220	2.36	0
3	0.98	200	61.50%	29	536	4.38	0
473	0.98	201	61.30%	1,021	3,317	1.18	0
186	0.98	202	61.10%	20	207	3.01	0
217	0.97	203	60.90%	115	1,244	3.61	0
154	0.97	204	60.70%	88	1,100	2.81	0
211	0.97	205	60.50%	550	3,732	1.49	0
306	0.96	206	60.30%	97	1,140	3.75	0
170	0.95	207	60.10%	193	1,427	3.94	0
384	0.95	208	59.90%	167	2,019	1.30	0
358	0.95	209	59.70%	42	550	2.15	0
248	0.94	210	59.50%	776	4,021	1.20	0
462	0.94	211	59.30%	107	997	2.39	0
104	0.93	212	59.10%	368	4,152	1.67	0
333	0.93	213	58.90%	38	653	4.02	0
271	0.93	214	58.80%	5	122	0.21	0
208	0.92	215	58.60%	71	450	2.62	0
259	0.91	216	58.40%	349	2,968	2.14	0
302	0.91	217	58.20%	839	8,908	1.68	0
23	0.91	218	58.00%	38	296	2.80	0
362	0.91	219	57.80%	83	792	2.46	0
29	0.91	220	57.60%	1,360	3,319	0.23	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
3	0.78	177	65.90%	29	536	4.38	0
223	0.78	178	65.70%	761	6,034	1.06	0
291	0.78	179	65.50%	30	589	4.82	0
243	0.78	180	65.30%	146	25	1.63	0
265	0.78	181	65.10%	108	1,223	2.66	0
23	0.77	182	64.90%	38	296	2.80	0
462	0.77	183	64.70%	107	997	2.39	0
136	0.77	184	64.60%	624	3,806	1.53	0
158	0.77	185	64.40%	179	1,809	2.44	0
70	0.76	186	64.20%	356	1,881	2.06	0
361	0.76	187	64.00%	65	838	2.81	0
244	0.76	188	63.80%	1,183	1,470	0.74	0
302	0.75	189	63.60%	839	8,908	1.68	0
248	0.75	190	63.40%	776	4,021	1.20	0
310	0.75	191	63.20%	45	558	2.26	0
236	0.75	192	63.00%	1,321	6,000	0.90	0
446	0.75	193	62.80%	48	601	3.66	0
491	0.74	194	62.60%	486	4,809	1.63	0
58	0.74	195	62.40%	210	598	0.52	0
169	0.74	196	62.20%	21	299	3.43	0
208	0.74	197	62.00%	71	450	2.62	0
384	0.74	198	61.80%	167	2,019	1.30	0
358	0.74	199	61.70%	42	550	2.15	0
425	0.73	200	61.50%	55	651	2.41	0
29	0.73	201	61.30%	1,360	3,319	0.23	0
38	0.73	202	61.10%	63	976	3.36	0
34	0.73	203	60.90%	241	1,887	1.43	0
377	0.72	204	60.70%	479	3,645	1.18	0
271	0.72	205	60.50%	5	122	0.21	0
217	0.72	206	60.30%	115	1,244	3.61	0
308	0.72	207	60.10%	55	400	2.71	0
191	0.71	208	59.90%	42	534	2.50	0
104	0.71	209	59.70%	368	4,152	1.67	0
473	0.71	210	59.50%	1,021	3,317	1.18	0
262	0.70	211	59.30%	63	631	1.84	0
235	0.70	212	59.10%	33	500	2.42	0
211	0.70	213	58.90%	550	3,732	1.49	0
362	0.70	214	58.60%	83	792	2.46	0
401	0.70	214	58.60%	33	494	1.53	0
376	0.70	216	58.40%	114	605	2.29	0
176	0.69	217	58.20%	34	436	1.43	0
341	0.69	218	58.00%	2,313	15,224	2.05	0
4	0.69	219	57.80%	86	1,140	3.80	0
369	0.69	220	57.60%	549	1,866	1.08	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
184	0.90	221	57.40%	24	385	1.66	0
420	0.90	222	57.20%	60	950	1.02	0
213	0.89	223	57.00%	1,815	14,170	1.63	0
236	0.89	224	56.80%	1,321	6,000	0.90	0
310	0.89	225	56.60%	45	558	2.26	0
397	0.89	226	56.40%	105	1,230	3.35	0
76	0.89	227	56.20%	150	1,930	2.40	0
34	0.89	228	56.00%	241	1,887	1.43	0
58	0.89	229	55.80%	210	598	0.52	0
262	0.88	230	55.70%	63	631	1.84	0
330	0.88	231	55.50%	5	50	7.17	0
341	0.87	232	55.30%	2,313	15,224	2.05	0
412	0.87	233	55.10%	117	1,549	2.04	0
60	0.86	234	54.90%	265	3,165	2.30	0
377	0.86	235	54.70%	479	3,645	1.18	0
176	0.86	236	54.50%	34	436	1.43	0
169	0.86	237	54.30%	21	299	3.43	0
235	0.86	238	54.10%	33	500	2.42	0
244	0.85	239	53.90%	1,183	1,470	0.74	0
150	0.85	240	53.70%	393	3,487	1.95	0
317	0.85	241	53.50%	105	844	2.00	0
345	0.84	242	53.30%	108	1,250	3.11	0
401	0.84	243	53.10%	33	494	1.53	0
112	0.84	244	52.90%	26	477	3.67	0
113	0.84	245	52.80%	22	477	1.00	0
308	0.84	246	52.60%	55	400	2.71	0
325	0.83	247	52.40%	139	1,495	1.55	0
119	0.83	248	52.20%	854	7,997	1.09	0
376	0.83	249	52.00%	114	605	2.29	0
427	0.82	250	51.80%	37	478	4.09	0
328	0.82	251	51.60%	341	2,079	1.53	0
243	0.82	252	51.40%	146	25	1.63	0
433	0.81	253	51.20%	511	3,500	1.20	0
102	0.81	254	51.00%	60	714	3.36	0
353	0.81	255	50.80%	196	4,071	1.52	0
507	0.81	256	50.60%	45	98	1.83	0
63	0.81	257	50.40%	71	789	3.09	0
373	0.81	258	50.20%	215	2,496	1.71	0
114	0.81	259	50.00%	63	621	2.91	0
147	0.80	260	49.90%	127	1,611	2.67	0
180	0.79	261	49.70%	74	928	0.68	0
121	0.79	262	49.50%	222	2,000	1.43	0
75	0.78	263	49.30%	215	1,573	1.81	0
107	0.78	264	49.10%	133	1,041	2.23	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
333	0.68	221	57.40%	38	653	4.02	0
170	0.67	222	57.20%	193	1,427	3.94	0
113	0.67	223	57.00%	22	477	1.00	0
184	0.67	224	56.80%	24	385	1.66	0
141	0.66	225	56.60%	42	635	3.60	0
345	0.66	226	56.40%	108	1,250	3.11	0
427	0.65	227	56.20%	37	478	4.09	0
114	0.65	228	56.00%	63	621	2.91	0
31	0.64	229	55.80%	147	778	1.72	0
317	0.64	230	55.70%	105	844	2.00	0
60	0.63	231	55.50%	265	3,165	2.30	0
306	0.63	232	55.30%	97	1,140	3.75	0
147	0.61	233	55.10%	127	1,611	2.67	0
49	0.61	234	54.90%	48	650	3.63	0
397	0.61	235	54.70%	105	1,230	3.35	0
466	0.61	236	54.50%	437	4,335	1.14	0
102	0.61	237	54.30%	60	714	3.36	0
412	0.60	238	54.10%	117	1,549	2.04	0
453	0.60	239	53.90%	66	865	1.19	0
213	0.60	240	53.70%	1,815	14,170	1.63	0
121	0.60	241	53.50%	222	2,000	1.43	0
373	0.60	242	53.30%	215	2,496	1.71	0
45	0.60	243	53.10%	391	1,231	1.32	0
298	0.60	244	52.90%	298	2,428	1.36	0
426	0.59	245	52.80%	237	1,736	1.04	0
150	0.59	246	52.60%	393	3,487	1.95	0
417	0.58	247	52.40%	19	260	3.68	0
119	0.58	248	52.20%	854	7,997	1.09	0
391	0.58	249	52.00%	618	5,850	0.84	0
63	0.58	250	51.80%	71	789	3.09	0
444	0.58	251	51.60%	147	1,864	3.56	0
165	0.57	252	51.40%	155	1,482	1.73	0
73	0.57	253	51.20%	188	779	2.36	0
507	0.57	254	51.00%	45	98	1.83	0
195	0.56	255	50.80%	118	950	2.25	0
112	0.56	256	50.60%	26	477	3.67	0
75	0.55	257	50.40%	215	1,573	1.81	0
210	0.55	258	50.20%	815	6,984	1.12	0
492	0.55	259	50.00%	133	800	3.34	0
209	0.55	260	49.90%	19	256	3.71	0
203	0.54	261	49.70%	55	799	3.93	0
429	0.54	262	49.50%	129	1,941	1.84	0
299	0.54	263	49.30%	118	557	2.02	0
328	0.53	264	49.10%	341	2,079	1.53	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
49	0.78	265	48.90%	48	650	3.63	0
40	0.78	266	48.70%	59	688	2.13	0
195	0.77	267	48.50%	118	950	2.25	0
117	0.77	268	48.30%	295	2,235	2.16	0
8	0.77	269	48.10%	87	863	2.14	0
45	0.77	270	47.90%	391	1,231	1.32	0
512	0.77	271	47.70%	53	834	2.20	0
298	0.76	272	47.50%	298	2,428	1.36	0
453	0.76	273	47.30%	66	865	1.19	0
515	0.76	274	47.10%	38	550	3.29	0
168	0.76	275	47.00%	194	1,975	2.08	0
31	0.75	276	46.80%	147	778	1.72	0
37	0.75	277	46.60%	150	875	1.56	0
371	0.75	278	46.40%	43	668	5.41	0
132	0.74	279	46.20%	221	1,968	2.64	0
437	0.74	280	46.00%	42	650	5.39	0
227	0.74	281	45.80%	43	440	1.18	0
86	0.74	282	45.60%	268	1,931	2.13	0
209	0.74	283	45.40%	19	256	3.71	0
275	0.73	284	45.20%	154	1,496	1.41	0
295	0.73	285	45.00%	80	1,146	0.93	0
516	0.73	286	44.80%	62	715	1.68	0
212	0.73	287	44.60%	187	2,415	1.67	0
210	0.72	288	44.40%	815	6,984	1.12	0
417	0.72	289	44.20%	19	260	3.68	0
464	0.72	290	44.10%	135	641	1.12	0
145	0.72	291	43.90%	295	2,844	1.40	0
165	0.72	292	43.70%	155	1,482	1.73	0
127	0.71	293	43.50%	75	834	3.46	0
24	0.70	294	43.30%	343	3,301	1.61	0
79	0.70	295	43.10%	76	1,005	1.14	0
426	0.69	296	42.90%	237	1,736	1.04	0
279	0.69	297	42.70%	62	382	1.61	0
513	0.69	298	42.50%	98	1,100	1.68	0
299	0.68	299	42.30%	118	557	2.02	0
422	0.68	300	42.10%	112	896	1.42	0
492	0.67	301	41.90%	133	800	3.34	0
504	0.67	302	41.70%	228	1,200	2.75	0
35	0.66	303	41.50%	183	1,947	1.71	0
289	0.66	304	41.30%	70	760	2.44	0
432	0.65	305	41.10%	105	1,271	1.76	0
481	0.65	306	41.00%	248	1,855	1.06	0
456	0.64	307	40.80%	439	3,328	0.92	0
355	0.63	308	40.60%	337	3,525	1.39	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
132	0.53	265	48.90%	221	1,968	2.64	0
86	0.53	266	48.70%	268	1,931	2.13	0
168	0.52	267	48.50%	194	1,975	2.08	0
275	0.52	268	48.30%	154	1,496	1.41	0
117	0.52	269	48.10%	295	2,235	2.16	0
8	0.52	270	47.90%	87	863	2.14	0
37	0.51	271	47.70%	150	875	1.56	0
24	0.51	272	47.50%	343	3,301	1.61	0
107	0.51	273	47.30%	133	1,041	2.23	0
11	0.50	274	47.10%	629	6,665	0.93	0
504	0.50	275	47.00%	228	1,200	2.75	0
405	0.50	276	46.80%	396	3,019	0.82	0
180	0.48	277	46.60%	74	928	0.68	0
481	0.48	278	46.40%	248	1,855	1.06	0
516	0.48	279	46.20%	62	715	1.68	0
154	0.48	280	46.00%	88	1,100	2.81	0
422	0.47	281	45.80%	112	896	1.42	0
76	0.47	282	45.60%	150	1,930	2.40	0
456	0.47	283	45.40%	439	3,328	0.92	0
512	0.45	284	45.20%	53	834	2.20	0
497	0.45	285	45.00%	30	351	4.18	0
289	0.45	286	44.80%	70	760	2.44	0
41	0.45	287	44.60%	131	901	2.20	0
515	0.45	288	44.40%	38	550	3.29	0
295	0.43	289	44.20%	80	1,146	0.93	0
79	0.42	290	44.10%	76	1,005	1.14	0
91	0.42	291	43.90%	127	1,365	1.83	0
325	0.42	292	43.70%	139	1,495	1.55	0
205	0.41	293	43.50%	186	1,325	3.56	0
353	0.40	294	43.30%	196	4,071	1.52	0
279	0.39	295	43.10%	62	382	1.61	0
300	0.39	296	42.90%	142	1,422	1.24	0
178	0.39	297	42.70%	97	1,102	0.43	0
433	0.39	298	42.50%	511	3,500	1.20	0
500	0.38	299	42.30%	1,215	1,765	0.24	0
68	0.38	300	42.10%	14	80	19.35	0
246	0.38	301	41.90%	439	2,381	1.08	0
92	0.38	302	41.70%	239	1,876	1.36	0
134	0.38	303	41.50%	244	1,374	1.65	0
430	0.37	304	41.30%	438	2,530	0.74	0
370	0.37	305	41.10%	16	400	10.59	0
32	0.36	306	41.00%	28	446	3.38	0
437	0.35	307	40.80%	42	650	5.39	0
266	0.35	308	40.60%	240	2,052	1.37	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
73	0.63	309	40.40%	188	779	2.36	0
115	0.63	310	40.20%	794	12,000	1.04	0
178	0.63	311	40.00%	97	1,102	0.43	0
116	0.62	312	39.80%	103	1,596	0.99	0
36	0.62	313	39.60%	1,225	13,500	0.79	0
134	0.61	314	39.40%	244	1,374	1.65	0
261	0.61	315	39.20%	253	2,410	1.59	0
205	0.61	316	39.00%	186	1,325	3.56	0
74	0.60	317	38.80%	178	1,101	2.66	0
55	0.60	318	38.60%	37	672	3.05	0
122	0.60	319	38.40%	3,615	20,332	0.66	0
405	0.60	320	38.20%	396	3,019	0.82	0
155	0.59	321	38.10%	241	2,378	1.79	0
497	0.59	322	37.90%	30	351	4.18	0
305	0.59	323	37.70%	66	666	2.47	0
144	0.59	324	37.50%	64	810	1.30	0
226	0.58	325	37.30%	196	1,901	2.22	0
128	0.58	326	37.10%	183	1,716	1.80	0
41	0.57	327	36.90%	131	901	2.20	0
32	0.57	328	36.70%	28	446	3.38	0
300	0.57	329	36.50%	142	1,422	1.24	0
92	0.57	330	36.30%	239	1,876	1.36	0
430	0.57	331	36.10%	438	2,530	0.74	0
91	0.56	332	35.90%	127	1,365	1.83	0
500	0.55	333	35.70%	1,215	1,765	0.24	0
421	0.55	334	35.50%	106	1,236	1.95	0
133	0.55	335	35.30%	157	1,728	2.56	0
510	0.55	336	35.20%	128	514	0.89	0
471	0.55	337	35.00%	182	2,080	1.48	0
511	0.54	338	34.80%	130	1,200	1.23	0
394	0.54	339	34.60%	43	577	3.60	0
467	0.54	340	34.40%	83	750	1.60	0
239	0.54	341	34.20%	357	5,400	1.15	0
419	0.54	342	34.00%	163	2,210	2.66	0
246	0.51	343	33.80%	439	2,381	1.08	0
43	0.51	344	33.60%	96	1,374	2.01	0
10	0.51	345	33.40%	51	765	0.60	0
400	0.51	346	33.20%	616	3,190	0.67	0
375	0.49	347	33.00%	351	2,380	1.24	0
129	0.49	348	32.80%	28	150	2.10	0
465	0.48	349	32.60%	55	667	2.64	0
124	0.48	350	32.40%	75	1,038	3.29	0
472	0.48	351	32.30%	435	4,239	1.51	0
110	0.48	352	32.10%	596	1,983	1.11	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
467	0.34	309	40.40%	83	750	1.60	0
155	0.34	310	40.20%	241	2,378	1.79	0
110	0.34	311	40.00%	596	1,983	1.11	0
505	0.33	312	39.80%	217	2,351	3.53	0
74	0.33	313	39.60%	178	1,101	2.66	0
116	0.32	314	39.40%	103	1,596	0.99	0
510	0.32	315	39.20%	128	514	0.89	0
127	0.32	316	39.00%	75	834	3.46	0
355	0.31	317	38.80%	337	3,525	1.39	0
471	0.30	318	38.60%	182	2,080	1.48	0
35	0.28	319	38.40%	183	1,947	1.71	0
212	0.28	320	38.20%	187	2,415	1.67	0
43	0.28	321	38.10%	96	1,374	2.01	0
513	0.27	322	37.90%	98	1,100	1.68	0
421	0.27	323	37.70%	106	1,236	1.95	0
400	0.26	324	37.50%	616	3,190	0.67	0
226	0.26	325	37.30%	196	1,901	2.22	0
129	0.25	326	37.10%	28	150	2.10	0
432	0.25	327	36.90%	105	1,271	1.76	0
503	0.25	328	36.70%	33	525	4.51	0
375	0.24	329	36.50%	351	2,380	1.24	0
42	0.23	330	36.30%	441	1,218	0.85	0
144	0.23	331	36.10%	64	810	1.30	0
145	0.22	332	35.90%	295	2,844	1.40	0
128	0.21	333	35.70%	183	1,716	1.80	0
253	0.20	334	35.50%	302	585	0.97	0
378	0.20	335	35.30%	117	1,458	2.60	0
418	0.20	336	35.20%	138	1,135	1.80	0
261	0.20	337	35.00%	253	2,410	1.59	0
219	0.20	338	34.80%	16	150	2.53	0
419	0.19	339	34.60%	163	2,210	2.66	0
242	0.19	340	34.40%	64	780	2.31	0
330	0.18	341	34.20%	5	50	7.17	0
80	0.18	342	34.00%	200	1,144	3.81	0
36	0.18	343	33.80%	1,225	13,500	0.79	0
463	0.18	344	33.60%	993	8,726	0.63	0
489	0.17	345	33.40%	221	2,045	2.26	0
465	0.17	346	33.20%	55	667	2.64	0
133	0.17	347	33.00%	157	1,728	2.56	0
452	0.16	348	32.80%	79	600	2.59	0
239	0.16	349	32.60%	357	5,400	1.15	0
363	0.16	350	32.40%	105	899	0.73	0
12	0.14	351	32.30%	308	2,800	1.27	0
26	0.13	352	32.10%	133	1,400	0.16	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
380	0.48	353	31.90%	23	224	1.41	0
12	0.47	354	31.70%	308	2,800	1.27	0
284	0.47	355	31.50%	588	4,010	1.56	0
68	0.46	356	31.30%	14	80	19.35	0
503	0.46	357	31.10%	33	525	4.51	0
489	0.45	358	30.90%	221	2,045	2.26	0
452	0.45	359	30.70%	79	600	2.59	0
242	0.44	360	30.50%	64	780	2.31	0
253	0.43	361	30.30%	302	585	0.97	0
276	0.41	362	30.10%	268	3,513	1.13	0
219	0.40	363	29.90%	16	150	2.53	0
42	0.40	364	29.70%	441	1,218	0.85	0
80	0.39	365	29.50%	200	1,144	3.81	0
108	0.39	366	29.40%	447	3,100	1.28	0
482	0.39	367	29.20%	44	605	3.60	0
378	0.38	368	29.00%	117	1,458	2.60	0
418	0.37	369	28.80%	138	1,135	1.80	0
26	0.37	370	28.60%	133	1,400	0.16	0
152	0.35	371	28.40%	43	504	5.10	0
274	0.34	372	28.20%	273	1,348	1.53	0
363	0.34	373	28.00%	105	899	0.73	0
200	0.33	374	27.80%	32	407	1.71	0
67	0.33	375	27.60%	57	495	1.11	0
59	0.33	376	27.40%	228	2,692	0.46	0
156	0.32	377	27.20%	16	300	5.74	0
315	0.32	378	27.00%	215	1,286	1.74	0
218	0.32	379	26.80%	141	1,298	1.15	0
193	0.32	380	26.60%	134	1,614	1.68	0
463	0.31	381	26.40%	993	8,726	0.63	0
304	0.30	382	26.30%	158	1,329	1.56	0
267	0.30	383	26.10%	39	474	0.99	0
487	0.30	384	25.90%	13	150	0.61	0
354	0.29	385	25.70%	115	929	0.90	0
411	0.28	386	25.50%	360	3,535	1.22	0
395	0.26	387	25.30%	82	987	1.86	0
351	0.24	388	25.10%	736	2,993	1.10	0
294	0.24	389	24.90%	17	277	3.42	0
415	0.23	390	24.70%	361	3,437	1.72	0
483	0.23	391	24.50%	297	4,400	1.70	0
313	0.22	392	24.30%	16	209	8.14	0
340	0.21	393	24.10%	261	3,177	1.56	0
57	0.20	394	23.90%	853	2,937	0.41	0
106	0.19	395	23.70%	155	1,958	1.87	0
327	0.19	396	23.50%	1,148	6,312	0.68	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
313	0.12	353	31.90%	16	209	8.14	0
152	0.12	354	31.70%	43	504	5.10	0
276	0.12	355	31.50%	268	3,513	1.13	0
115	0.11	356	31.30%	794	12,000	1.04	0
267	0.10	357	31.10%	39	474	0.99	0
380	0.10	358	30.90%	23	224	1.41	0
67	0.10	359	30.70%	57	495	1.11	0
218	0.09	360	30.50%	141	1,298	1.15	0
464	0.09	361	30.30%	135	641	1.12	0
40	0.08	362	30.10%	59	688	2.13	0
395	0.07	363	29.90%	82	987	1.86	0
274	0.07	364	29.70%	273	1,348	1.53	0
305	0.07	365	29.50%	66	666	2.47	0
315	0.06	366	29.40%	215	1,286	1.74	0
411	0.04	367	29.20%	360	3,535	1.22	0
57	0.04	368	29.00%	853	2,937	0.41	0
124	0.03	369	28.80%	75	1,038	3.29	0
108	0.03	370	28.60%	447	3,100	1.28	0
394	0.02	371	28.40%	43	577	3.60	0
472	0.01	372	28.20%	435	4,239	1.51	0
304	0.00	373	28.00%	158	1,329	1.56	0
10	-0.01	374	27.80%	51	765	0.60	0
511	-0.01	375	27.60%	130	1,200	1.23	0
442	-0.02	376	27.40%	97	1,100	2.90	0
269	-0.02	377	27.20%	11	121	7.87	0
193	-0.02	378	27.00%	134	1,614	1.68	0
59	-0.03	379	26.80%	228	2,692	0.46	0
460	-0.03	380	26.60%	17	214	4.88	0
482	-0.03	381	26.40%	44	605	3.60	0
199	-0.03	382	26.30%	18	251	2.76	1
351	-0.04	383	26.10%	736	2,993	1.10	0
327	-0.04	384	25.90%	1,148	6,312	0.68	0
222	-0.05	385	25.70%	15	200	2.33	1
122	-0.07	386	25.50%	3,615	20,332	0.66	0
216	-0.08	387	25.30%	15	170	1.83	1
458	-0.08	388	25.10%	141	1,258	2.84	0
55	-0.09	389	24.90%	37	672	3.05	0
518	-0.12	390	24.70%	5	83	8.92	1
415	-0.12	391	24.50%	361	3,437	1.72	0
454	-0.12	392	24.30%	51	25	5.07	0
372	-0.12	393	24.10%	23	407	2.96	0
105	-0.12	394	23.90%	24	500	2.28	0
125	-0.13	395	23.70%	10	266	11.81	0
354	-0.13	396	23.50%	115	929	0.90	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
66	0.17	397	23.40%	20	256	5.92	0
379	0.17	398	23.20%	304	2,524	2.92	0
185	0.17	399	23.00%	157	1,406	2.21	0
285	0.15	400	22.80%	215	845	1.12	0
458	0.15	401	22.60%	141	1,258	2.84	0
518	0.13	402	22.40%	5	83	8.92	0
53	0.11	403	22.20%	26	339	5.86	0
329	0.09	404	22.00%	19	308	6.43	0
469	0.09	405	21.80%	506	2,304	1.04	0
424	0.09	406	21.60%	358	3,901	0.88	0
181	0.09	407	21.40%	45	803	3.89	0
346	0.08	408	21.20%	311	2,554	2.32	0
459	0.08	409	21.00%	178	1,065	0.98	0
166	0.07	410	20.80%	775	7,012	2.83	0
260	0.06	411	20.60%	27	268	3.21	0
348	0.05	412	20.50%	73	945	0.15	0
164	0.05	413	20.30%	43	983	3.41	0
269	0.04	414	20.10%	11	121	7.87	0
125	0.04	415	19.90%	10	266	11.81	0
359	0.03	416	19.70%	333	1,675	1.13	0
460	0.03	417	19.50%	17	214	4.88	0
30	0.03	418	19.30%	39	571	5.37	0
332	0.02	419	19.10%	44	649	2.86	0
199	-0.01	420	18.90%	18	251	2.76	1
222	-0.01	421	18.70%	15	200	2.33	1
135	-0.02	422	18.50%	31	447	1.80	0
216	-0.02	423	18.30%	15	170	1.83	1
105	-0.02	424	18.10%	24	500	2.28	0
50	-0.03	425	17.90%	34	459	3.05	0
100	-0.03	426	17.70%	173	367	0.28	0
251	-0.03	427	17.60%	36	323	2.16	0
372	-0.03	428	17.40%	23	407	2.96	0
307	-0.03	429	17.20%	104	887	2.77	0
78	-0.04	430	17.00%	55	703	1.84	0
256	-0.04	431	16.80%	8	130	3.21	0
450	-0.05	432	16.60%	92	1,310	2.37	0
22	-0.06	433	16.40%	73	623	2.17	0
255	-0.06	434	16.20%	40	429	3.23	0
65	-0.06	435	16.00%	56	561	0.98	0
360	-0.07	436	15.80%	30	393	3.54	0
172	-0.07	437	15.60%	28	264	3.48	0
263	-0.08	438	15.40%	23	374	2.52	0
151	-0.08	439	15.20%	20	260	2.57	0
130	-0.08	440	15.00%	137	670	1.61	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
260	-0.13	397	23.40%	27	268	3.21	1
256	-0.13	398	23.20%	8	130	3.21	0
166	-0.14	399	23.00%	775	7,012	2.83	0
66	-0.15	400	22.80%	20	256	5.92	0
106	-0.16	401	22.60%	155	1,958	1.87	0
50	-0.17	402	22.40%	34	459	3.05	0
53	-0.17	403	22.20%	26	339	5.86	0
263	-0.17	404	22.00%	23	374	2.52	0
371	-0.17	405	21.80%	43	668	5.41	0
255	-0.17	406	21.60%	40	429	3.23	0
332	-0.17	407	21.40%	44	649	2.86	0
227	-0.19	408	21.20%	43	440	1.18	1
487	-0.20	409	21.00%	13	150	0.61	0
30	-0.22	410	20.80%	39	571	5.37	0
171	-0.22	411	20.60%	54	567	3.22	0
95	-0.23	412	20.50%	32	440	3.54	0
273	-0.23	413	20.30%	26	400	2.17	0
156	-0.23	414	20.10%	16	300	5.74	0
78	-0.23	415	19.90%	55	703	1.84	0
22	-0.23	416	19.70%	73	623	2.17	0
459	-0.24	417	19.50%	178	1,065	0.98	0
502	-0.24	418	19.30%	10	170	8.05	0
360	-0.24	419	19.10%	30	393	3.54	0
457	-0.25	420	18.90%	9	141	5.58	0
483	-0.25	421	18.70%	297	4,400	1.70	0
100	-0.25	422	18.50%	173	367	0.28	0
379	-0.25	423	18.30%	304	2,524	2.92	0
185	-0.25	424	18.10%	157	1,406	2.21	0
251	-0.25	425	17.90%	36	323	2.16	0
498	-0.26	426	17.70%	57	743	0.95	0
469	-0.27	427	17.60%	506	2,304	1.04	0
284	-0.27	428	17.40%	588	4,010	1.56	0
359	-0.27	429	17.20%	333	1,675	1.13	0
292	-0.28	430	17.00%	31	392	2.55	0
495	-0.28	431	16.80%	20	317	2.55	0
450	-0.29	432	16.60%	92	1,310	2.37	0
468	-0.30	433	16.40%	35	452	1.67	0
96	-0.30	434	16.20%	45	435	4.85	0
348	-0.30	435	16.00%	73	945	0.15	0
434	-0.31	436	15.80%	87	621	2.36	0
172	-0.31	437	15.60%	28	264	3.48	0
198	-0.32	438	15.40%	33	385	2.02	1
329	-0.32	439	15.20%	19	308	6.43	0
424	-0.33	440	15.00%	358	3,901	0.88	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
454	-0.09	441	14.80%	51	25	5.07	0
339	-0.10	442	14.70%	7	253	0.14	0
434	-0.10	443	14.50%	87	621	2.36	0
404	-0.12	444	14.30%	67	738	1.64	0
171	-0.13	445	14.10%	54	567	3.22	0
273	-0.13	446	13.90%	26	400	2.17	0
250	-0.13	447	13.70%	86	950	2.46	1
188	-0.13	448	13.50%	151	1,064	1.94	0
457	-0.14	449	13.30%	9	141	5.58	0
95	-0.14	450	13.10%	32	440	3.54	0
498	-0.14	451	12.90%	57	743	0.95	0
382	-0.15	452	12.70%	370	1,599	1.26	0
297	-0.15	453	12.50%	37	275	1.37	0
71	-0.15	454	12.30%	65	438	0.90	0
468	-0.16	455	12.10%	35	452	1.67	0
495	-0.16	456	11.90%	20	317	2.55	0
502	-0.17	457	11.70%	10	170	8.05	0
96	-0.17	458	11.60%	45	435	4.85	0
198	-0.18	459	11.40%	33	385	2.02	1
292	-0.19	460	11.20%	31	392	2.55	0
85	-0.19	461	11.00%	55	306	1.75	0
179	-0.19	462	10.80%	13	150	4.73	0
48	-0.19	463	10.60%	51	770	2.09	0
494	-0.20	464	10.40%	21	313	2.81	0
54	-0.24	465	10.20%	115	1,043	2.47	0
386	-0.24	466	10.00%	89	1,200	1.75	0
439	-0.24	467	9.80%	17	175	2.11	0
399	-0.25	468	9.60%	37	432	3.75	0
221	-0.26	469	9.40%	55	600	3.06	0
352	-0.26	470	9.20%	24	165	2.51	0
390	-0.27	471	9.00%	57	945	0.65	0
18	-0.27	472	8.80%	50	565	5.54	0
148	-0.29	473	8.70%	41	496	1.22	0
177	-0.29	474	8.50%	36	382	3.56	0
77	-0.30	475	8.30%	59	640	1.44	0
131	-0.30	476	8.10%	28	442	11.25	1
398	-0.31	477	7.90%	43	552	1.28	0
89	-0.32	478	7.70%	70	509	2.02	0
470	-0.33	479	7.50%	28	286	3.05	1
204	-0.37	480	7.30%	90	1,176	1.66	0
98	-0.39	481	7.10%	297	852	3.50	0
206	-0.39	482	6.90%	49	443	1.71	0
162	-0.41	483	6.70%	40	320	1.36	0
334	-0.42	484	6.50%	22	311	4.06	0

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
404	-0.33	441	14.80%	67	738	1.64	0
181	-0.33	442	14.70%	45	803	3.89	0
352	-0.33	443	14.50%	24	165	2.51	0
130	-0.33	444	14.30%	137	670	1.61	0
188	-0.34	445	14.10%	151	1,064	1.94	0
250	-0.35	446	13.90%	86	950	2.46	1
285	-0.35	447	13.70%	215	845	1.12	0
307	-0.35	448	13.50%	104	887	2.77	0
382	-0.36	449	13.30%	370	1,599	1.26	0
200	-0.36	450	13.10%	32	407	1.71	1
85	-0.37	451	12.90%	55	306	1.75	0
65	-0.37	452	12.70%	56	561	0.98	0
151	-0.38	453	12.50%	20	260	2.57	0
297	-0.39	454	12.30%	37	275	1.37	0
135	-0.40	455	12.10%	31	447	1.80	0
494	-0.40	456	11.90%	21	313	2.81	0
439	-0.41	457	11.70%	17	175	2.11	0
177	-0.43	458	11.60%	36	382	3.56	0
48	-0.43	459	11.40%	51	770	2.09	0
18	-0.46	460	11.20%	50	565	5.54	0
339	-0.48	461	11.00%	7	253	0.14	0
61	-0.48	462	10.80%	3,082	140	0.02	0
89	-0.48	463	10.60%	70	509	2.02	0
386	-0.48	464	10.40%	89	1,200	1.75	0
399	-0.49	465	10.20%	37	432	3.75	0
340	-0.49	466	10.00%	261	3,177	1.56	0
54	-0.49	467	9.80%	115	1,043	2.47	0
334	-0.49	468	9.60%	22	311	4.06	0
98	-0.51	469	9.40%	297	852	3.50	0
131	-0.52	470	9.20%	28	442	11.25	1
179	-0.54	471	9.00%	13	150	4.73	0
346	-0.54	472	8.80%	311	2,554	2.32	0
221	-0.54	473	8.70%	55	600	3.06	0
162	-0.56	474	8.50%	40	320	1.36	0
470	-0.56	475	8.30%	28	286	3.05	1
148	-0.57	476	8.10%	41	496	1.22	0
71	-0.57	477	7.90%	65	438	0.90	0
517	-0.57	478	7.70%	120	750	17.65	1
77	-0.58	479	7.50%	59	640	1.44	0
207	-0.58	480	7.30%	230	1,950	1.61	0
294	-0.59	481	7.10%	17	277	3.42	0
320	-0.60	482	6.90%	58	375	1.71	0
194	-0.62	483	6.70%	46	462	1.61	0
206	-0.63	484	6.50%	49	443	1.71	0

Analysis 1: Max Day Demand Only
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
320	-0.44	485	6.30%	58	375	1.71	0
408	-0.45	486	6.10%	118	1,500	1.37	0
321	-0.45	487	5.90%	33	570	1.52	0
61	-0.46	488	5.80%	3,082	140	0.02	0
194	-0.48	489	5.60%	46	462	1.61	0
207	-0.48	490	5.40%	230	1,950	1.61	0
517	-0.49	491	5.20%	120	750	17.65	1
383	-0.51	492	5.00%	29	395	2.87	0
342	-0.52	493	4.80%	32	476	2.89	0
9	-0.53	494	4.60%	44	447	1.72	0
252	-0.56	495	4.40%	413	1,200	0.01	0
258	-0.56	496	4.20%	59	570	3.18	0
249	-0.57	497	4.00%	73	450	0.68	0
90	-0.59	498	3.80%	679	1,061	0.35	0
449	-0.60	499	3.60%	30	364	3.55	0
409	-0.60	500	3.40%	23	250	6.55	0
286	-0.62	501	3.20%	40	524	1.34	0
436	-0.74	502	3.00%	16	150	3.21	0
349	-0.80	503	2.90%	197	1,775	1.20	0
230	-0.83	504	2.70%	30	400	2.84	0
311	-0.87	505	2.50%	28	168	2.19	0
393	-0.88	506	2.30%	1,367	5,018	1.04	0
431	-0.89	507	2.10%	283	1,283	1.48	0
153	-0.90	508	1.90%	90	302	1.41	0
278	-0.91	509	1.70%	5	88	11.54	1
84	-0.95	510	1.50%	110	711	0.73	0
16	-1.05	511	1.30%	62	525	0.89	0
410	-1.18	512	1.10%	36	325	1.58	0
238	-1.18	513	0.90%	1,197	2,010	0.26	0
123	-1.25	514	0.70%	542	3,518	0.23	0
254	-1.33	515	0.50%	27	320	2.10	0
103	-1.39	516	0.30%	106	1,390	2.77	0
403	-1.85	517	0.10%	39	400	4.04	0
480	-2.84	518	0.00%	62	648	2.55	1
Count	99		Deficit Small Systems		97		10
% Deficit	19.1%	1.0%	% Small Systems		26%		
Average SE	0.98	0.8%					
% Deficit	19.1%						
S.D.	1.7%						

Analysis 2: AIA FP and No Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
252	-0.66	485	6.30%	413	1,200	0.01	0
398	-0.67	486	6.10%	43	552	1.28	0
390	-0.68	487	5.90%	57	945	0.65	0
408	-0.69	488	5.80%	118	1,500	1.37	0
249	-0.69	489	5.60%	73	450	0.68	0
9	-0.69	490	5.40%	44	447	1.72	0
383	-0.70	491	5.20%	29	395	2.87	0
164	-0.71	492	5.00%	43	983	3.41	0
449	-0.74	493	4.80%	30	364	3.55	0
321	-0.74	494	4.60%	33	570	1.52	0
90	-0.76	495	4.40%	679	1,061	0.35	0
258	-0.77	496	4.20%	59	570	3.18	0
342	-0.82	497	4.00%	32	476	2.89	0
436	-0.83	498	3.80%	16	150	3.21	0
409	-0.95	499	3.60%	23	250	6.55	0
153	-0.98	500	3.40%	90	302	1.41	0
230	-0.99	501	3.20%	30	400	2.84	0
311	-1.02	502	3.00%	28	168	2.19	0
349	-1.08	503	2.90%	197	1,775	1.20	0
204	-1.09	504	2.70%	90	1,176	1.66	0
286	-1.14	505	2.50%	40	524	1.34	0
431	-1.17	506	2.30%	283	1,283	1.48	0
16	-1.19	507	2.10%	62	525	0.89	0
393	-1.22	508	1.90%	1,367	5,018	1.04	0
238	-1.26	509	1.70%	1,197	2,010	0.26	0
451	-1.32	510	1.50%	136	1,565	1.07	0
123	-1.39	511	1.30%	542	3,518	0.23	0
410	-1.41	512	1.10%	36	325	1.58	0
278	-1.50	513	0.90%	5	88	11.54	1
254	-1.54	514	0.70%	27	320	2.10	0
84	-1.73	515	0.50%	110	711	0.73	0
103	-2.22	516	0.30%	106	1,390	2.77	0
480	-3.19	517	0.10%	62	648	2.55	1
403	-3.52	518	0.00%	39	400	4.04	0
Count	146		Deficit Small Systems		136		14
% Deficit	26.8%	1.4%	% Small Systems		36%		
Average SE	0.65	1.0%					
% Deficit	26.8%						
S.D.	2.3%						

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Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
159	7.70	1	100.00%	5,561	37,757	1.66	0
137	5.85	2	99.80%	9,320	61,150	1.86	0
62	5.85	3	99.60%	4,010	21,900	1.50	0
277	5.61	4	99.40%	2,171	18,708	1.88	0
268	5.28	5	99.20%	32,225	200,814	1.08	0
365	4.48	6	99.00%	1,701	7,462	8.44	0
190	4.23	7	98.80%	133	1,079	2.73	0
47	4.09	8	98.60%	302	3,364	4.19	0
474	3.46	9	98.40%	2,574	22,973	0.81	0
64	3.26	10	98.20%	1,470	12,741	2.02	0
7	3.26	11	98.00%	1,545	14,882	2.23	0
270	3.13	12	97.80%	168	1,205	2.74	0
240	3.12	13	97.60%	11,978	53,000	0.63	0
485	3.00	14	97.40%	6,952	63,240	1.12	0
475	2.93	15	97.20%	7,657	65,000	2.03	0
416	2.74	16	97.00%	1,559	6,976	4.22	0
374	2.65	17	96.90%	1,416	6,018	1.92	0
509	2.63	18	96.70%	2,435	20,000	1.70	0
93	2.55	19	96.50%	437	4,567	1.60	0
508	2.48	20	96.30%	675	2,465	2.35	0
486	2.47	21	96.10%	2,958	28,943	1.59	0
336	2.44	22	95.90%	1,782	12,545	1.39	0
303	2.39	23	95.70%	1,813	10,241	1.17	0
309	2.39	24	95.50%	598	4,134	2.27	0
120	2.33	25	95.30%	1,005	8,128	2.48	0
428	2.29	26	95.10%	1,266	8,648	1.51	0
443	2.16	27	94.90%	1,386	9,400	1.74	0
477	2.14	28	94.70%	2,224	5,750	0.84	0
364	2.06	29	94.50%	858	9,989	1.59	0
20	2.05	30	94.30%	74	1,102	4.15	0
440	2.03	31	94.10%	1,319	12,524	0.71	0
478	1.98	32	94.00%	991	10,649	1.18	0
19	1.98	33	93.80%	3,668	17,777	0.91	0
225	1.98	34	93.60%	1,193	7,541	1.89	0
228	1.98	35	93.40%	243	2,622	6.77	0
15	1.94	36	93.20%	1,018	2,194	1.56	0
368	1.93	37	93.00%	1,596	9,981	1.23	0
214	1.92	38	92.80%	1,915	14,187	1.94	0
245	1.91	39	92.60%	1,341	7,107	1.80	0
356	1.90	40	92.40%	842	8,275	2.07	0
118	1.84	41	92.20%	171	1,617	4.09	0
182	1.83	42	92.00%	1,412	11,098	0.62	0
314	1.82	43	91.80%	703	6,312	1.90	0
52	1.81	44	91.60%	292	3,228	3.85	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
159	4.02	1	100.00%	5,561	37,757	1.66	0
365	3.88	2	99.80%	1,701	7,462	8.44	0
190	3.71	3	99.60%	133	1,079	2.73	0
62	3.55	4	99.40%	4,010	21,900	1.50	0
47	3.33	5	99.20%	302	3,364	4.19	0
137	3.30	6	99.00%	9,320	61,150	1.86	0
277	3.29	7	98.80%	2,171	18,708	1.88	0
270	3.00	8	98.60%	168	1,205	2.74	0
64	2.91	9	98.40%	1,470	12,741	2.02	0
7	2.74	10	98.20%	1,545	14,882	2.23	0
474	2.67	11	98.00%	2,574	22,973	0.81	0
20	2.30	12	97.80%	74	1,102	4.15	0
485	2.24	13	97.60%	6,952	63,240	1.12	0
416	2.21	14	97.40%	1,559	6,976	4.22	0
93	2.21	15	97.20%	437	4,567	1.60	0
374	2.05	16	97.00%	1,416	6,018	1.92	0
508	2.01	17	96.90%	675	2,465	2.35	0
509	1.86	18	96.70%	2,435	20,000	1.70	0
336	1.79	19	96.50%	1,782	12,545	1.39	0
118	1.75	20	96.30%	171	1,617	4.09	0
364	1.75	21	96.10%	858	9,989	1.59	0
228	1.73	22	95.90%	243	2,622	6.77	0
478	1.70	23	95.70%	991	10,649	1.18	0
52	1.67	24	95.50%	292	3,228	3.85	0
486	1.65	25	95.30%	2,958	28,943	1.59	0
28	1.64	26	95.10%	73	1,127	9.26	0
142	1.63	27	94.90%	158	1,056	4.53	0
72	1.59	28	94.70%	118	1,352	2.13	0
309	1.56	29	94.50%	598	4,134	2.27	0
167	1.46	30	94.30%	194	1,039	1.36	0
319	1.45	31	94.10%	291	2,557	2.91	0
120	1.44	32	94.00%	1,005	8,128	2.48	0
440	1.44	33	93.80%	1,319	12,524	0.71	0
303	1.43	34	93.60%	1,813	10,241	1.17	0
443	1.41	35	93.40%	1,386	9,400	1.74	0
428	1.40	36	93.20%	1,266	8,648	1.51	0
314	1.39	37	93.00%	703	6,312	1.90	0
368	1.39	38	92.80%	1,596	9,981	1.23	0
484	1.36	39	92.60%	60	610	2.72	0
234	1.34	40	92.40%	434	3,540	0.92	0
281	1.33	41	92.20%	649	5,187	1.25	0
356	1.30	42	92.00%	842	8,275	2.07	0
225	1.28	43	91.80%	1,193	7,541	1.89	0
501	1.28	44	91.60%	298	2,108	2.13	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	Column1	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
281	1.79	45	91.40%	649	5,187	1.25	0
435	1.76	46	91.20%	7,627	24,551	0.49	0
455	1.72	47	91.10%	1,083	8,532	1.41	0
357	1.71	48	90.90%	1,274	9,418	1.57	0
142	1.70	49	90.70%	158	1,056	4.53	0
21	1.68	50	90.50%	304	1,450	1.35	0
163	1.68	51	90.30%	1,929	12,046	0.89	0
413	1.66	52	90.10%	1,389	8,330	1.65	0
319	1.64	53	89.90%	291	2,557	2.91	0
167	1.63	54	89.70%	194	1,039	1.36	0
72	1.62	55	89.50%	118	1,352	2.13	0
44	1.58	56	89.30%	540	3,608	1.92	0
1	1.54	57	89.10%	307	1,956	2.19	0
28	1.53	58	88.90%	73	1,127	9.26	0
479	1.53	59	88.70%	4,930	38,426	1.16	0
234	1.52	60	88.50%	434	3,540	0.92	0
88	1.50	61	88.30%	3,676	12,925	0.71	0
247	1.49	62	88.20%	789	5,137	1.33	0
232	1.46	63	88.00%	446	3,345	2.30	0
499	1.44	64	87.80%	1,856	14,000	0.91	0
447	1.44	65	87.60%	1,251	9,351	1.74	0
406	1.43	66	87.40%	1,270	4,328	1.18	0
501	1.43	67	87.20%	298	2,108	2.13	0
296	1.40	68	87.00%	480	5,419	1.49	0
111	1.39	69	86.80%	86	176	1.86	0
201	1.38	70	86.60%	400	2,193	1.84	0
82	1.37	71	86.40%	1,469	10,770	0.85	0
337	1.36	72	86.20%	400	4,505	1.96	0
385	1.36	73	86.00%	1,892	8,000	1.28	0
33	1.36	74	85.80%	2,070	15,464	0.92	0
157	1.32	75	85.60%	2,018	15,485	0.81	0
484	1.32	76	85.40%	60	610	2.72	0
316	1.32	77	85.20%	720	8,000	1.65	0
139	1.30	78	85.10%	399	4,936	1.83	0
101	1.29	79	84.90%	516	4,748	1.55	0
283	1.29	80	84.70%	594	5,897	2.22	0
381	1.28	81	84.50%	146	1,842	2.28	0
5	1.24	82	84.30%	267	3,656	2.43	0
496	1.24	83	84.10%	238	1,820	5.01	0
318	1.23	84	83.90%	290	2,761	1.72	0
396	1.23	85	83.70%	1,152	12,560	1.27	0
140	1.23	86	83.50%	47	275	8.67	0
146	1.21	87	83.30%	64	841	3.99	0
233	1.19	88	83.10%	325	2,801	1.27	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
21	1.27	45	91.40%	304	1,450	1.35	0
381	1.24	46	91.20%	146	1,842	2.28	0
140	1.23	47	91.10%	47	275	8.67	0
146	1.22	48	90.90%	64	841	3.99	0
296	1.21	49	90.70%	480	5,419	1.49	0
149	1.21	50	90.50%	34	536	9.11	0
337	1.19	51	90.30%	400	4,505	1.96	0
247	1.18	52	90.10%	789	5,137	1.33	0
245	1.15	53	89.90%	1,341	7,107	1.80	0
182	1.13	54	89.70%	1,412	11,098	0.62	0
139	1.13	55	89.50%	399	4,936	1.83	0
5	1.07	56	89.30%	267	3,656	2.43	0
46	1.06	57	89.10%	75	802	5.25	0
448	1.05	58	88.90%	28	513	9.64	0
233	1.05	59	88.70%	325	2,801	1.27	0
496	1.04	60	88.50%	238	1,820	5.01	0
232	1.04	61	88.30%	446	3,345	2.30	0
335	1.03	62	88.20%	116	1,015	16.62	0
283	1.02	63	88.00%	594	5,897	2.22	0
1	0.99	64	87.80%	307	1,956	2.19	0
109	0.99	65	87.60%	186	2,156	2.13	0
455	0.98	66	87.40%	1,083	8,532	1.41	0
175	0.98	67	87.20%	251	1,356	3.91	0
318	0.98	68	87.00%	290	2,761	1.72	0
51	0.97	69	86.80%	101	1,450	2.87	0
423	0.91	70	86.60%	217	1,500	1.84	0
15	0.90	71	86.40%	1,018	2,194	1.56	0
201	0.90	72	86.20%	400	2,193	1.84	0
290	0.87	73	86.00%	922	10,353	0.48	0
56	0.86	74	85.80%	75	872	1.23	0
44	0.85	75	85.60%	540	3,608	1.92	0
316	0.85	76	85.40%	720	8,000	1.65	0
101	0.84	77	85.20%	516	4,748	1.55	0
13	0.84	78	85.10%	79	983	0.87	0
272	0.84	79	84.90%	229	1,695	2.30	0
324	0.84	80	84.70%	514	3,412	1.43	0
214	0.83	81	84.50%	1,915	14,187	1.94	0
506	0.83	82	84.30%	52	376	4.54	0
161	0.82	83	84.10%	56	768	3.92	0
475	0.81	84	83.90%	7,657	65,000	2.03	0
163	0.81	85	83.70%	1,929	12,046	0.89	0
343	0.81	86	83.50%	243	2,680	1.33	0
396	0.81	87	83.30%	1,152	12,560	1.27	0
25	0.80	88	83.10%	99	648	2.62	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	Column1	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
197	1.16	89	82.90%	980	8,219	2.23	0
14	1.15	90	82.70%	1,038	8,600	0.84	0
445	1.14	91	82.50%	2,606	21,000	0.88	0
290	1.14	92	82.30%	922	10,353	0.48	0
175	1.13	93	82.20%	251	1,356	3.91	0
324	1.12	94	82.00%	514	3,412	1.43	0
293	1.12	95	81.80%	2,213	16,129	1.20	0
149	1.11	96	81.60%	34	536	9.11	0
366	1.11	97	81.40%	1,173	10,981	1.35	0
423	1.08	98	81.20%	217	1,500	1.84	0
272	1.07	99	81.00%	229	1,695	2.30	0
347	1.07	100	80.80%	169	936	2.15	0
335	1.06	101	80.60%	116	1,015	16.62	0
109	1.06	102	80.40%	186	2,156	2.13	0
46	1.05	103	80.20%	75	802	5.25	0
402	1.04	104	80.00%	281	2,079	2.18	0
389	1.03	105	79.80%	1,421	7,427	1.78	0
476	1.02	106	79.60%	1,111	9,900	1.31	0
448	1.00	107	79.40%	28	513	9.64	0
367	0.99	108	79.30%	1,298	7,929	0.86	0
343	0.98	109	79.10%	243	2,680	1.33	0
51	0.98	110	78.90%	101	1,450	2.87	0
39	0.96	111	78.70%	797	5,371	0.98	0
224	0.96	112	78.50%	13,479	61,110	1.12	0
344	0.95	113	78.30%	747	6,592	1.66	0
280	0.95	114	78.10%	507	4,143	1.79	0
87	0.92	115	77.90%	708	3,764	1.70	0
322	0.91	116	77.70%	3,390	30,046	1.37	0
257	0.91	117	77.50%	1,298	10,583	1.23	0
94	0.90	118	77.30%	303	385	5.90	0
350	0.90	119	77.10%	198	2,074	1.85	0
493	0.89	120	76.90%	682	1,549	0.71	0
2	0.88	121	76.70%	330	1,819	1.51	0
323	0.88	122	76.50%	206	1,899	1.59	0
461	0.86	123	76.40%	547	4,101	1.18	0
25	0.85	124	76.20%	99	648	2.62	0
56	0.85	125	76.00%	75	872	1.23	0
301	0.85	126	75.80%	286	2,667	3.07	0
407	0.85	127	75.60%	680	2,117	0.85	0
388	0.84	128	75.40%	22	220	2.36	0
506	0.84	129	75.20%	52	376	4.54	0
186	0.84	130	75.00%	20	207	3.01	0
126	0.84	131	74.80%	483	3,882	1.04	0
160	0.83	132	74.60%	614	1,839	3.20	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
237	0.79	89	82.90%	24	430	3.46	0
220	0.79	90	82.70%	70	997	3.98	0
366	0.78	91	82.50%	1,173	10,981	1.35	0
6	0.78	92	82.30%	79	860	4.15	0
81	0.77	93	82.20%	21	263	4.24	0
282	0.76	94	82.00%	137	1,377	3.32	0
350	0.76	95	81.80%	198	2,074	1.85	0
231	0.76	96	81.60%	33	450	3.02	0
420	0.72	97	81.40%	60	950	1.02	0
387	0.71	98	81.20%	49	710	4.32	0
323	0.71	99	81.00%	206	1,899	1.59	0
280	0.70	100	80.80%	507	4,143	1.79	0
169	0.70	101	80.60%	21	299	3.43	0
357	0.70	102	80.40%	1,274	9,418	1.57	0
197	0.70	103	80.20%	980	8,219	2.23	0
3	0.69	104	80.00%	29	536	4.38	0
23	0.69	105	79.80%	38	296	2.80	0
310	0.68	106	79.60%	45	558	2.26	0
17	0.68	107	79.40%	65	798	3.02	0
94	0.67	108	79.30%	303	385	5.90	0
447	0.67	109	79.10%	1,251	9,351	1.74	0
477	0.66	110	78.90%	2,224	5,750	0.84	0
514	0.66	111	78.70%	174	2,350	1.60	0
99	0.65	112	78.50%	118	1,155	1.39	0
202	0.64	113	78.30%	89	1,171	2.28	0
358	0.64	114	78.10%	42	550	2.15	0
301	0.63	115	77.90%	286	2,667	3.07	0
401	0.63	116	77.70%	33	494	1.53	0
462	0.62	117	77.50%	107	997	2.39	0
235	0.62	118	77.30%	33	500	2.42	0
2	0.61	119	77.10%	330	1,819	1.51	0
113	0.61	120	76.90%	22	477	1.00	0
308	0.61	121	76.70%	55	400	2.71	0
83	0.60	122	76.50%	204	1,887	1.97	0
176	0.60	123	76.40%	34	436	1.43	0
446	0.60	124	76.20%	48	601	3.66	0
476	0.59	125	76.00%	1,111	9,900	1.31	0
39	0.59	126	75.80%	797	5,371	0.98	0
499	0.59	127	75.60%	1,856	14,000	0.91	0
291	0.59	128	75.40%	30	589	4.82	0
438	0.59	129	75.20%	73	815	4.83	0
33	0.58	130	75.00%	2,070	15,464	0.92	0
262	0.58	131	74.80%	63	631	1.84	0
333	0.57	132	74.60%	38	653	4.02	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
287	0.83	133	74.40%	2,866	11,100	1.37	0
282	0.82	134	74.20%	137	1,377	3.32	0
187	0.82	135	74.00%	1,546	15,128	2.46	0
13	0.81	136	73.80%	79	983	0.87	0
241	0.80	137	73.60%	394	3,826	1.28	0
143	0.79	138	73.50%	1,217	7,500	0.80	0
161	0.79	139	73.30%	56	768	3.92	0
229	0.78	140	73.10%	1,470	13,430	1.06	0
6	0.78	141	72.90%	79	860	4.15	0
243	0.78	142	72.70%	146	25	1.63	0
338	0.77	143	72.50%	313	2,892	1.50	0
490	0.77	144	72.30%	1,598	13,300	0.37	0
288	0.77	145	72.10%	1,994	14,055	1.13	0
83	0.75	146	71.90%	204	1,887	1.97	0
189	0.73	147	71.70%	456	5,064	1.35	0
514	0.73	148	71.50%	174	2,350	1.60	0
237	0.73	149	71.30%	24	430	3.46	0
183	0.72	150	71.10%	2,011	19,723	0.27	0
231	0.72	151	70.90%	33	450	3.02	0
271	0.72	152	70.70%	5	122	0.21	0
220	0.72	153	70.50%	70	997	3.98	0
99	0.71	154	70.40%	118	1,155	1.39	0
392	0.71	155	70.20%	1,566	8,300	0.54	0
420	0.70	156	70.00%	60	950	1.02	0
488	0.69	157	69.80%	976	5,709	0.74	0
259	0.69	158	69.60%	349	2,968	2.14	0
27	0.68	159	69.40%	2,215	11,188	1.06	0
244	0.68	160	69.20%	1,183	1,470	0.74	0
81	0.68	161	69.00%	21	263	4.24	0
326	0.66	162	68.80%	2,270	7,162	0.67	0
23	0.66	163	68.60%	38	296	2.80	0
312	0.66	164	68.40%	578	6,009	1.53	0
17	0.65	165	68.20%	65	798	3.02	0
69	0.65	166	68.00%	1,928	9,958	1.88	0
169	0.65	167	67.80%	21	299	3.43	0
414	0.65	168	67.60%	425	4,950	2.40	0
236	0.64	169	67.50%	1,321	6,000	0.90	0
462	0.64	170	67.30%	107	997	2.39	0
387	0.63	171	67.10%	49	710	4.32	0
310	0.63	172	66.90%	45	558	2.26	0
3	0.63	173	66.70%	29	536	4.38	0
302	0.62	174	66.50%	839	8,908	1.68	0
202	0.62	175	66.30%	89	1,171	2.28	0
308	0.62	176	66.10%	55	400	2.71	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
184	0.57	133	74.40%	24	385	1.66	0
389	0.57	134	74.20%	1,421	7,427	1.78	0
425	0.56	135	74.00%	55	651	2.41	0
138	0.55	136	73.80%	92	1,451	2.27	0
461	0.55	137	73.60%	547	4,101	1.18	0
259	0.55	138	73.50%	349	2,968	2.14	0
427	0.55	139	73.30%	37	478	4.09	0
376	0.54	140	73.10%	114	605	2.29	0
417	0.54	141	72.90%	19	260	3.68	0
114	0.54	142	72.70%	63	621	2.91	0
344	0.54	143	72.50%	747	6,592	1.66	0
338	0.54	144	72.30%	313	2,892	1.50	0
208	0.53	145	72.10%	71	450	2.62	0
479	0.52	146	71.90%	4,930	38,426	1.16	0
49	0.52	147	71.70%	48	650	3.63	0
413	0.52	148	71.50%	1,389	8,330	1.65	0
362	0.51	149	71.30%	83	792	2.46	0
215	0.51	150	71.10%	97	1,146	4.44	0
384	0.51	151	70.90%	167	2,019	1.30	0
345	0.50	152	70.70%	108	1,250	3.11	0
241	0.50	153	70.50%	394	3,826	1.28	0
38	0.49	154	70.40%	63	976	3.36	0
453	0.49	155	70.20%	66	865	1.19	0
243	0.49	156	70.00%	146	25	1.63	0
209	0.49	157	69.80%	19	256	3.71	0
406	0.48	158	69.60%	1,270	4,328	1.18	0
265	0.48	159	69.40%	108	1,223	2.66	0
217	0.47	160	69.20%	115	1,244	3.61	0
158	0.47	161	69.00%	179	1,809	2.44	0
187	0.47	162	68.80%	1,546	15,128	2.46	0
34	0.47	163	68.60%	241	1,887	1.43	0
102	0.47	164	68.40%	60	714	3.36	0
97	0.46	165	68.20%	119	1,600	2.45	0
31	0.45	166	68.00%	147	778	1.72	0
147	0.45	167	67.80%	127	1,611	2.67	0
157	0.45	168	67.60%	2,018	15,485	0.81	0
257	0.45	169	67.50%	1,298	10,583	1.23	0
112	0.44	170	67.30%	26	477	3.67	0
73	0.44	171	67.10%	188	779	2.36	0
426	0.43	172	66.90%	237	1,736	1.04	0
58	0.41	173	66.70%	210	598	0.52	0
82	0.41	174	66.50%	1,469	10,770	0.85	0
412	0.40	175	66.30%	117	1,549	2.04	0
317	0.40	176	66.10%	105	844	2.00	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
58	0.62	177	65.90%	210	598	0.52	0
196	0.62	178	65.70%	1,710	11,419	0.71	0
223	0.61	179	65.50%	761	6,034	1.06	0
208	0.60	180	65.30%	71	450	2.62	0
377	0.60	181	65.10%	479	3,645	1.18	0
248	0.60	182	64.90%	776	4,021	1.20	0
376	0.59	183	64.70%	114	605	2.29	0
401	0.59	184	64.60%	33	494	1.53	0
34	0.59	185	64.40%	241	1,887	1.43	0
29	0.58	186	64.20%	1,360	3,319	0.23	0
331	0.58	187	64.00%	426	4,292	1.96	0
235	0.58	188	63.80%	33	500	2.42	0
438	0.57	189	63.60%	73	815	4.83	0
507	0.57	190	63.40%	45	98	1.83	0
384	0.56	191	63.20%	167	2,019	1.30	0
176	0.56	192	63.00%	34	436	1.43	0
158	0.56	193	62.80%	179	1,809	2.44	0
358	0.56	194	62.60%	42	550	2.15	0
173	0.55	195	62.40%	214	2,060	4.21	0
174	0.55	196	62.20%	1,633	15,864	1.52	0
262	0.55	197	62.00%	63	631	1.84	0
341	0.54	198	61.80%	2,313	15,224	2.05	0
31	0.54	199	61.70%	147	778	1.72	0
113	0.54	200	61.50%	22	477	1.00	0
104	0.53	201	61.30%	368	4,152	1.67	0
138	0.53	202	61.10%	92	1,451	2.27	0
70	0.53	203	60.90%	356	1,881	2.06	0
362	0.52	204	60.70%	83	792	2.46	0
345	0.52	205	60.50%	108	1,250	3.11	0
217	0.51	206	60.30%	115	1,244	3.61	0
114	0.51	207	60.10%	63	621	2.91	0
73	0.51	208	59.90%	188	779	2.36	0
427	0.51	209	59.70%	37	478	4.09	0
265	0.51	210	59.50%	108	1,223	2.66	0
215	0.51	211	59.30%	97	1,146	4.44	0
446	0.51	212	59.10%	48	601	3.66	0
426	0.50	213	58.90%	237	1,736	1.04	0
425	0.49	214	58.80%	55	651	2.41	0
211	0.48	215	58.60%	550	3,732	1.49	0
184	0.48	216	58.40%	24	385	1.66	0
473	0.48	217	58.20%	1,021	3,317	1.18	0
491	0.48	218	58.00%	486	4,809	1.63	0
417	0.47	219	57.80%	19	260	3.68	0
136	0.47	220	57.60%	624	3,806	1.53	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
63	0.40	177	65.90%	71	789	3.09	0
165	0.39	178	65.70%	155	1,482	1.73	0
377	0.39	179	65.50%	479	3,645	1.18	0
497	0.38	180	65.30%	30	351	4.18	0
4	0.37	181	65.10%	86	1,140	3.80	0
141	0.37	182	64.90%	42	635	3.60	0
19	0.37	183	64.70%	3,668	17,777	0.91	0
104	0.37	184	64.60%	368	4,152	1.67	0
397	0.37	185	64.40%	105	1,230	3.35	0
492	0.36	186	64.20%	133	800	3.34	0
306	0.36	187	64.00%	97	1,140	3.75	0
191	0.35	188	63.80%	42	534	2.50	0
373	0.35	189	63.60%	215	2,496	1.71	0
173	0.35	190	63.40%	214	2,060	4.21	0
299	0.34	191	63.20%	118	557	2.02	0
407	0.33	192	63.00%	680	2,117	0.85	0
60	0.33	193	62.80%	265	3,165	2.30	0
441	0.33	194	62.60%	96	1,651	1.97	0
186	0.33	195	62.40%	20	207	3.01	0
388	0.32	196	62.20%	22	220	2.36	0
121	0.32	197	62.00%	222	2,000	1.43	0
298	0.32	198	61.80%	298	2,428	1.36	0
515	0.31	199	61.70%	38	550	3.29	0
361	0.31	200	61.50%	65	838	2.81	0
516	0.31	201	61.30%	62	715	1.68	0
302	0.30	202	61.10%	839	8,908	1.68	0
195	0.29	203	60.90%	118	950	2.25	0
289	0.28	204	60.70%	70	760	2.44	0
8	0.28	205	60.50%	87	863	2.14	0
385	0.28	206	60.30%	1,892	8,000	1.28	0
512	0.27	207	60.10%	53	834	2.20	0
405	0.27	208	59.90%	396	3,019	0.82	0
91	0.27	209	59.70%	127	1,365	1.83	0
41	0.26	210	59.50%	131	901	2.20	0
32	0.26	211	59.30%	28	446	3.38	0
275	0.26	212	59.10%	154	1,496	1.41	0
240	0.26	213	58.90%	11,978	53,000	0.63	0
192	0.25	214	58.80%	197	3,500	7.03	0
79	0.24	215	58.60%	76	1,005	1.14	0
414	0.24	216	58.40%	425	4,950	2.40	0
295	0.23	217	58.20%	80	1,146	0.93	0
189	0.23	218	58.00%	456	5,064	1.35	0
170	0.23	219	57.80%	193	1,427	3.94	0
132	0.23	220	57.60%	221	1,968	2.64	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
453	0.47	221	57.40%	66	865	1.19	0
49	0.47	222	57.20%	48	650	3.63	0
45	0.47	223	57.00%	391	1,231	1.32	0
298	0.46	224	56.80%	298	2,428	1.36	0
333	0.46	225	56.60%	38	653	4.02	0
317	0.46	226	56.40%	105	844	2.00	0
165	0.46	227	56.20%	155	1,482	1.73	0
147	0.45	228	56.00%	127	1,611	2.67	0
170	0.45	229	55.80%	193	1,427	3.94	0
121	0.44	230	55.70%	222	2,000	1.43	0
492	0.44	231	55.50%	133	800	3.34	0
38	0.44	232	55.30%	63	976	3.36	0
60	0.43	233	55.10%	265	3,165	2.30	0
373	0.43	234	54.90%	215	2,496	1.71	0
102	0.42	235	54.70%	60	714	3.36	0
405	0.41	236	54.50%	396	3,019	0.82	0
210	0.41	237	54.30%	815	6,984	1.12	0
299	0.41	238	54.10%	118	557	2.02	0
369	0.39	239	53.90%	549	1,866	1.08	0
209	0.39	240	53.70%	19	256	3.71	0
397	0.39	241	53.50%	105	1,230	3.35	0
97	0.39	242	53.30%	119	1,600	2.45	0
412	0.39	243	53.10%	117	1,549	2.04	0
119	0.39	244	52.90%	854	7,997	1.09	0
195	0.38	245	52.80%	118	950	2.25	0
68	0.38	246	52.60%	14	80	19.35	0
63	0.38	247	52.40%	71	789	3.09	0
213	0.37	248	52.20%	1,815	14,170	1.63	0
150	0.37	249	52.00%	393	3,487	1.95	0
504	0.36	250	51.80%	228	1,200	2.75	0
306	0.36	251	51.60%	97	1,140	3.75	0
75	0.36	252	51.40%	215	1,573	1.81	0
132	0.36	253	51.20%	221	1,968	2.64	0
275	0.36	254	51.00%	154	1,496	1.41	0
86	0.35	255	50.80%	268	1,931	2.13	0
24	0.35	256	50.60%	343	3,301	1.61	0
481	0.34	257	50.40%	248	1,855	1.06	0
497	0.34	258	50.20%	30	351	4.18	0
41	0.34	259	50.00%	131	901	2.20	0
112	0.34	260	49.90%	26	477	3.67	0
192	0.34	261	49.70%	197	3,500	7.03	0
4	0.34	262	49.50%	86	1,140	3.80	0
168	0.33	263	49.30%	194	1,975	2.08	0
117	0.32	264	49.10%	295	2,235	2.16	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
168	0.22	221	57.40%	194	1,975	2.08	0
180	0.22	222	57.20%	74	928	0.68	0
75	0.22	223	57.00%	215	1,573	1.81	0
293	0.22	224	56.80%	2,213	16,129	1.20	0
422	0.21	225	56.60%	112	896	1.42	0
481	0.20	226	56.40%	248	1,855	1.06	0
107	0.20	227	56.20%	133	1,041	2.23	0
445	0.20	228	56.00%	2,606	21,000	0.88	0
178	0.19	229	55.80%	97	1,102	0.43	0
24	0.19	230	55.70%	343	3,301	1.61	0
402	0.18	231	55.50%	281	2,079	2.18	0
300	0.18	232	55.30%	142	1,422	1.24	0
183	0.18	233	55.10%	2,011	19,723	0.27	0
504	0.18	234	54.90%	228	1,200	2.75	0
87	0.18	235	54.70%	708	3,764	1.70	0
312	0.17	236	54.50%	578	6,009	1.53	0
437	0.17	237	54.30%	42	650	5.39	0
126	0.17	238	54.10%	483	3,882	1.04	0
203	0.16	239	53.90%	55	799	3.93	0
467	0.16	240	53.70%	83	750	1.60	0
223	0.16	241	53.50%	761	6,034	1.06	0
86	0.16	242	53.30%	268	1,931	2.13	0
370	0.15	243	53.10%	16	400	10.59	0
503	0.14	244	52.90%	33	525	4.51	0
248	0.12	245	52.80%	776	4,021	1.20	0
116	0.12	246	52.60%	103	1,596	0.99	0
493	0.12	247	52.40%	682	1,549	0.71	0
37	0.12	248	52.20%	150	875	1.56	0
154	0.12	249	52.00%	88	1,100	2.81	0
331	0.12	250	51.80%	426	4,292	1.96	0
117	0.11	251	51.60%	295	2,235	2.16	0
456	0.10	252	51.40%	439	3,328	0.92	0
70	0.10	253	51.20%	356	1,881	2.06	0
205	0.10	254	51.00%	186	1,325	3.56	0
14	0.10	255	50.80%	1,038	8,600	0.84	0
68	0.09	256	50.60%	14	80	19.35	0
150	0.09	257	50.40%	393	3,487	1.95	0
43	0.09	258	50.20%	96	1,374	2.01	0
279	0.09	259	50.00%	62	382	1.61	0
210	0.08	260	49.90%	815	6,984	1.12	0
160	0.08	261	49.70%	614	1,839	3.20	0
92	0.07	262	49.50%	239	1,876	1.36	0
444	0.07	263	49.30%	147	1,864	3.56	0
491	0.06	264	49.10%	486	4,809	1.63	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
456	0.32	265	48.90%	439	3,328	0.92	0
37	0.31	266	48.70%	150	875	1.56	0
91	0.30	267	48.50%	127	1,365	1.83	0
8	0.30	268	48.30%	87	863	2.14	0
191	0.30	269	48.10%	42	534	2.50	0
422	0.29	270	47.90%	112	896	1.42	0
328	0.29	271	47.70%	341	2,079	1.53	0
291	0.29	272	47.50%	30	589	4.82	0
107	0.28	273	47.30%	133	1,041	2.23	0
246	0.27	274	47.10%	439	2,381	1.08	0
289	0.27	275	47.00%	70	760	2.44	0
516	0.26	276	46.80%	62	715	1.68	0
391	0.25	277	46.60%	618	5,850	0.84	0
129	0.25	278	46.40%	28	150	2.10	0
300	0.25	279	46.20%	142	1,422	1.24	0
205	0.25	280	46.00%	186	1,325	3.56	0
500	0.24	281	45.80%	1,215	1,765	0.24	0
466	0.23	282	45.60%	437	4,335	1.14	0
430	0.22	283	45.40%	438	2,530	0.74	0
361	0.22	284	45.20%	65	838	2.81	0
92	0.22	285	45.00%	239	1,876	1.36	0
110	0.21	286	44.80%	596	1,983	1.11	0
180	0.21	287	44.60%	74	928	0.68	0
79	0.20	288	44.40%	76	1,005	1.14	0
178	0.20	289	44.20%	97	1,102	0.43	0
219	0.20	290	44.10%	16	150	2.53	0
32	0.19	291	43.90%	28	446	3.38	0
295	0.19	292	43.70%	80	1,146	0.93	0
134	0.19	293	43.50%	244	1,374	1.65	0
330	0.18	294	43.30%	5	50	7.17	0
512	0.18	295	43.10%	53	834	2.20	0
515	0.17	296	42.90%	38	550	3.29	0
467	0.17	297	42.70%	83	750	1.60	0
279	0.15	298	42.50%	62	382	1.61	0
155	0.14	299	42.30%	241	2,378	1.79	0
444	0.14	300	42.10%	147	1,864	3.56	0
510	0.13	301	41.90%	128	514	0.89	0
313	0.12	302	41.70%	16	209	8.14	0
141	0.12	303	41.50%	42	635	3.60	0
76	0.12	304	41.30%	150	1,930	2.40	0
74	0.10	305	41.10%	178	1,101	2.66	0
471	0.10	306	41.00%	182	2,080	1.48	0
380	0.10	307	40.80%	23	224	1.41	0
42	0.10	308	40.60%	441	1,218	0.85	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
236	0.06	265	48.90%	1,321	6,000	0.90	0
271	0.06	266	48.70%	5	122	0.21	0
353	0.06	267	48.50%	196	4,071	1.52	0
45	0.06	268	48.30%	391	1,231	1.32	0
76	0.05	269	48.10%	150	1,930	2.40	0
246	0.05	270	47.90%	439	2,381	1.08	0
341	0.02	271	47.70%	2,313	15,224	2.05	0
242	0.02	272	47.50%	64	780	2.31	0
378	0.02	273	47.30%	117	1,458	2.60	0
421	0.01	274	47.10%	106	1,236	1.95	0
211	0.01	275	47.00%	550	3,732	1.49	0
471	0.01	276	46.80%	182	2,080	1.48	0
155	0.01	277	46.60%	241	2,378	1.79	0
418	-0.01	278	46.40%	138	1,135	1.80	1
127	-0.01	279	46.20%	75	834	3.46	0
465	-0.02	280	46.00%	55	667	2.64	0
267	-0.02	281	45.80%	39	474	0.99	0
144	-0.03	282	45.60%	64	810	1.30	0
288	-0.03	283	45.40%	1,994	14,055	1.13	0
199	-0.04	284	45.20%	18	251	2.76	1
152	-0.05	285	45.00%	43	504	5.10	0
490	-0.05	286	44.80%	1,598	13,300	0.37	0
395	-0.06	287	44.60%	82	987	1.86	0
363	-0.06	288	44.40%	105	899	0.73	0
143	-0.06	289	44.20%	1,217	7,500	0.80	0
429	-0.06	290	44.10%	129	1,941	1.84	0
325	-0.06	291	43.90%	139	1,495	1.55	0
513	-0.07	292	43.70%	98	1,100	1.68	0
74	-0.09	293	43.50%	178	1,101	2.66	0
452	-0.09	294	43.30%	79	600	2.59	0
430	-0.09	295	43.10%	438	2,530	0.74	0
432	-0.10	296	42.90%	105	1,271	1.76	0
134	-0.11	297	42.70%	244	1,374	1.65	0
119	-0.12	298	42.50%	854	7,997	1.09	0
328	-0.12	299	42.30%	341	2,079	1.53	0
67	-0.13	300	42.10%	57	495	1.11	0
26	-0.14	301	41.90%	133	1,400	0.16	0
125	-0.15	302	41.70%	10	266	11.81	0
372	-0.16	303	41.50%	23	407	2.96	0
80	-0.16	304	41.30%	200	1,144	3.81	0
105	-0.17	305	41.10%	24	500	2.28	0
218	-0.17	306	41.00%	141	1,298	1.15	0
226	-0.17	307	40.80%	196	1,901	2.22	0
510	-0.18	308	40.60%	128	514	0.89	1

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	Column1	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
43	0.09	309	40.40%	96	1,374	2.01	0
154	0.09	310	40.20%	88	1,100	2.81	0
325	0.08	311	39.80%	139	1,495	1.55	0
503	0.08	311	39.80%	33	525	4.51	0
116	0.07	313	39.60%	103	1,596	0.99	0
441	0.07	314	39.40%	96	1,651	1.97	0
463	0.06	315	39.20%	993	8,726	0.63	0
400	0.06	316	39.00%	616	3,190	0.67	0
353	0.06	317	38.80%	196	4,071	1.52	0
418	0.06	318	38.60%	138	1,135	1.80	0
378	0.05	319	38.40%	117	1,458	2.60	0
375	0.04	320	38.20%	351	2,380	1.24	0
355	0.04	321	38.10%	337	3,525	1.39	0
421	0.04	322	37.90%	106	1,236	1.95	0
433	0.03	323	37.70%	511	3,500	1.20	0
80	0.02	324	37.50%	200	1,144	3.81	0
437	0.01	325	37.30%	42	650	5.39	0
253	0.00	326	37.10%	302	585	0.97	0
203	0.00	327	36.90%	55	799	3.93	0
363	0.00	328	36.70%	105	899	0.73	0
226	-0.01	329	36.50%	196	1,901	2.22	0
269	-0.02	330	36.30%	11	121	7.87	0
127	-0.02	331	36.10%	75	834	3.46	0
242	-0.02	332	35.90%	64	780	2.31	0
460	-0.03	333	35.70%	17	214	4.88	0
35	-0.03	334	35.50%	183	1,947	1.71	0
429	-0.04	335	35.30%	129	1,941	1.84	0
222	-0.05	336	35.20%	15	200	2.33	1
267	-0.05	337	35.00%	39	474	0.99	0
199	-0.06	338	34.80%	18	251	2.76	1
489	-0.06	339	34.60%	221	2,045	2.26	0
513	-0.06	340	34.40%	98	1,100	1.68	0
26	-0.06	341	34.20%	133	1,400	0.16	0
432	-0.07	342	34.00%	105	1,271	1.76	0
152	-0.07	343	33.80%	43	504	5.10	0
212	-0.08	344	33.60%	187	2,415	1.67	0
395	-0.08	345	33.40%	82	987	1.86	0
216	-0.08	346	33.20%	15	170	1.83	1
144	-0.08	347	33.00%	64	810	1.30	0
218	-0.08	348	32.80%	141	1,298	1.15	0
452	-0.08	349	32.60%	79	600	2.59	0
419	-0.09	350	32.40%	163	2,210	2.66	0
67	-0.10	351	32.30%	57	495	1.11	0
57	-0.10	352	32.10%	853	2,937	0.41	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
419	-0.18	309	40.40%	163	2,210	2.66	0
35	-0.18	310	40.20%	183	1,947	1.71	0
222	-0.18	311	40.00%	15	200	2.33	1
212	-0.18	312	39.80%	187	2,415	1.67	0
244	-0.19	313	39.60%	1,183	1,470	0.74	0
263	-0.21	314	39.40%	23	374	2.52	0
355	-0.21	315	39.20%	337	3,525	1.39	0
313	-0.21	316	39.00%	16	209	8.14	0
260	-0.21	317	38.80%	27	268	3.21	1
269	-0.22	318	38.60%	11	121	7.87	0
394	-0.23	319	38.40%	43	577	3.60	0
460	-0.23	320	38.20%	17	214	4.88	0
482	-0.23	321	38.10%	44	605	3.60	0
489	-0.24	322	37.90%	221	2,045	2.26	0
133	-0.24	323	37.70%	157	1,728	2.56	0
110	-0.24	324	37.50%	596	1,983	1.11	0
454	-0.24	325	37.30%	51	25	5.07	0
213	-0.24	326	37.10%	1,815	14,170	1.63	0
375	-0.24	327	36.90%	351	2,380	1.24	0
50	-0.24	328	36.70%	34	459	3.05	0
124	-0.25	329	36.50%	75	1,038	3.29	0
128	-0.25	330	36.30%	183	1,716	1.80	0
255	-0.25	331	36.10%	40	429	3.23	0
66	-0.26	332	35.90%	20	256	5.92	0
276	-0.26	333	35.70%	268	3,513	1.13	0
466	-0.26	334	35.50%	437	4,335	1.14	0
88	-0.27	335	35.30%	3,676	12,925	0.71	0
95	-0.27	336	35.20%	32	440	3.54	0
332	-0.27	337	35.00%	44	649	2.86	0
273	-0.28	338	34.80%	26	400	2.17	0
171	-0.28	339	34.60%	54	567	3.22	0
463	-0.28	340	34.40%	993	8,726	0.63	0
53	-0.29	341	34.20%	26	339	5.86	0
216	-0.29	342	34.00%	15	170	1.83	1
69	-0.30	343	33.80%	1,928	9,958	1.88	0
136	-0.30	344	33.60%	624	3,806	1.53	0
10	-0.31	345	33.40%	51	765	0.60	0
264	-0.31	346	33.20%	98	1,308	1.96	0
392	-0.31	347	33.00%	1,566	8,300	0.54	0
495	-0.32	348	32.80%	20	317	2.55	0
305	-0.32	349	32.60%	66	666	2.47	0
193	-0.32	350	32.40%	134	1,614	1.68	0
30	-0.32	351	32.30%	39	571	5.37	0
360	-0.32	352	32.10%	30	393	3.54	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
465	-0.10	353	31.90%	55	667	2.64	0
128	-0.11	354	31.70%	183	1,716	1.80	0
518	-0.12	355	31.50%	5	83	8.92	1
454	-0.12	356	31.30%	51	25	5.07	0
12	-0.13	357	31.10%	308	2,800	1.27	0
276	-0.13	358	30.90%	268	3,513	1.13	0
256	-0.13	359	30.70%	8	130	3.21	0
239	-0.13	360	30.50%	357	5,400	1.15	0
261	-0.14	361	30.30%	253	2,410	1.59	0
315	-0.14	362	30.10%	215	1,286	1.74	0
274	-0.16	363	29.90%	273	1,348	1.53	0
133	-0.16	364	29.70%	157	1,728	2.56	0
411	-0.16	365	29.50%	360	3,535	1.22	0
36	-0.17	366	29.40%	1,225	13,500	0.79	0
145	-0.18	367	29.20%	295	2,844	1.40	0
372	-0.20	368	29.00%	23	407	2.96	0
487	-0.20	369	28.80%	13	150	0.61	0
505	-0.20	370	28.60%	217	2,351	3.53	0
105	-0.21	371	28.40%	24	500	2.28	0
327	-0.23	372	28.20%	1,148	6,312	0.68	0
266	-0.24	373	28.00%	240	2,052	1.37	0
502	-0.24	374	27.80%	10	170	8.05	0
457	-0.25	375	27.60%	9	141	5.58	0
263	-0.25	376	27.40%	23	374	2.52	0
304	-0.25	377	27.20%	158	1,329	1.56	0
125	-0.26	378	27.00%	10	266	11.81	0
108	-0.26	379	26.80%	447	3,100	1.28	0
458	-0.26	380	26.60%	141	1,258	2.84	0
351	-0.27	381	26.40%	736	2,993	1.10	0
255	-0.27	382	26.30%	40	429	3.23	0
50	-0.28	383	26.10%	34	459	3.05	0
264	-0.28	384	25.90%	98	1,308	1.96	0
260	-0.28	385	25.70%	27	268	3.21	1
95	-0.29	386	25.50%	32	440	3.54	0
370	-0.30	387	25.30%	16	400	10.59	1
115	-0.30	388	25.10%	794	12,000	1.04	0
193	-0.30	389	24.90%	134	1,614	1.68	0
166	-0.31	390	24.70%	775	7,012	2.83	0
171	-0.31	391	24.50%	54	567	3.22	0
59	-0.31	392	24.30%	228	2,692	0.46	0
273	-0.32	393	24.10%	26	400	2.17	0
124	-0.33	394	23.90%	75	1,038	3.29	0
352	-0.33	395	23.70%	24	165	2.51	0
332	-0.34	396	23.50%	44	649	2.86	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
292	-0.33	353	31.90%	31	392	2.55	0
498	-0.33	354	31.70%	57	743	0.95	0
239	-0.33	355	31.50%	357	5,400	1.15	0
229	-0.34	356	31.30%	1,470	13,430	1.06	0
458	-0.35	357	31.10%	141	1,258	2.84	0
78	-0.35	358	30.90%	55	703	1.84	0
40	-0.37	359	30.70%	59	688	2.13	0
391	-0.38	360	30.50%	618	5,850	0.84	0
411	-0.38	361	30.30%	360	3,535	1.22	0
468	-0.38	362	30.10%	35	452	1.67	0
156	-0.38	363	29.90%	16	300	5.74	0
55	-0.38	364	29.70%	37	672	3.05	0
22	-0.38	365	29.50%	73	623	2.17	0
42	-0.38	366	29.40%	441	1,218	0.85	0
251	-0.39	367	29.20%	36	323	2.16	0
261	-0.39	368	29.00%	253	2,410	1.59	0
198	-0.40	369	28.80%	33	385	2.02	1
315	-0.40	370	28.60%	215	1,286	1.74	0
96	-0.40	371	28.40%	45	435	4.85	0
174	-0.40	372	28.20%	1,633	15,864	1.52	0
304	-0.40	373	28.00%	158	1,329	1.56	0
172	-0.42	374	27.80%	28	264	3.48	0
256	-0.43	375	27.60%	8	130	3.21	0
29	-0.43	376	27.40%	1,360	3,319	0.23	0
12	-0.43	377	27.20%	308	2,800	1.27	0
27	-0.44	378	27.00%	2,215	11,188	1.06	0
400	-0.45	379	26.80%	616	3,190	0.67	0
329	-0.46	380	26.60%	19	308	6.43	0
505	-0.47	381	26.40%	217	2,351	3.53	0
450	-0.47	382	26.30%	92	1,310	2.37	0
502	-0.47	383	26.10%	10	170	8.05	0
494	-0.47	384	25.90%	21	313	2.81	0
435	-0.48	385	25.70%	7,627	24,551	0.49	0
59	-0.48	386	25.50%	228	2,692	0.46	0
151	-0.48	387	25.30%	20	260	2.57	0
404	-0.48	388	25.10%	67	738	1.64	0
434	-0.50	389	24.90%	87	621	2.36	0
334	-0.51	390	24.70%	22	311	4.06	0
177	-0.52	391	24.50%	36	382	3.56	0
106	-0.52	392	24.30%	155	1,958	1.87	0
339	-0.52	393	24.10%	7	253	0.14	0
507	-0.53	394	23.90%	45	98	1.83	0
85	-0.54	395	23.70%	55	306	1.75	0
219	-0.54	396	23.50%	16	150	2.53	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	Column1	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
292	-0.35	397	23.40%	31	392	2.55	0
498	-0.36	398	23.20%	57	743	0.95	0
360	-0.37	399	23.00%	30	393	3.54	0
495	-0.37	400	22.80%	20	317	2.55	0
472	-0.38	401	22.60%	435	4,239	1.51	0
11	-0.38	402	22.40%	629	6,665	0.93	0
305	-0.39	403	22.20%	66	666	2.47	0
22	-0.39	404	22.00%	73	623	2.17	0
53	-0.39	405	21.60%	26	339	5.86	0
482	-0.39	405	21.60%	44	605	3.60	0
96	-0.40	407	21.40%	45	435	4.85	0
78	-0.40	408	21.20%	55	703	1.84	0
415	-0.40	409	21.00%	361	3,437	1.72	0
66	-0.41	410	20.80%	20	256	5.92	0
468	-0.41	411	20.60%	35	452	1.67	0
439	-0.41	412	20.50%	17	175	2.11	0
100	-0.42	413	20.30%	173	367	0.28	0
30	-0.43	414	20.10%	39	571	5.37	0
198	-0.43	415	19.90%	33	385	2.02	1
394	-0.43	416	19.70%	43	577	3.60	0
251	-0.43	417	19.50%	36	323	2.16	0
106	-0.45	418	19.30%	155	1,958	1.87	0
464	-0.45	419	19.10%	135	641	1.12	0
511	-0.46	420	18.90%	130	1,200	1.23	0
10	-0.46	421	18.70%	51	765	0.60	0
450	-0.48	422	18.50%	92	1,310	2.37	0
61	-0.48	423	18.30%	3,082	140	0.02	0
434	-0.48	424	18.10%	87	621	2.36	0
459	-0.49	425	17.90%	178	1,065	0.98	0
354	-0.49	426	17.70%	115	929	0.90	0
172	-0.50	427	17.60%	28	264	3.48	0
188	-0.51	428	17.40%	151	1,064	1.94	0
404	-0.51	429	17.20%	67	738	1.64	0
85	-0.51	430	17.00%	55	306	1.75	0
40	-0.52	431	16.80%	59	688	2.13	0
382	-0.53	432	16.60%	370	1,599	1.26	0
359	-0.53	433	16.40%	333	1,675	1.13	0
250	-0.53	434	16.20%	86	950	2.46	1
179	-0.54	435	16.00%	13	150	4.73	0
177	-0.54	436	15.80%	36	382	3.56	0
334	-0.54	437	15.60%	22	311	4.06	0
130	-0.55	438	15.40%	137	670	1.61	0
469	-0.55	439	15.20%	506	2,304	1.04	0
494	-0.56	440	15.00%	21	313	2.81	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
181	-0.54	397	23.40%	45	803	3.89	0
297	-0.54	398	23.20%	37	275	1.37	0
250	-0.55	399	23.00%	86	950	2.46	1
18	-0.56	400	22.80%	50	565	5.54	0
253	-0.56	401	22.60%	302	585	0.97	0
65	-0.56	402	22.40%	56	561	0.98	0
274	-0.57	403	22.20%	273	1,348	1.53	0
48	-0.57	404	22.00%	51	770	2.09	0
348	-0.58	405	21.80%	73	945	0.15	0
369	-0.59	406	21.60%	549	1,866	1.08	0
135	-0.59	407	21.40%	31	447	1.80	0
457	-0.59	408	21.20%	9	141	5.58	0
352	-0.60	409	21.00%	24	165	2.51	0
145	-0.60	410	20.80%	295	2,844	1.40	0
188	-0.60	411	20.60%	151	1,064	1.94	0
371	-0.62	412	20.50%	43	668	5.41	0
131	-0.62	413	20.30%	28	442	11.25	1
511	-0.62	414	20.10%	130	1,200	1.23	0
473	-0.63	415	19.90%	1,021	3,317	1.18	0
399	-0.63	416	19.70%	37	432	3.75	0
196	-0.63	417	19.50%	1,710	11,419	0.71	0
115	-0.65	418	19.30%	794	12,000	1.04	0
162	-0.66	419	19.10%	40	320	1.36	0
433	-0.66	420	18.90%	511	3,500	1.20	0
354	-0.66	421	18.70%	115	929	0.90	0
386	-0.67	422	18.50%	89	1,200	1.75	0
36	-0.67	423	18.30%	1,225	13,500	0.79	0
470	-0.67	424	18.10%	28	286	3.05	1
89	-0.67	425	17.90%	70	509	2.02	0
166	-0.68	426	17.70%	775	7,012	2.83	0
129	-0.68	427	17.60%	28	150	2.10	0
517	-0.68	428	17.40%	120	750	17.65	1
459	-0.70	429	17.20%	178	1,065	0.98	0
415	-0.71	430	17.00%	361	3,437	1.72	0
307	-0.71	431	16.80%	104	887	2.77	0
130	-0.72	432	16.60%	137	670	1.61	0
221	-0.72	433	16.40%	55	600	3.06	0
194	-0.72	434	16.20%	46	462	1.61	0
108	-0.73	435	16.00%	447	3,100	1.28	0
54	-0.73	436	15.80%	115	1,043	2.47	0
200	-0.73	437	15.60%	32	407	1.71	1
347	-0.74	438	15.40%	169	936	2.15	0
207	-0.74	439	15.20%	230	1,950	1.61	0
148	-0.76	440	15.00%	41	496	1.22	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	Column1	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
297	-0.58	441	14.80%	37	275	1.37	0
379	-0.58	442	14.70%	304	2,524	2.92	0
185	-0.58	443	14.50%	157	1,406	2.21	0
122	-0.60	444	14.30%	3,615	20,332	0.66	0
348	-0.60	445	14.10%	73	945	0.15	0
89	-0.61	446	13.90%	70	509	2.02	0
18	-0.62	447	13.70%	50	565	5.54	0
151	-0.62	448	13.50%	20	260	2.57	0
98	-0.62	449	13.30%	297	852	3.50	0
307	-0.62	450	13.10%	104	887	2.77	0
483	-0.63	451	12.90%	297	4,400	1.70	0
65	-0.64	452	12.70%	56	561	0.98	0
517	-0.64	453	12.50%	120	750	17.65	1
48	-0.64	454	12.30%	51	770	2.09	0
329	-0.66	455	12.10%	19	308	6.43	0
207	-0.67	456	11.90%	230	1,950	1.61	0
424	-0.67	457	11.70%	358	3,901	0.88	0
399	-0.68	458	11.60%	37	432	3.75	0
156	-0.68	459	11.40%	16	300	5.74	0
162	-0.68	460	11.20%	40	320	1.36	0
386	-0.68	461	11.00%	89	1,200	1.75	0
131	-0.69	462	10.80%	28	442	11.25	1
54	-0.69	463	10.60%	115	1,043	2.47	0
181	-0.69	464	10.40%	45	803	3.89	0
55	-0.69	465	10.20%	37	672	3.05	0
135	-0.70	466	10.00%	31	447	1.80	0
194	-0.73	467	9.80%	46	462	1.61	0
320	-0.74	468	9.60%	58	375	1.71	0
252	-0.74	469	9.40%	413	1,200	0.01	0
470	-0.75	470	9.20%	28	286	3.05	1
285	-0.78	471	9.00%	215	845	1.12	0
339	-0.78	472	8.80%	7	253	0.14	0
221	-0.79	473	8.70%	55	600	3.06	0
249	-0.79	474	8.50%	73	450	0.68	0
148	-0.79	475	8.30%	41	496	1.22	0
206	-0.82	476	8.10%	49	443	1.71	0
436	-0.83	477	7.90%	16	150	3.21	0
9	-0.83	478	7.70%	44	447	1.72	0
77	-0.83	479	7.50%	59	640	1.44	0
449	-0.85	480	7.30%	30	364	3.55	0
383	-0.86	481	7.10%	29	395	2.87	0
284	-0.87	482	6.90%	588	4,010	1.56	0
408	-0.88	483	6.70%	118	1,500	1.37	0
90	-0.89	484	6.50%	679	1,061	0.35	0

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	SE	Rank	Percent	Average Day Demand (1,000 gal)	Population Served	Storage Turnover in Days on Minimum Month	Check: Max Day Data Correction and Deficit
57	-0.76	441	14.80%	853	2,937	0.41	0
266	-0.76	442	14.70%	240	2,052	1.37	0
320	-0.77	443	14.50%	58	375	1.71	0
77	-0.77	444	14.30%	59	640	1.44	0
322	-0.78	445	14.10%	3,390	30,046	1.37	0
383	-0.79	446	13.90%	29	395	2.87	0
185	-0.80	447	13.70%	157	1,406	2.21	0
367	-0.80	448	13.50%	1,298	7,929	0.86	0
449	-0.81	449	13.30%	30	364	3.55	0
9	-0.82	450	13.10%	44	447	1.72	0
206	-0.82	451	12.90%	49	443	1.71	0
294	-0.83	452	12.70%	17	277	3.42	0
483	-0.84	453	12.50%	297	4,400	1.70	0
249	-0.84	454	12.30%	73	450	0.68	0
398	-0.84	455	12.10%	43	552	1.28	0
464	-0.84	456	11.90%	135	641	1.12	0
227	-0.84	457	11.70%	43	440	1.18	1
321	-0.85	458	11.60%	33	570	1.52	0
472	-0.86	459	11.40%	435	4,239	1.51	0
287	-0.86	460	11.20%	2,866	11,100	1.37	1
382	-0.87	461	11.00%	370	1,599	1.26	0
100	-0.88	462	10.80%	173	367	0.28	0
224	-0.88	463	10.60%	13,479	61,110	1.12	0
518	-0.89	464	10.40%	5	83	8.92	1
258	-0.91	465	10.20%	59	570	3.18	0
408	-0.92	466	10.00%	118	1,500	1.37	0
98	-0.92	467	9.80%	297	852	3.50	0
488	-0.95	468	9.60%	976	5,709	0.74	0
390	-0.95	469	9.40%	57	945	0.65	0
379	-0.95	470	9.20%	304	2,524	2.92	0
359	-0.96	471	9.00%	333	1,675	1.13	0
342	-0.98	472	8.80%	32	476	2.89	0
164	-0.98	473	8.70%	43	983	3.41	0
252	-0.99	474	8.50%	413	1,200	0.01	0
71	-1.02	475	8.30%	65	438	0.90	0
500	-1.03	476	8.10%	1,215	1,765	0.24	0
439	-1.03	477	7.90%	17	175	2.11	0
327	-1.04	478	7.70%	1,148	6,312	0.68	0
424	-1.04	479	7.50%	358	3,901	0.88	0
230	-1.08	480	7.30%	30	400	2.84	0
409	-1.08	481	7.10%	23	250	6.55	0
153	-1.10	482	6.90%	90	302	1.41	0
436	-1.12	483	6.70%	16	150	3.21	0
351	-1.20	484	6.50%	736	2,993	1.10	0

Analysis 3: Adjusted AIA FP to ISO, no reserve
Rank and Percentile

Point	*Column1*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
71	-0.90	485	6.30%	65	438	0.90	0
200	-0.92	486	6.10%	32	407	1.71	1
227	-0.93	487	5.90%	43	440	1.18	1
258	-0.95	488	5.80%	59	570	3.18	0
371	-0.97	489	5.60%	43	668	5.41	0
398	-0.98	490	5.40%	43	552	1.28	0
321	-1.00	491	5.20%	33	570	1.52	0
311	-1.02	492	5.00%	28	168	2.19	0
346	-1.04	493	4.80%	311	2,554	2.32	0
153	-1.04	494	4.60%	90	302	1.41	0
390	-1.04	495	4.40%	57	945	0.65	0
342	-1.05	496	4.20%	32	476	2.89	0
340	-1.06	497	4.00%	261	3,177	1.56	0
230	-1.13	498	3.80%	30	400	2.84	0
409	-1.22	499	3.60%	23	250	6.55	0
294	-1.26	500	3.40%	17	277	3.42	0
16	-1.30	501	3.20%	62	525	0.89	0
349	-1.31	502	3.00%	197	1,775	1.20	0
164	-1.32	503	2.90%	43	983	3.41	0
238	-1.33	504	2.70%	1,197	2,010	0.26	0
431	-1.39	505	2.50%	283	1,283	1.48	0
393	-1.48	506	2.30%	1,367	5,018	1.04	0
278	-1.50	507	2.10%	5	88	11.54	1
123	-1.51	508	1.90%	542	3,518	0.23	0
286	-1.56	509	1.70%	40	524	1.34	0
410	-1.60	510	1.50%	36	325	1.58	0
442	-1.60	511	1.30%	97	1,100	2.90	0
204	-1.66	512	1.10%	90	1,176	1.66	0
254	-1.71	513	0.90%	27	320	2.10	0
84	-2.41	514	0.70%	110	711	0.73	0
103	-2.89	515	0.50%	106	1,390	2.77	0
451	-3.31	516	0.30%	136	1,565	1.07	0
480	-3.49	517	0.10%	62	648	2.55	1
403	-4.85	518	0.00%	39	400	4.04	0
Count	191		Deficit Small Systems		177		15
% Deficit	35.4%	1.4%	% Small Systems		47%		
Average SE	0.39	1.4%					
% Deficit	35.4%						
S.D.	2.8%						

Analysis 4: AIA FP with Average Day in Reserve
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
469	-1.27	485	6.30%	506	2,304	1.04	0
380	-1.33	486	6.10%	23	224	1.41	0
16	-1.34	487	5.90%	62	525	0.89	0
340	-1.35	488	5.80%	261	3,177	1.56	0
349	-1.44	489	5.60%	197	1,775	1.20	0
326	-1.45	490	5.40%	2,270	7,162	0.67	0
286	-1.48	491	5.20%	40	524	1.34	0
285	-1.54	492	5.00%	215	845	1.12	0
410	-1.55	493	4.80%	36	325	1.58	0
311	-1.60	494	4.60%	28	168	2.19	0
442	-1.61	495	4.40%	97	1,100	2.90	0
346	-1.62	496	4.20%	311	2,554	2.32	0
204	-1.63	497	4.00%	90	1,176	1.66	0
254	-1.63	498	3.80%	27	320	2.10	0
90	-1.70	499	3.60%	679	1,061	0.35	0
179	-1.73	500	3.40%	13	150	4.73	0
123	-1.77	501	3.20%	542	3,518	0.23	0
11	-1.81	502	3.00%	629	6,665	0.93	0
431	-1.82	503	2.90%	283	1,283	1.48	0
238	-1.88	504	2.70%	1,197	2,010	0.26	0
487	-1.90	505	2.50%	13	150	0.61	0
330	-2.02	506	2.30%	5	50	7.17	0
284	-2.09	507	2.10%	588	4,010	1.56	0
61	-2.17	508	1.90%	3,082	140	0.02	0
122	-2.58	509	1.70%	3,615	20,332	0.66	0
111	-2.67	510	1.50%	86	176	1.86	0
84	-2.69	511	1.30%	110	711	0.73	0
268	-2.71	512	1.10%	32,225	200,814	1.08	0
103	-2.96	513	0.90%	106	1,390	2.77	0
393	-3.12	514	0.70%	1,367	5,018	1.04	0
278	-3.40	515	0.50%	5	88	11.54	1
480	-3.43	516	0.30%	62	648	2.55	1
451	-3.47	517	0.10%	136	1,565	1.07	0
403	-4.61	518	0.00%	39	400	4.04	0
Count	241		Deficit Small Systems		197		17
% Deficit	44.9%	1.6%	% Small Systems		52%		
Average SE	0.06	1.9%					
% Deficit	44.9%						
S.D.	3.6%						

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Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
159	5.33	1	100.00%	5,561	37,757	1.66	0
268	5.05	2	99.80%	32,225	200,814	1.08	0
47	4.37	3	99.60%	302	3,364	4.19	0
365	4.28	4	99.40%	1,701	7,462	8.44	0
137	3.99	5	99.20%	9,320	61,150	1.86	0
277	3.66	6	99.00%	2,171	18,708	1.88	0
475	3.21	7	98.80%	7,657	65,000	2.03	0
62	2.78	8	98.60%	4,010	21,900	1.50	0
347	2.76	9	98.40%	169	936	2.15	0
228	2.50	10	98.20%	243	2,622	6.77	0
111	2.34	11	98.00%	86	176	1.86	0
28	1.86	12	97.80%	73	1,127	9.26	0
120	1.82	13	97.60%	1,005	8,128	2.48	0
287	1.65	14	97.40%	2,866	11,100	1.37	0
309	1.62	15	97.20%	598	4,134	2.27	0
190	1.61	16	97.00%	133	1,079	2.73	0
192	1.56	17	96.90%	197	3,500	7.03	0
413	1.49	18	96.70%	1,389	8,330	1.65	0
402	1.45	19	96.50%	281	2,079	2.18	0
416	1.41	20	96.30%	1,559	6,976	4.22	0
15	1.30	21	96.10%	1,018	2,194	1.56	0
496	1.27	22	95.90%	238	1,820	5.01	0
7	1.25	23	95.70%	1,545	14,882	2.23	0
69	1.23	24	95.50%	1,928	9,958	1.88	0
224	1.20	25	95.30%	13,479	61,110	1.12	0
160	1.16	26	95.10%	614	1,839	3.20	0
214	1.15	27	94.90%	1,915	14,187	1.94	0
140	1.13	28	94.70%	47	275	8.67	0
505	1.12	29	94.50%	217	2,351	3.53	0
245	1.11	30	94.30%	1,341	7,107	1.80	0
356	1.06	31	94.10%	842	8,275	2.07	0
486	1.05	32	94.00%	2,958	28,943	1.59	0
149	1.04	33	93.80%	34	536	9.11	0
240	1.03	34	93.60%	11,978	53,000	0.63	0
374	1.03	35	93.40%	1,416	6,018	1.92	0
225	1.02	36	93.20%	1,193	7,541	1.89	0
443	1.00	37	93.00%	1,386	9,400	1.74	0
284	1.00	38	92.80%	588	4,010	1.56	0
485	0.99	39	92.60%	6,952	63,240	1.12	0
509	0.99	40	92.40%	2,435	20,000	1.70	0
385	0.98	41	92.20%	1,892	8,000	1.28	0
322	0.96	42	92.00%	3,390	30,046	1.37	0
477	0.94	43	91.80%	2,224	5,750	0.84	0
428	0.93	44	91.60%	1,266	8,648	1.51	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
159	5.33	1	100.00%	5,561	37,757	1.66	0
268	5.05	2	99.80%	32,225	200,814	1.08	0
47	4.37	3	99.60%	302	3,364	4.19	0
365	4.28	4	99.40%	1,701	7,462	8.44	0
137	3.99	5	99.20%	9,320	61,150	1.86	0
277	3.66	6	99.00%	2,171	18,708	1.88	0
475	3.21	7	98.80%	7,657	65,000	2.03	0
62	2.78	8	98.60%	4,010	21,900	1.50	0
347	2.76	9	98.40%	169	936	2.15	0
228	2.50	10	98.20%	243	2,622	6.77	0
111	2.09	11	98.00%	86	176	1.86	0
28	1.86	12	97.80%	73	1,127	9.26	0
120	1.82	13	97.60%	1,005	8,128	2.48	0
309	1.62	14	97.40%	598	4,134	2.27	0
190	1.61	15	97.20%	133	1,079	2.73	0
192	1.56	16	97.00%	197	3,500	7.03	0
287	1.50	17	96.90%	2,866	11,100	1.37	0
413	1.49	18	96.70%	1,389	8,330	1.65	0
402	1.45	19	96.50%	281	2,079	2.18	0
416	1.41	20	96.30%	1,559	6,976	4.22	0
15	1.30	21	96.10%	1,018	2,194	1.56	0
496	1.27	22	95.90%	238	1,820	5.01	0
7	1.25	23	95.70%	1,545	14,882	2.23	0
69	1.23	24	95.50%	1,928	9,958	1.88	0
224	1.20	25	95.30%	13,479	61,110	1.12	0
160	1.16	26	95.10%	614	1,839	3.20	0
214	1.15	27	94.90%	1,915	14,187	1.94	0
140	1.13	28	94.70%	47	275	8.67	0
245	1.11	29	94.50%	1,341	7,107	1.80	0
356	1.06	30	94.30%	842	8,275	2.07	0
486	1.05	31	94.10%	2,958	28,943	1.59	0
149	1.04	32	94.00%	34	536	9.11	0
240	1.03	33	93.80%	11,978	53,000	0.63	0
374	1.03	34	93.60%	1,416	6,018	1.92	0
225	1.02	35	93.40%	1,193	7,541	1.89	0
443	1.00	36	93.20%	1,386	9,400	1.74	0
485	0.99	37	93.00%	6,952	63,240	1.12	0
509	0.99	38	92.80%	2,435	20,000	1.70	0
505	0.98	39	92.60%	217	2,351	3.53	0
385	0.98	40	92.40%	1,892	8,000	1.28	0
322	0.96	41	92.20%	3,390	30,046	1.37	0
477	0.94	42	92.00%	2,224	5,750	0.84	0
428	0.93	43	91.80%	1,266	8,648	1.51	0
44	0.91	44	91.60%	540	3,608	1.92	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
44	0.91	45	91.40%	540	3,608	1.92	0
19	0.91	46	91.20%	3,668	17,777	0.91	0
447	0.87	47	91.10%	1,251	9,351	1.74	0
87	0.85	48	90.90%	708	3,764	1.70	0
1	0.83	49	90.70%	307	1,956	2.19	0
303	0.83	50	90.50%	1,813	10,241	1.17	0
406	0.82	51	90.30%	1,270	4,328	1.18	0
170	0.82	52	90.10%	193	1,427	3.94	0
357	0.80	53	89.90%	1,274	9,418	1.57	0
52	0.79	54	89.70%	292	3,228	3.85	0
455	0.79	55	89.50%	1,083	8,532	1.41	0
367	0.78	56	89.30%	1,298	7,929	0.86	0
197	0.77	57	89.10%	980	8,219	2.23	0
473	0.77	58	88.90%	1,021	3,317	1.18	0
479	0.76	59	88.70%	4,930	38,426	1.16	0
336	0.76	60	88.50%	1,782	12,545	1.39	0
20	0.74	61	88.30%	74	1,102	4.15	0
326	0.74	62	88.20%	2,270	7,162	0.67	0
118	0.74	63	88.00%	171	1,617	4.09	0
27	0.73	64	87.80%	2,215	11,188	1.06	0
314	0.72	65	87.60%	703	6,312	1.90	0
173	0.72	66	87.40%	214	2,060	4.21	0
379	0.70	67	87.20%	304	2,524	2.92	0
201	0.69	68	87.00%	400	2,193	1.84	0
46	0.69	69	86.80%	75	802	5.25	0
389	0.67	70	86.60%	1,421	7,427	1.78	0
414	0.66	71	86.40%	425	4,950	2.40	0
70	0.64	72	86.20%	356	1,881	2.06	0
136	0.64	73	86.00%	624	3,806	1.53	0
232	0.63	74	85.80%	446	3,345	2.30	0
213	0.63	75	85.60%	1,815	14,170	1.63	0
64	0.62	76	85.40%	1,470	12,741	2.02	0
88	0.62	77	85.20%	3,676	12,925	0.71	0
346	0.60	78	85.10%	311	2,554	2.32	0
319	0.59	79	84.90%	291	2,557	2.91	0
293	0.59	80	84.70%	2,213	16,129	1.20	0
508	0.59	81	84.50%	675	2,465	2.35	0
444	0.59	82	84.30%	147	1,864	3.56	0
301	0.57	83	84.10%	286	2,667	3.07	0
435	0.56	84	83.90%	7,627	24,551	0.49	0
174	0.56	85	83.70%	1,633	15,864	1.52	0
270	0.55	86	83.50%	168	1,205	2.74	0
474	0.55	87	83.30%	2,574	22,973	0.81	0
335	0.54	88	83.10%	116	1,015	16.62	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
19	0.91	45	91.40%	3,668	17,777	0.91	0
447	0.87	46	91.20%	1,251	9,351	1.74	0
87	0.85	47	91.10%	708	3,764	1.70	0
1	0.83	48	90.90%	307	1,956	2.19	0
303	0.83	49	90.70%	1,813	10,241	1.17	0
406	0.82	50	90.50%	1,270	4,328	1.18	0
170	0.82	51	90.30%	193	1,427	3.94	0
357	0.80	52	90.10%	1,274	9,418	1.57	0
52	0.79	53	89.90%	292	3,228	3.85	0
455	0.79	54	89.70%	1,083	8,532	1.41	0
367	0.78	55	89.50%	1,298	7,929	0.86	0
197	0.77	56	89.30%	980	8,219	2.23	0
473	0.77	57	89.10%	1,021	3,317	1.18	0
479	0.76	58	88.90%	4,930	38,426	1.16	0
336	0.76	59	88.70%	1,782	12,545	1.39	0
20	0.74	60	88.50%	74	1,102	4.15	0
326	0.74	61	88.30%	2,270	7,162	0.67	0
118	0.74	62	88.20%	171	1,617	4.09	0
27	0.73	63	88.00%	2,215	11,188	1.06	0
314	0.72	64	87.80%	703	6,312	1.90	0
173	0.72	65	87.60%	214	2,060	4.21	0
201	0.69	66	87.40%	400	2,193	1.84	0
46	0.69	67	87.20%	75	802	5.25	0
389	0.67	68	87.00%	1,421	7,427	1.78	0
414	0.66	69	86.80%	425	4,950	2.40	0
70	0.64	70	86.60%	356	1,881	2.06	0
136	0.64	71	86.40%	624	3,806	1.53	0
232	0.63	72	86.20%	446	3,345	2.30	0
213	0.63	73	86.00%	1,815	14,170	1.63	0
64	0.62	74	85.80%	1,470	12,741	2.02	0
88	0.62	75	85.60%	3,676	12,925	0.71	0
319	0.59	76	85.40%	291	2,557	2.91	0
293	0.59	77	85.20%	2,213	16,129	1.20	0
508	0.59	78	85.10%	675	2,465	2.35	0
444	0.59	79	84.90%	147	1,864	3.56	0
301	0.57	80	84.70%	286	2,667	3.07	0
435	0.56	81	84.50%	7,627	24,551	0.49	0
174	0.56	82	84.30%	1,633	15,864	1.52	0
270	0.55	83	84.10%	168	1,205	2.74	0
474	0.55	84	83.90%	2,574	22,973	0.81	0
335	0.54	85	83.70%	116	1,015	16.62	0
187	0.53	86	83.50%	1,546	15,128	2.46	0
341	0.53	87	83.30%	2,313	15,224	2.05	0
283	0.52	88	83.10%	594	5,897	2.22	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
68	0.54	89	82.90%	14	80	19.35	0
187	0.53	90	82.70%	1,546	15,128	2.46	0
341	0.53	91	82.50%	2,313	15,224	2.05	0
283	0.52	92	82.30%	594	5,897	2.22	0
369	0.52	93	82.20%	549	1,866	1.08	0
166	0.49	94	82.00%	775	7,012	2.83	0
368	0.49	95	81.80%	1,596	9,981	1.23	0
393	0.47	96	81.60%	1,367	5,018	1.04	0
101	0.46	97	81.40%	516	4,748	1.55	0
163	0.46	98	81.20%	1,929	12,046	0.89	0
215	0.46	99	81.00%	97	1,146	4.44	0
142	0.45	100	80.80%	158	1,056	4.53	0
504	0.45	101	80.60%	228	1,200	2.75	0
364	0.44	102	80.40%	858	9,989	1.59	0
288	0.44	103	80.20%	1,994	14,055	1.13	0
316	0.43	104	80.00%	720	8,000	1.65	0
33	0.42	105	79.80%	2,070	15,464	0.92	0
331	0.41	106	79.60%	426	4,292	1.96	0
93	0.41	107	79.40%	437	4,567	1.60	0
21	0.40	108	79.30%	304	1,450	1.35	0
45	0.39	109	79.10%	391	1,231	1.32	0
229	0.39	110	78.90%	1,470	13,430	1.06	0
351	0.39	111	78.70%	736	2,993	1.10	0
205	0.38	112	78.50%	186	1,325	3.56	0
448	0.37	113	78.30%	28	513	9.64	0
302	0.37	114	78.10%	839	8,908	1.68	0
5	0.37	115	77.90%	267	3,656	2.43	0
14	0.37	116	77.70%	1,038	8,600	0.84	0
328	0.36	117	77.50%	341	2,079	1.53	0
344	0.36	118	77.30%	747	6,592	1.66	0
506	0.36	119	77.10%	52	376	4.54	0
272	0.36	120	76.90%	229	1,695	2.30	0
517	0.36	121	76.70%	120	750	17.65	0
143	0.35	122	76.50%	1,217	7,500	0.80	0
491	0.35	123	76.40%	486	4,809	1.63	0
280	0.35	124	76.20%	507	4,143	1.79	0
312	0.35	125	76.00%	578	6,009	1.53	0
488	0.33	126	75.80%	976	5,709	0.74	0
257	0.33	127	75.60%	1,298	10,583	1.23	0
236	0.33	128	75.40%	1,321	6,000	0.90	0
247	0.33	129	75.20%	789	5,137	1.33	0
211	0.33	130	75.00%	550	3,732	1.49	0
507	0.33	131	74.80%	45	98	1.83	0
306	0.33	132	74.60%	97	1,140	3.75	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
369	0.52	89	82.90%	549	1,866	1.08	0
368	0.49	90	82.70%	1,596	9,981	1.23	0
284	0.47	91	82.50%	588	4,010	1.56	0
68	0.46	92	82.30%	14	80	19.35	0
101	0.46	93	82.20%	516	4,748	1.55	0
163	0.46	94	82.00%	1,929	12,046	0.89	0
215	0.46	95	81.80%	97	1,146	4.44	0
142	0.45	96	81.60%	158	1,056	4.53	0
504	0.45	97	81.40%	228	1,200	2.75	0
364	0.44	98	81.20%	858	9,989	1.59	0
288	0.44	99	81.00%	1,994	14,055	1.13	0
316	0.43	100	80.80%	720	8,000	1.65	0
33	0.42	101	80.60%	2,070	15,464	0.92	0
331	0.41	102	80.40%	426	4,292	1.96	0
93	0.41	103	80.20%	437	4,567	1.60	0
21	0.40	104	80.00%	304	1,450	1.35	0
45	0.39	105	79.80%	391	1,231	1.32	0
229	0.39	106	79.60%	1,470	13,430	1.06	0
205	0.38	107	79.40%	186	1,325	3.56	0
448	0.37	108	79.30%	28	513	9.64	0
302	0.37	109	79.10%	839	8,908	1.68	0
5	0.37	110	78.90%	267	3,656	2.43	0
14	0.37	111	78.70%	1,038	8,600	0.84	0
328	0.36	112	78.50%	341	2,079	1.53	0
344	0.36	113	78.30%	747	6,592	1.66	0
506	0.36	114	78.10%	52	376	4.54	0
272	0.36	115	77.90%	229	1,695	2.30	0
143	0.35	116	77.70%	1,217	7,500	0.80	0
491	0.35	117	77.50%	486	4,809	1.63	0
280	0.35	118	77.30%	507	4,143	1.79	0
312	0.35	119	77.10%	578	6,009	1.53	0
488	0.33	120	76.90%	976	5,709	0.74	0
257	0.33	121	76.70%	1,298	10,583	1.23	0
236	0.33	122	76.50%	1,321	6,000	0.90	0
247	0.33	123	76.40%	789	5,137	1.33	0
211	0.33	124	76.20%	550	3,732	1.49	0
507	0.33	125	76.00%	45	98	1.83	0
306	0.33	126	75.80%	97	1,140	3.75	0
217	0.32	127	75.60%	115	1,244	3.61	0
499	0.32	128	75.40%	1,856	14,000	0.91	0
150	0.32	129	75.20%	393	3,487	1.95	0
438	0.31	130	75.00%	73	815	4.83	0
74	0.31	131	74.80%	178	1,101	2.66	0
282	0.30	132	74.60%	137	1,377	3.32	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
217	0.32	133	74.40%	115	1,244	3.61	0
499	0.32	134	74.20%	1,856	14,000	0.91	0
150	0.32	135	74.00%	393	3,487	1.95	0
438	0.31	136	73.80%	73	815	4.83	0
74	0.31	137	73.60%	178	1,101	2.66	0
282	0.30	138	73.50%	137	1,377	3.32	0
318	0.30	139	73.30%	290	2,761	1.72	0
117	0.30	140	73.10%	295	2,235	2.16	0
248	0.30	141	72.90%	776	4,021	1.20	0
82	0.30	142	72.70%	1,469	10,770	0.85	0
281	0.30	143	72.50%	649	5,187	1.25	0
244	0.29	144	72.30%	1,183	1,470	0.74	0
501	0.29	145	72.10%	298	2,108	2.13	0
489	0.29	146	71.90%	221	2,045	2.26	0
478	0.29	147	71.70%	991	10,649	1.18	0
403	0.28	148	71.50%	39	400	4.04	0
366	0.28	149	71.30%	1,173	10,981	1.35	0
132	0.28	150	71.10%	221	1,968	2.64	0
157	0.27	151	70.90%	2,018	15,485	0.81	0
175	0.27	152	70.70%	251	1,356	3.91	0
324	0.27	153	70.50%	514	3,412	1.43	0
6	0.26	154	70.40%	79	860	4.15	0
337	0.26	155	70.20%	400	4,505	1.96	0
476	0.26	156	70.00%	1,111	9,900	1.31	0
445	0.26	157	69.80%	2,606	21,000	0.88	0
139	0.26	158	69.60%	399	4,936	1.83	0
2	0.26	159	69.40%	330	1,819	1.51	0
396	0.25	160	69.20%	1,152	12,560	1.27	0
189	0.25	161	69.00%	456	5,064	1.35	0
86	0.25	162	68.80%	268	1,931	2.13	0
407	0.24	163	68.60%	680	2,117	0.85	0
253	0.24	164	68.40%	302	585	0.97	0
243	0.24	165	68.20%	146	25	1.63	0
119	0.23	166	68.00%	854	7,997	1.09	0
313	0.23	167	67.80%	16	209	8.14	0
127	0.22	168	67.60%	75	834	3.46	0
493	0.22	169	67.50%	682	1,549	0.71	0
296	0.21	170	67.30%	480	5,419	1.49	0
433	0.21	171	67.10%	511	3,500	1.20	0
196	0.21	172	66.90%	1,710	11,419	0.71	0
126	0.20	173	66.70%	483	3,882	1.04	0
274	0.20	174	66.50%	273	1,348	1.53	0
42	0.19	175	66.30%	441	1,218	0.85	0
440	0.19	176	66.10%	1,319	12,524	0.71	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
318	0.30	133	74.40%	290	2,761	1.72	0
117	0.30	134	74.20%	295	2,235	2.16	0
248	0.30	135	74.00%	776	4,021	1.20	0
82	0.30	136	73.80%	1,469	10,770	0.85	0
281	0.30	137	73.60%	649	5,187	1.25	0
244	0.29	138	73.50%	1,183	1,470	0.74	0
501	0.29	139	73.30%	298	2,108	2.13	0
489	0.29	140	73.10%	221	2,045	2.26	0
478	0.29	141	72.90%	991	10,649	1.18	0
366	0.28	142	72.70%	1,173	10,981	1.35	0
132	0.28	143	72.50%	221	1,968	2.64	0
157	0.27	144	72.30%	2,018	15,485	0.81	0
175	0.27	145	72.10%	251	1,356	3.91	0
324	0.27	146	71.90%	514	3,412	1.43	0
6	0.26	147	71.70%	79	860	4.15	0
337	0.26	148	71.50%	400	4,505	1.96	0
476	0.26	149	71.30%	1,111	9,900	1.31	0
445	0.26	150	71.10%	2,606	21,000	0.88	0
139	0.26	151	70.90%	399	4,936	1.83	0
2	0.26	152	70.70%	330	1,819	1.51	0
396	0.25	153	70.50%	1,152	12,560	1.27	0
189	0.25	154	70.40%	456	5,064	1.35	0
86	0.25	155	70.20%	268	1,931	2.13	0
351	0.24	156	70.00%	736	2,993	1.10	0
407	0.24	157	69.80%	680	2,117	0.85	0
253	0.24	158	69.60%	302	585	0.97	0
243	0.24	159	69.40%	146	25	1.63	0
119	0.23	160	69.20%	854	7,997	1.09	0
127	0.22	161	69.00%	75	834	3.46	0
493	0.22	162	68.80%	682	1,549	0.71	0
313	0.22	163	68.60%	16	209	8.14	0
296	0.21	164	68.40%	480	5,419	1.49	0
433	0.21	165	68.20%	511	3,500	1.20	0
196	0.21	166	68.00%	1,710	11,419	0.71	0
126	0.20	167	67.80%	483	3,882	1.04	0
274	0.20	168	67.60%	273	1,348	1.53	0
42	0.19	169	67.50%	441	1,218	0.85	0
440	0.19	170	67.30%	1,319	12,524	0.71	0
208	0.18	171	67.10%	71	450	2.62	0
315	0.18	172	66.90%	215	1,286	1.74	0
60	0.18	173	66.70%	265	3,165	2.30	0
350	0.18	174	66.50%	198	2,074	1.85	0
83	0.17	175	66.30%	204	1,887	1.97	0
94	0.17	176	66.10%	303	385	5.90	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
208	0.18	177	65.90%	71	450	2.62	0
469	0.18	178	65.70%	506	2,304	1.04	0
315	0.18	179	65.50%	215	1,286	1.74	0
60	0.18	180	65.30%	265	3,165	2.30	0
131	0.18	181	65.10%	28	442	11.25	0
350	0.18	182	64.90%	198	2,074	1.85	0
83	0.17	183	64.70%	204	1,887	1.97	0
94	0.17	184	64.60%	303	385	5.90	0
51	0.17	185	64.40%	101	1,450	2.87	0
109	0.17	186	64.20%	186	2,156	2.13	0
39	0.17	187	64.00%	797	5,371	0.98	0
461	0.17	188	63.80%	547	4,101	1.18	0
146	0.17	189	63.60%	64	841	3.99	0
492	0.17	190	63.40%	133	800	3.34	0
226	0.17	191	63.20%	196	1,901	2.22	0
472	0.17	192	63.00%	435	4,239	1.51	0
223	0.16	193	62.80%	761	6,034	1.06	0
265	0.16	194	62.60%	108	1,223	2.66	0
259	0.16	195	62.40%	349	2,968	2.14	0
241	0.15	196	62.20%	394	3,826	1.28	0
72	0.15	197	62.00%	118	1,352	2.13	0
108	0.15	198	61.80%	447	3,100	1.28	0
76	0.15	199	61.70%	150	1,930	2.40	0
25	0.14	200	61.50%	99	648	2.62	0
186	0.14	201	61.30%	20	207	3.01	0
220	0.14	202	61.10%	70	997	3.98	0
388	0.13	203	60.90%	22	220	2.36	0
285	0.13	204	60.70%	215	845	1.12	0
381	0.13	205	60.50%	146	1,842	2.28	0
307	0.13	206	60.30%	104	887	2.77	0
80	0.13	207	60.10%	200	1,144	3.81	0
129	0.13	208	59.90%	28	150	2.10	0
104	0.13	209	59.70%	368	4,152	1.67	0
233	0.13	210	59.50%	325	2,801	1.27	0
38	0.12	211	59.30%	63	976	3.36	0
185	0.12	212	59.10%	157	1,406	2.21	0
376	0.12	213	58.90%	114	605	2.29	0
167	0.12	214	58.80%	194	1,039	1.36	0
168	0.12	215	58.60%	194	1,975	2.08	0
4	0.12	216	58.40%	86	1,140	3.80	0
345	0.12	217	58.20%	108	1,250	3.11	0
427	0.11	218	58.00%	37	478	4.09	0
179	0.11	219	57.80%	13	150	4.73	0
134	0.11	220	57.60%	244	1,374	1.65	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
51	0.17	177	65.90%	101	1,450	2.87	0
109	0.17	178	65.70%	186	2,156	2.13	0
39	0.17	179	65.50%	797	5,371	0.98	0
461	0.17	180	65.30%	547	4,101	1.18	0
379	0.17	181	65.10%	304	2,524	2.92	0
146	0.17	182	64.90%	64	841	3.99	0
492	0.17	183	64.70%	133	800	3.34	0
226	0.17	184	64.60%	196	1,901	2.22	0
472	0.17	185	64.40%	435	4,239	1.51	0
223	0.16	186	64.20%	761	6,034	1.06	0
265	0.16	187	64.00%	108	1,223	2.66	0
259	0.16	188	63.80%	349	2,968	2.14	0
241	0.15	189	63.60%	394	3,826	1.28	0
72	0.15	190	63.40%	118	1,352	2.13	0
108	0.15	191	63.20%	447	3,100	1.28	0
76	0.15	192	63.00%	150	1,930	2.40	0
25	0.14	193	62.80%	99	648	2.62	0
186	0.14	194	62.60%	20	207	3.01	0
220	0.14	195	62.40%	70	997	3.98	0
388	0.13	196	62.20%	22	220	2.36	0
285	0.13	197	62.00%	215	845	1.12	0
381	0.13	198	61.80%	146	1,842	2.28	0
80	0.13	199	61.70%	200	1,144	3.81	0
129	0.13	200	61.50%	28	150	2.10	0
104	0.13	201	61.30%	368	4,152	1.67	0
233	0.13	202	61.10%	325	2,801	1.27	0
38	0.12	203	60.90%	63	976	3.36	0
185	0.12	204	60.70%	157	1,406	2.21	0
376	0.12	205	60.50%	114	605	2.29	0
167	0.12	206	60.30%	194	1,039	1.36	0
168	0.12	207	60.10%	194	1,975	2.08	0
4	0.12	208	59.90%	86	1,140	3.80	0
345	0.12	209	59.70%	108	1,250	3.11	0
427	0.11	210	59.50%	37	478	4.09	0
134	0.11	211	59.30%	244	1,374	1.65	0
234	0.11	212	59.10%	434	3,540	0.92	0
338	0.11	213	58.90%	313	2,892	1.50	0
195	0.10	214	58.80%	118	950	2.25	0
423	0.10	215	58.60%	217	1,500	1.84	0
161	0.10	216	58.40%	56	768	3.92	0
41	0.10	217	58.20%	131	901	2.20	0
75	0.10	218	58.00%	215	1,573	1.81	0
182	0.10	219	57.80%	1,412	11,098	0.62	0
377	0.09	220	57.60%	479	3,645	1.18	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
234	0.11	221	57.40%	434	3,540	0.92	0
338	0.11	222	57.20%	313	2,892	1.50	0
454	0.11	223	57.00%	51	25	5.07	0
96	0.11	224	56.80%	45	435	4.85	0
195	0.10	225	56.60%	118	950	2.25	0
103	0.10	226	56.40%	106	1,390	2.77	0
423	0.10	227	56.20%	217	1,500	1.84	0
161	0.10	228	56.00%	56	768	3.92	0
41	0.10	229	55.80%	131	901	2.20	0
75	0.10	230	55.70%	215	1,573	1.81	0
182	0.10	231	55.50%	1,412	11,098	0.62	0
278	0.09	232	55.30%	5	88	11.54	0
377	0.09	233	55.10%	479	3,645	1.18	0
392	0.09	234	54.90%	1,566	8,300	0.54	0
18	0.09	235	54.70%	50	565	5.54	0
24	0.08	236	54.50%	343	3,301	1.61	0
387	0.08	237	54.30%	49	710	4.32	0
53	0.08	238	54.10%	26	339	5.86	0
378	0.08	239	53.90%	117	1,458	2.60	0
17	0.08	240	53.70%	65	798	3.02	0
133	0.08	241	53.50%	157	1,728	2.56	0
98	0.08	242	53.30%	297	852	3.50	0
203	0.08	243	53.10%	55	799	3.93	0
145	0.08	244	52.90%	295	2,844	1.40	0
431	0.07	245	52.80%	283	1,283	1.48	0
458	0.07	246	52.60%	141	1,258	2.84	0
460	0.07	247	52.40%	17	214	4.88	0
298	0.07	248	52.20%	298	2,428	1.36	0
362	0.07	249	52.00%	83	792	2.46	0
269	0.07	250	51.80%	11	121	7.87	0
415	0.07	251	51.60%	361	3,437	1.72	0
31	0.07	252	51.40%	147	778	1.72	0
462	0.06	253	51.20%	107	997	2.39	0
323	0.06	254	51.00%	206	1,899	1.59	0
102	0.06	255	50.80%	60	714	3.36	0
63	0.06	256	50.60%	71	789	3.09	0
155	0.06	257	50.40%	241	2,378	1.79	0
3	0.06	258	50.20%	29	536	4.38	0
73	0.06	259	50.00%	188	779	2.36	0
147	0.05	260	49.90%	127	1,611	2.67	0
37	0.05	261	49.70%	150	875	1.56	0
466	0.05	262	49.50%	437	4,335	1.14	0
397	0.05	263	49.30%	105	1,230	3.35	0
375	0.05	264	49.10%	351	2,380	1.24	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
392	0.09	221	57.40%	1,566	8,300	0.54	0
469	0.09	222	57.20%	506	2,304	1.04	0
24	0.08	223	57.00%	343	3,301	1.61	0
346	0.08	224	56.80%	311	2,554	2.32	0
387	0.08	225	56.60%	49	710	4.32	0
53	0.08	226	56.40%	26	339	5.86	0
378	0.08	227	56.20%	117	1,458	2.60	0
17	0.08	228	56.00%	65	798	3.02	0
133	0.08	229	55.80%	157	1,728	2.56	0
203	0.08	230	55.70%	55	799	3.93	0
145	0.08	231	55.50%	295	2,844	1.40	0
458	0.07	232	55.30%	141	1,258	2.84	0
166	0.07	233	55.10%	775	7,012	2.83	0
298	0.07	234	54.90%	298	2,428	1.36	0
362	0.07	235	54.70%	83	792	2.46	0
415	0.07	236	54.50%	361	3,437	1.72	0
31	0.07	237	54.30%	147	778	1.72	0
462	0.06	238	54.10%	107	997	2.39	0
323	0.06	239	53.90%	206	1,899	1.59	0
102	0.06	240	53.70%	60	714	3.36	0
63	0.06	241	53.50%	71	789	3.09	0
155	0.06	242	53.30%	241	2,378	1.79	0
3	0.06	243	53.10%	29	536	4.38	0
73	0.06	244	52.90%	188	779	2.36	0
147	0.05	245	52.80%	127	1,611	2.67	0
37	0.05	246	52.60%	150	875	1.56	0
466	0.05	247	52.40%	437	4,335	1.14	0
397	0.05	248	52.20%	105	1,230	3.35	0
375	0.05	249	52.00%	351	2,380	1.24	0
152	0.05	250	51.80%	43	504	5.10	0
165	0.05	251	51.60%	155	1,482	1.73	0
261	0.05	252	51.40%	253	2,410	1.59	0
107	0.04	253	51.20%	133	1,041	2.23	0
269	0.04	254	51.00%	11	121	7.87	0
154	0.04	255	50.80%	88	1,100	2.81	0
484	0.04	256	50.60%	60	610	2.72	0
446	0.04	257	50.40%	48	601	3.66	0
210	0.04	258	50.20%	815	6,984	1.12	0
503	0.04	259	50.00%	33	525	4.51	0
355	0.03	260	49.90%	337	3,525	1.39	0
246	0.03	261	49.70%	439	2,381	1.08	0
121	0.03	262	49.50%	222	2,000	1.43	0
373	0.03	263	49.30%	215	2,496	1.71	0
359	0.03	264	49.10%	333	1,675	1.13	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
152	0.05	265	48.90%	43	504	5.10	0
165	0.05	266	48.70%	155	1,482	1.73	0
261	0.05	267	48.50%	253	2,410	1.59	0
107	0.04	268	48.30%	133	1,041	2.23	0
154	0.04	269	48.10%	88	1,100	2.81	0
484	0.04	270	47.90%	60	610	2.72	0
446	0.04	271	47.70%	48	601	3.66	0
210	0.04	272	47.50%	815	6,984	1.12	0
503	0.04	273	47.30%	33	525	4.51	0
355	0.03	274	47.10%	337	3,525	1.39	0
246	0.03	275	47.00%	439	2,381	1.08	0
502	0.03	276	46.80%	10	170	8.05	0
121	0.03	277	46.60%	222	2,000	1.43	0
373	0.03	278	46.40%	215	2,496	1.71	0
359	0.03	279	46.20%	333	1,675	1.13	0
457	0.03	280	46.00%	9	141	5.58	0
437	0.03	281	45.80%	42	650	5.39	0
409	0.03	282	45.60%	23	250	6.55	0
122	0.03	283	45.40%	3,615	20,332	0.66	0
311	0.02	284	45.20%	28	168	2.19	0
114	0.02	285	45.00%	63	621	2.91	0
419	0.02	286	44.80%	163	2,210	2.66	0
418	0.02	287	44.60%	138	1,135	1.80	0
317	0.02	288	44.40%	105	844	2.00	0
219	0.01	289	44.20%	16	150	2.53	0
110	0.01	290	44.10%	596	1,983	1.11	0
231	0.01	291	43.90%	33	450	3.02	0
92	0.01	292	43.70%	239	1,876	1.36	0
343	0.01	293	43.50%	243	2,680	1.33	0
456	0.01	294	43.30%	439	3,328	0.92	0
518	0.01	295	43.10%	5	83	8.92	0
405	0.01	296	42.90%	396	3,019	0.82	0
463	0.01	297	42.70%	993	8,726	0.63	0
49	0.01	298	42.50%	48	650	3.63	0
299	0.00	299	42.30%	118	557	2.02	0
352	0.00	300	42.10%	24	165	2.51	0
124	0.00	301	41.90%	75	1,038	3.29	0
304	0.00	302	41.70%	158	1,329	1.56	0
12	0.00	303	41.50%	308	2,800	1.27	0
158	0.00	304	41.30%	179	1,809	2.44	0
30	-0.01	305	41.10%	39	571	5.37	0
327	-0.01	306	41.00%	1,148	6,312	0.68	0
222	-0.01	307	40.80%	15	200	2.33	1
497	-0.01	308	40.60%	30	351	4.18	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
460	0.03	265	48.90%	17	214	4.88	0
437	0.03	266	48.70%	42	650	5.39	0
122	0.03	267	48.50%	3,615	20,332	0.66	0
114	0.02	268	48.30%	63	621	2.91	0
419	0.02	269	48.10%	163	2,210	2.66	0
418	0.02	270	47.90%	138	1,135	1.80	0
317	0.02	271	47.70%	105	844	2.00	0
219	0.01	272	47.50%	16	150	2.53	0
110	0.01	273	47.30%	596	1,983	1.11	0
231	0.01	274	47.10%	33	450	3.02	0
92	0.01	275	47.00%	239	1,876	1.36	0
343	0.01	276	46.80%	243	2,680	1.33	0
456	0.01	277	46.60%	439	3,328	0.92	0
518	0.01	278	46.40%	5	83	8.92	0
405	0.01	279	46.20%	396	3,019	0.82	0
463	0.01	280	46.00%	993	8,726	0.63	0
49	0.01	281	45.80%	48	650	3.63	0
299	0.00	282	45.60%	118	557	2.02	0
124	0.00	283	45.40%	75	1,038	3.29	0
304	0.00	284	45.20%	158	1,329	1.56	0
12	0.00	285	45.00%	308	2,800	1.27	0
158	0.00	286	44.80%	179	1,809	2.44	0
30	-0.01	287	44.60%	39	571	5.37	0
327	-0.01	288	44.40%	1,148	6,312	0.68	0
222	-0.01	289	44.20%	15	200	2.33	1
497	-0.01	290	44.10%	30	351	4.18	0
411	-0.01	291	43.90%	360	3,535	1.22	0
23	-0.01	292	43.70%	38	296	2.80	0
34	-0.01	293	43.50%	241	1,887	1.43	0
57	-0.02	294	43.30%	853	2,937	0.41	0
237	-0.02	295	43.10%	24	430	3.46	1
35	-0.02	296	42.90%	183	1,947	1.71	0
426	-0.02	297	42.70%	237	1,736	1.04	0
400	-0.02	298	42.50%	616	3,190	0.67	0
216	-0.02	299	42.30%	15	170	1.83	1
308	-0.02	300	42.10%	55	400	2.71	0
128	-0.02	301	41.90%	183	1,716	1.80	0
481	-0.02	302	41.70%	248	1,855	1.06	0
202	-0.02	303	41.50%	89	1,171	2.28	0
370	-0.02	304	41.30%	16	400	10.59	1
380	-0.03	305	41.10%	23	224	1.41	0
275	-0.03	306	41.00%	154	1,496	1.41	0
199	-0.03	307	40.80%	18	251	2.76	1
97	-0.03	308	40.60%	119	1,600	2.45	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
411	-0.01	309	40.40%	360	3,535	1.22	0
23	-0.01	310	40.20%	38	296	2.80	0
34	-0.01	311	40.00%	241	1,887	1.43	0
255	-0.01	312	39.80%	40	429	3.23	0
130	-0.02	313	39.60%	137	670	1.61	0
434	-0.02	314	39.40%	87	621	2.36	0
57	-0.02	315	39.20%	853	2,937	0.41	0
237	-0.02	316	39.00%	24	430	3.46	1
35	-0.02	317	38.80%	183	1,947	1.71	0
250	-0.02	318	38.60%	86	950	2.46	1
426	-0.02	319	38.40%	237	1,736	1.04	0
400	-0.02	320	38.20%	616	3,190	0.67	0
216	-0.02	321	38.10%	15	170	1.83	1
308	-0.02	322	37.90%	55	400	2.71	0
128	-0.02	323	37.70%	183	1,716	1.80	0
481	-0.02	324	37.50%	248	1,855	1.06	0
202	-0.02	325	37.30%	89	1,171	2.28	0
370	-0.02	326	37.10%	16	400	10.59	1
177	-0.03	327	36.90%	36	382	3.56	0
380	-0.03	328	36.70%	23	224	1.41	0
275	-0.03	329	36.50%	154	1,496	1.41	0
188	-0.03	330	36.30%	151	1,064	1.94	0
436	-0.03	331	36.10%	16	150	3.21	0
199	-0.03	332	35.90%	18	251	2.76	1
97	-0.03	333	35.70%	119	1,600	2.45	0
256	-0.03	334	35.50%	8	130	3.21	0
61	-0.03	335	35.30%	3,082	140	0.02	0
399	-0.03	336	35.20%	37	432	3.75	0
91	-0.03	337	35.00%	127	1,365	1.83	0
500	-0.03	338	34.80%	1,215	1,765	0.24	0
430	-0.03	339	34.60%	438	2,530	0.74	0
81	-0.04	340	34.40%	21	263	4.24	0
384	-0.04	341	34.20%	167	2,019	1.30	0
235	-0.04	342	34.00%	33	500	2.42	0
169	-0.04	343	33.80%	21	299	3.43	0
8	-0.04	344	33.60%	87	863	2.14	0
89	-0.04	345	33.40%	70	509	2.02	0
54	-0.04	346	33.20%	115	1,043	2.47	0
29	-0.04	347	33.00%	1,360	3,319	0.23	0
422	-0.04	348	32.80%	112	896	1.42	0
333	-0.05	349	32.60%	38	653	4.02	0
95	-0.05	350	32.40%	32	440	3.54	0
289	-0.05	351	32.30%	70	760	2.44	0
412	-0.05	352	32.10%	117	1,549	2.04	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
307	-0.03	309	40.40%	104	887	2.77	0
91	-0.03	310	40.20%	127	1,365	1.83	0
500	-0.03	311	40.00%	1,215	1,765	0.24	0
430	-0.03	312	39.80%	438	2,530	0.74	0
81	-0.04	313	39.60%	21	263	4.24	0
384	-0.04	314	39.40%	167	2,019	1.30	0
235	-0.04	315	39.20%	33	500	2.42	0
169	-0.04	316	39.00%	21	299	3.43	0
8	-0.04	317	38.80%	87	863	2.14	0
256	-0.04	318	38.60%	8	130	3.21	0
29	-0.04	319	38.40%	1,360	3,319	0.23	0
422	-0.04	320	38.20%	112	896	1.42	0
333	-0.05	321	38.10%	38	653	4.02	0
289	-0.05	322	37.90%	70	760	2.44	0
412	-0.05	323	37.70%	117	1,549	2.04	0
510	-0.05	324	37.50%	128	514	0.89	1
266	-0.05	325	37.30%	240	2,052	1.37	0
255	-0.06	326	37.10%	40	429	3.23	0
310	-0.06	327	36.90%	45	558	2.26	0
43	-0.06	328	36.70%	96	1,374	2.01	0
58	-0.06	329	36.50%	210	598	0.52	0
50	-0.06	330	36.30%	34	459	3.05	0
420	-0.06	331	36.10%	60	950	1.02	0
125	-0.06	332	35.90%	10	266	11.81	0
471	-0.07	333	35.70%	182	2,080	1.48	0
279	-0.07	334	35.50%	62	382	1.61	0
300	-0.07	335	35.30%	142	1,422	1.24	0
417	-0.08	336	35.20%	19	260	3.68	0
421	-0.08	337	35.00%	106	1,236	1.95	0
360	-0.08	338	34.80%	30	393	3.54	0
401	-0.08	339	34.60%	33	494	1.53	0
391	-0.08	340	34.40%	618	5,850	0.84	0
130	-0.08	341	34.20%	137	670	1.61	0
372	-0.09	342	34.00%	23	407	2.96	0
454	-0.09	343	33.80%	51	25	5.07	0
262	-0.10	344	33.60%	63	631	1.84	0
514	-0.10	345	33.40%	174	2,350	1.60	0
425	-0.10	346	33.20%	55	651	2.41	1
22	-0.10	347	33.00%	73	623	2.17	0
452	-0.10	348	32.80%	79	600	2.59	0
434	-0.10	349	32.60%	87	621	2.36	0
467	-0.10	350	32.40%	83	750	1.60	0
450	-0.11	351	32.30%	92	1,310	2.37	0
112	-0.11	352	32.10%	26	477	3.67	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
439	-0.05	353	31.90%	17	175	2.11	0
382	-0.05	354	31.70%	370	1,599	1.26	0
510	-0.05	355	31.50%	128	514	0.89	1
266	-0.05	356	31.30%	240	2,052	1.37	0
171	-0.06	357	31.10%	54	567	3.22	0
310	-0.06	358	30.90%	45	558	2.26	0
43	-0.06	359	30.70%	96	1,374	2.01	0
207	-0.06	360	30.50%	230	1,950	1.61	0
58	-0.06	361	30.30%	210	598	0.52	0
50	-0.06	362	30.10%	34	459	3.05	0
420	-0.06	363	29.90%	60	950	1.02	0
125	-0.06	364	29.70%	10	266	11.81	0
471	-0.07	365	29.50%	182	2,080	1.48	0
279	-0.07	366	29.40%	62	382	1.61	0
300	-0.07	367	29.20%	142	1,422	1.24	0
417	-0.08	368	29.00%	19	260	3.68	0
421	-0.08	369	28.80%	106	1,236	1.95	0
360	-0.08	370	28.60%	30	393	3.54	0
401	-0.08	371	28.40%	33	494	1.53	0
391	-0.08	372	28.20%	618	5,850	0.84	0
334	-0.09	373	28.00%	22	311	4.06	0
292	-0.09	374	27.80%	31	392	2.55	0
372	-0.09	375	27.60%	23	407	2.96	0
262	-0.10	376	27.40%	63	631	1.84	0
514	-0.10	377	27.20%	174	2,350	1.60	0
425	-0.10	378	27.00%	55	651	2.41	1
22	-0.10	379	26.80%	73	623	2.17	0
452	-0.10	380	26.60%	79	600	2.59	0
467	-0.10	381	26.40%	83	750	1.60	0
450	-0.11	382	26.30%	92	1,310	2.37	0
112	-0.11	383	26.10%	26	477	3.67	0
330	-0.11	384	25.90%	5	50	7.17	0
325	-0.11	385	25.70%	139	1,495	1.55	0
263	-0.11	386	25.50%	23	374	2.52	0
66	-0.11	387	25.30%	20	256	5.92	0
449	-0.11	388	25.10%	30	364	3.55	0
209	-0.11	389	24.90%	19	256	3.71	0
32	-0.11	390	24.70%	28	446	3.38	0
105	-0.12	391	24.50%	24	500	2.28	0
191	-0.12	392	24.30%	42	534	2.50	0
90	-0.12	393	24.10%	679	1,061	0.35	0
85	-0.12	394	23.90%	55	306	1.75	0
176	-0.12	395	23.70%	34	436	1.43	0
395	-0.12	396	23.50%	82	987	1.86	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
330	-0.11	353	31.90%	5	50	7.17	0
325	-0.11	354	31.70%	139	1,495	1.55	0
263	-0.11	355	31.50%	23	374	2.52	0
66	-0.11	356	31.30%	20	256	5.92	0
209	-0.11	357	31.10%	19	256	3.71	0
32	-0.11	358	30.90%	28	446	3.38	0
105	-0.12	359	30.70%	24	500	2.28	0
191	-0.12	360	30.50%	42	534	2.50	0
176	-0.12	361	30.30%	34	436	1.43	0
395	-0.12	362	30.10%	82	987	1.86	0
271	-0.13	363	29.90%	5	122	0.21	0
171	-0.13	364	29.70%	54	567	3.22	0
260	-0.13	365	29.50%	27	268	3.21	1
273	-0.13	366	29.40%	26	400	2.17	0
212	-0.13	367	29.20%	187	2,415	1.67	0
332	-0.13	368	29.00%	44	649	2.86	0
250	-0.13	369	28.80%	86	950	2.46	1
188	-0.13	370	28.60%	151	1,064	1.94	0
442	-0.13	371	28.40%	97	1,100	2.90	0
106	-0.14	372	28.20%	155	1,958	1.87	0
242	-0.14	373	28.00%	64	780	2.31	0
138	-0.14	374	27.80%	92	1,451	2.27	0
457	-0.14	375	27.60%	9	141	5.58	0
465	-0.14	376	27.40%	55	667	2.64	0
453	-0.14	377	27.20%	66	865	1.19	0
95	-0.14	378	27.00%	32	440	3.54	0
99	-0.15	379	26.80%	118	1,155	1.39	0
382	-0.15	380	26.60%	370	1,599	1.26	0
276	-0.16	381	26.40%	268	3,513	1.13	0
290	-0.16	382	26.30%	922	10,353	0.48	0
495	-0.16	383	26.10%	20	317	2.55	0
251	-0.16	384	25.90%	36	323	2.16	0
340	-0.16	385	25.70%	261	3,177	1.56	0
291	-0.17	386	25.50%	30	589	4.82	1
468	-0.17	387	25.30%	35	452	1.67	0
502	-0.17	388	25.10%	10	170	8.05	0
96	-0.17	389	24.90%	45	435	4.85	0
329	-0.17	390	24.70%	19	308	6.43	0
218	-0.17	391	24.50%	141	1,298	1.15	0
498	-0.17	392	24.30%	57	743	0.95	0
482	-0.17	393	24.10%	44	605	3.60	0
172	-0.17	394	23.90%	28	264	3.48	0
56	-0.18	395	23.70%	75	872	1.23	0
516	-0.18	396	23.50%	62	715	1.68	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
271	-0.13	397	23.40%	5	122	0.21	0
273	-0.13	398	23.20%	26	400	2.17	0
260	-0.13	399	23.00%	27	268	3.21	1
212	-0.13	400	22.80%	187	2,415	1.67	0
332	-0.13	401	22.60%	44	649	2.86	0
442	-0.13	402	22.40%	97	1,100	2.90	0
238	-0.13	403	22.20%	1,197	2,010	0.26	0
106	-0.14	404	22.00%	155	1,958	1.87	0
242	-0.14	405	21.80%	64	780	2.31	0
320	-0.14	406	21.60%	58	375	1.71	0
138	-0.14	407	21.40%	92	1,451	2.27	0
198	-0.14	408	21.20%	33	385	2.02	1
465	-0.14	409	21.00%	55	667	2.64	0
453	-0.14	410	20.80%	66	865	1.19	0
495	-0.15	411	20.60%	20	317	2.55	0
99	-0.15	412	20.50%	118	1,155	1.39	0
276	-0.16	413	20.30%	268	3,513	1.13	0
290	-0.16	414	20.10%	922	10,353	0.48	0
251	-0.16	415	19.90%	36	323	2.16	0
221	-0.16	416	19.70%	55	600	3.06	0
340	-0.16	417	19.50%	261	3,177	1.56	0
153	-0.16	418	19.30%	90	302	1.41	0
291	-0.17	419	19.10%	30	589	4.82	1
468	-0.17	420	18.90%	35	452	1.67	0
329	-0.17	421	18.70%	19	308	6.43	0
218	-0.17	422	18.50%	141	1,298	1.15	0
498	-0.17	423	18.30%	57	743	0.95	0
9	-0.17	424	18.10%	44	447	1.72	0
482	-0.17	425	17.90%	44	605	3.60	0
172	-0.17	426	17.70%	28	264	3.48	0
56	-0.18	427	17.60%	75	872	1.23	0
516	-0.18	428	17.40%	62	715	1.68	0
483	-0.18	429	17.20%	297	4,400	1.70	0
13	-0.18	430	17.00%	79	983	0.87	0
67	-0.19	431	16.80%	57	495	1.11	0
383	-0.19	432	16.60%	29	395	2.87	0
78	-0.19	433	16.40%	55	703	1.84	0
470	-0.19	434	16.20%	28	286	3.05	1
206	-0.19	435	16.00%	49	443	1.71	0
361	-0.19	436	15.80%	65	838	2.81	1
194	-0.19	437	15.60%	46	462	1.61	0
358	-0.20	438	15.40%	42	550	2.15	1
249	-0.20	439	15.20%	73	450	0.68	0
230	-0.20	440	15.00%	30	400	2.84	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
198	-0.18	397	23.40%	33	385	2.02	1
483	-0.18	398	23.20%	297	4,400	1.70	0
13	-0.18	399	23.00%	79	983	0.87	0
292	-0.19	400	22.80%	31	392	2.55	0
85	-0.19	401	22.60%	55	306	1.75	0
67	-0.19	402	22.40%	57	495	1.11	0
78	-0.19	403	22.20%	55	703	1.84	0
179	-0.19	404	22.00%	13	150	4.73	0
361	-0.19	405	21.80%	65	838	2.81	1
358	-0.20	406	21.60%	42	550	2.15	1
515	-0.20	407	21.40%	38	550	3.29	0
141	-0.20	408	21.20%	42	635	3.60	1
512	-0.20	409	21.00%	53	834	2.20	0
305	-0.21	410	20.80%	66	666	2.47	0
404	-0.21	411	20.60%	67	738	1.64	0
432	-0.21	412	20.50%	105	1,271	1.76	0
394	-0.21	413	20.30%	43	577	3.60	0
113	-0.21	414	20.10%	22	477	1.00	1
184	-0.21	415	19.90%	24	385	1.66	0
267	-0.22	416	19.70%	39	474	0.99	0
36	-0.22	417	19.50%	1,225	13,500	0.79	0
429	-0.22	418	19.30%	129	1,941	1.84	0
193	-0.22	419	19.10%	134	1,614	1.68	0
363	-0.23	420	18.90%	105	899	0.73	0
459	-0.24	421	18.70%	178	1,065	0.98	0
54	-0.24	422	18.50%	115	1,043	2.47	0
494	-0.24	423	18.30%	21	313	2.81	0
386	-0.24	424	18.10%	89	1,200	1.75	0
439	-0.24	425	17.90%	17	175	2.11	0
181	-0.24	426	17.70%	45	803	3.89	0
48	-0.24	427	17.60%	51	770	2.09	0
399	-0.25	428	17.40%	37	432	3.75	0
424	-0.25	429	17.20%	358	3,901	0.88	0
464	-0.25	430	17.00%	135	641	1.12	0
353	-0.25	431	16.80%	196	4,071	1.52	0
221	-0.26	432	16.60%	55	600	3.06	0
352	-0.26	433	16.40%	24	165	2.51	0
513	-0.26	434	16.20%	98	1,100	1.68	0
115	-0.26	435	16.00%	794	12,000	1.04	0
100	-0.26	436	15.80%	173	367	0.28	0
18	-0.27	437	15.60%	50	565	5.54	0
297	-0.28	438	15.40%	37	275	1.37	0
239	-0.28	439	15.20%	357	5,400	1.15	0
371	-0.28	440	15.00%	43	668	5.41	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
258	-0.20	441	14.80%	59	570	3.18	0
515	-0.20	442	14.70%	38	550	3.29	0
141	-0.20	443	14.50%	42	635	3.60	1
162	-0.20	444	14.30%	40	320	1.36	0
512	-0.20	445	14.10%	53	834	2.20	0
305	-0.21	446	13.90%	66	666	2.47	0
404	-0.21	447	13.70%	67	738	1.64	0
386	-0.21	448	13.50%	89	1,200	1.75	0
432	-0.21	449	13.30%	105	1,271	1.76	0
394	-0.21	450	13.10%	43	577	3.60	0
113	-0.21	451	12.90%	22	477	1.00	1
184	-0.21	452	12.70%	24	385	1.66	0
267	-0.22	453	12.50%	39	474	0.99	0
36	-0.22	454	12.30%	1,225	13,500	0.79	0
252	-0.22	455	12.10%	413	1,200	0.01	0
429	-0.22	456	11.90%	129	1,941	1.84	0
408	-0.22	457	11.70%	118	1,500	1.37	0
193	-0.22	458	11.60%	134	1,614	1.68	0
363	-0.23	459	11.40%	105	899	0.73	0
459	-0.24	460	11.20%	178	1,065	0.98	0
494	-0.24	461	11.00%	21	313	2.81	0
16	-0.24	462	10.80%	62	525	0.89	0
181	-0.24	463	10.60%	45	803	3.89	0
48	-0.24	464	10.40%	51	770	2.09	0
424	-0.25	465	10.20%	358	3,901	0.88	0
464	-0.25	466	10.00%	135	641	1.12	0
342	-0.25	467	9.80%	32	476	2.89	0
353	-0.25	468	9.60%	196	4,071	1.52	0
513	-0.26	469	9.40%	98	1,100	1.68	0
115	-0.26	470	9.20%	794	12,000	1.04	0
100	-0.26	471	9.00%	173	367	0.28	0
349	-0.27	472	8.80%	197	1,775	1.20	0
297	-0.28	473	8.70%	37	275	1.37	0
239	-0.28	474	8.50%	357	5,400	1.15	0
371	-0.28	475	8.30%	43	668	5.41	0
79	-0.29	476	8.10%	76	1,005	1.14	0
178	-0.31	477	7.90%	97	1,102	0.43	0
295	-0.32	478	7.70%	80	1,146	0.93	0
490	-0.32	479	7.50%	1,598	13,300	0.37	0
116	-0.33	480	7.30%	103	1,596	0.99	0
148	-0.33	481	7.10%	41	496	1.22	0
11	-0.33	482	6.90%	629	6,665	0.93	0
151	-0.34	483	6.70%	20	260	2.57	0
183	-0.34	484	6.50%	2,011	19,723	0.27	0

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
79	-0.29	441	14.80%	76	1,005	1.14	0
177	-0.29	442	14.70%	36	382	3.56	0
131	-0.30	443	14.50%	28	442	11.25	1
178	-0.31	444	14.30%	97	1,102	0.43	0
295	-0.32	445	14.10%	80	1,146	0.93	0
89	-0.32	446	13.90%	70	509	2.02	0
490	-0.32	447	13.70%	1,598	13,300	0.37	0
470	-0.33	448	13.50%	28	286	3.05	1
116	-0.33	449	13.30%	103	1,596	0.99	0
148	-0.33	450	13.10%	41	496	1.22	0
11	-0.33	451	12.90%	629	6,665	0.93	0
151	-0.34	452	12.70%	20	260	2.57	0
183	-0.34	453	12.50%	2,011	19,723	0.27	0
77	-0.35	454	12.30%	59	640	1.44	0
144	-0.36	455	12.10%	64	810	1.30	0
26	-0.37	456	11.90%	133	1,400	0.16	0
180	-0.37	457	11.70%	74	928	0.68	0
511	-0.38	458	11.60%	130	1,200	1.23	0
98	-0.39	459	11.40%	297	852	3.50	0
206	-0.39	460	11.20%	49	443	1.71	0
156	-0.40	461	11.00%	16	300	5.74	0
162	-0.41	462	10.80%	40	320	1.36	0
487	-0.41	463	10.60%	13	150	0.61	0
135	-0.41	464	10.40%	31	447	1.80	0
334	-0.42	465	10.20%	22	311	4.06	0
40	-0.44	466	10.00%	59	688	2.13	0
71	-0.44	467	9.80%	65	438	0.90	0
320	-0.44	468	9.60%	58	375	1.71	0
65	-0.44	469	9.40%	56	561	0.98	0
354	-0.45	470	9.20%	115	929	0.90	0
408	-0.45	471	9.00%	118	1,500	1.37	0
59	-0.45	472	8.80%	228	2,692	0.46	0
321	-0.45	473	8.70%	33	570	1.52	0
61	-0.46	474	8.50%	3,082	140	0.02	0
194	-0.48	475	8.30%	46	462	1.61	0
207	-0.48	476	8.10%	230	1,950	1.61	0
264	-0.48	477	7.90%	98	1,308	1.96	0
517	-0.49	478	7.70%	120	750	17.65	1
383	-0.51	479	7.50%	29	395	2.87	0
342	-0.52	480	7.30%	32	476	2.89	0
9	-0.53	481	7.10%	44	447	1.72	0
398	-0.53	482	6.90%	43	552	1.28	0
55	-0.55	483	6.70%	37	672	3.05	0
252	-0.56	484	6.50%	413	1,200	0.01	0

Analysis 5: Adjusted AIA FP to ISO, no Reserve, FP Period
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
254	-0.34	485	6.30%	27	320	2.10	0
77	-0.35	486	6.10%	59	640	1.44	0
144	-0.36	487	5.90%	64	810	1.30	0
410	-0.36	488	5.80%	36	325	1.58	0
123	-0.36	489	5.60%	542	3,518	0.23	0
26	-0.37	490	5.40%	133	1,400	0.16	0
180	-0.37	491	5.20%	74	928	0.68	0
511	-0.38	492	5.00%	130	1,200	1.23	0
156	-0.40	493	4.80%	16	300	5.74	0
480	-0.41	494	4.60%	62	648	2.55	1
487	-0.41	495	4.40%	13	150	0.61	0
135	-0.41	496	4.20%	31	447	1.80	0
40	-0.44	497	4.00%	59	688	2.13	0
71	-0.44	498	3.80%	65	438	0.90	0
65	-0.44	499	3.60%	56	561	0.98	0
321	-0.45	500	3.40%	33	570	1.52	0
354	-0.45	501	3.20%	115	929	0.90	0
59	-0.45	502	3.00%	228	2,692	0.46	0
264	-0.48	503	2.90%	98	1,308	1.96	0
398	-0.53	504	2.70%	43	552	1.28	0
55	-0.55	505	2.50%	37	672	3.05	0
164	-0.58	506	2.30%	43	983	3.41	0
204	-0.59	507	2.10%	90	1,176	1.66	0
348	-0.61	508	1.90%	73	945	0.15	0
286	-0.63	509	1.70%	40	524	1.34	0
390	-0.65	510	1.50%	57	945	0.65	0
339	-0.69	511	1.30%	7	253	0.14	0
200	-0.74	512	1.10%	32	407	1.71	1
10	-0.79	513	0.90%	51	765	0.60	0
441	-0.83	514	0.70%	96	1,651	1.97	0
294	-0.91	515	0.50%	17	277	3.42	0
227	-0.97	516	0.30%	43	440	1.18	1
84	-1.00	517	0.10%	110	711	0.73	0
451	-2.32	518	0.00%	136	1,565	1.07	0
Count	216		Deficit Small Systems		204		19
% Deficit	39.9%	1.8%	% Small Systems		54%		
Average SE	0.21	4.4%					
% Deficit	39.9%						
S.D.	6.3%						

Analysis 6: Worst Case, Analysis 1 or 5
Rank and Percentile

Point	*SE*	*Rank*	*Percent*	*Average Day Demand (1,000 gal)*	*Population Served*	*Storage Turnover in Days on Minimum Month*	*Check: Max Day Data Correction and Deficit*
258	-0.56	485	6.30%	59	570	3.18	0
249	-0.57	486	6.10%	73	450	0.68	0
164	-0.58	487	5.90%	43	983	3.41	0
90	-0.59	488	5.80%	679	1,061	0.35	0
204	-0.59	489	5.60%	90	1,176	1.66	0
449	-0.60	490	5.40%	30	364	3.55	0
409	-0.60	491	5.20%	23	250	6.55	0
348	-0.61	492	5.00%	73	945	0.15	0
286	-0.63	493	4.80%	40	524	1.34	0
390	-0.65	494	4.60%	57	945	0.65	0
339	-0.69	495	4.40%	7	253	0.14	0
436	-0.74	496	4.20%	16	150	3.21	0
200	-0.74	497	4.00%	32	407	1.71	1
10	-0.79	498	3.80%	51	765	0.60	0
349	-0.80	499	3.60%	197	1,775	1.20	0
230	-0.83	500	3.40%	30	400	2.84	0
441	-0.83	501	3.20%	96	1,651	1.97	0
311	-0.87	502	3.00%	28	168	2.19	0
393	-0.88	503	2.90%	1,367	5,018	1.04	0
431	-0.89	504	2.70%	283	1,283	1.48	0
153	-0.90	505	2.50%	90	302	1.41	0
294	-0.91	506	2.30%	17	277	3.42	0
278	-0.91	507	2.10%	5	88	11.54	1
227	-0.97	508	1.90%	43	440	1.18	1
84	-1.00	509	1.70%	110	711	0.73	0
16	-1.05	510	1.50%	62	525	0.89	0
410	-1.18	511	1.30%	36	325	1.58	0
238	-1.18	512	1.10%	1,197	2,010	0.26	0
123	-1.25	513	0.90%	542	3,518	0.23	0
254	-1.33	514	0.70%	27	320	2.10	0
103	-1.39	515	0.50%	106	1,390	2.77	0
403	-1.85	516	0.30%	39	400	4.04	0
451	-2.32	517	0.10%	136	1,565	1.07	0
480	-2.84	518	0.00%	62	648	2.55	1
Count	234		Deficit Small Systems		220		22
% Deficit	43.1%	2.1%	% Small Systems		59%		
Average SE	0.15	4.2%					
% Deficit	43.1%						
S.D.	6.4%						