

**2009
WATER MANAGEMENT
&
CONSERVATION PROGRAM
UPDATE**



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EXECUTIVE SUMMARY

South Jordan City 2009 Water Management and Conservation Plan Update has been prepared to comply with the Utah Water Conservation Plan Act of 1998 amended in 2004 with House Bill 71 Section 73-10-32. The Act requires water conservancy districts and water retailers to file a water conservation plan with the Utah Board of Water Resources by April 1, 1999 and provide plan updates every five years. This update describes the water conservation activities of South Jordan City since 1999 and presents the City's current water conservation goals.

South Jordan City is one of the fastest growing cities in the Salt Lake Valley with a current population estimate of 54,309 residents. The City supplies drinking and irrigation water through two water distribution systems. The City's culinary water system serves all of the residents and the secondary water system serves approximately 30 percent of the City's residents.

The City is in the process of completing culinary water projects recommended by the Culinary Master Plan prepared in June 2006. The City has also begun implementing a SCADA system to manage, record, and help conserve water throughout the City. Six storage tanks were also constructed to increase storage capacity. Two additional storage tanks are in the design and construction phase. Additional transmission and distribution lines are currently being constructed to improve and simplify the operation of the culinary water system. The City has also established an inverted block culinary water rate structure to encourage water conservation.

South Jordan City's secondary water system consists of a gravity-fed piped system that delivers canal irrigation water with a few isolated neighborhoods that have pumps to pressurize the water. Currently secondary water systems are installed on a case-by-case basis in new developments after thorough evaluation. The goal of the City's secondary water system is to provide an alternative for summer outdoor irrigation thus reducing the peak demand on the culinary water system and providing a cheaper water source for irrigation.

South Jordan City has established short term objectives and goals for water conservation over the next five years as well as long term reduction goals. Short term goals are:

- Develop city policies for water rationing under emergency situations.
- Continue public education about landscape irrigation to reduce outdoor water demands.

- Organize biannual irrigation workshops and an annual water week open house to encourage residents to learn about the secondary and culinary water system as well as other water related topics.
- Continue promoting the use of smart controllers for residential and commercial landscape use.
- Install smart controllers in city parks to automatically manage irrigation schedules.
- Install water or flow meters to manage amount of water use for irrigation purposes.
- Promote JVVCD water conservation programs and information such as the Water Check program, landscaping classes, and water-wise landscaping information sheets.
- Promote the JVVCD demonstration gardens to encourage residents to use water-wise plants.
- Establish a conservation program funding mechanism to have a consistent funding source for conservation activities.

These goals will help reduce the water use among its residents and decrease the demand on the water systems. The long term objective of the planned water conservation activities is to reduce the water use per capita by 25 percent by the year 2025, using the year 2000 as the benchmark, in conjunction with the State of Utah and Jordan Valley Water Conservancy District's conservation programs found at www.conservewater.utah.gov and www.slowtheflow.org.

SECTION 1

1.1 Introduction

The purpose of the 2009 Water Management and Water Conservation Plan Update is to revise and update the existing conservation plan, as well as outlining South Jordan City's conservation activities for the next five years. The updates in this document will be used as a guide to meet the City's water conservation goal to reduce water use by 25 percent before the year 2025, using the year 2000 as the benchmark.

This document will comply with the requirements of House Bill 418, also known as the Water Conservation Plan Act, which was passed in the 1998 General Session of the State of Utah. The Water Conservation Plan Act requires water conservancy districts and water retailers to prepare and adopt a water conservation plan which must be filed with the Utah Board of Water Resources by April 1, 1999 with periodic updates of the document every five years. The Act was amended in the 2004 session of the Utah legislature as House Bill 71 Section 73-10-32, Appendix 1, of the Utah State Code stating that:

- (2) (a) *Each water conservation plan shall contain:*
- (i) *a clearly stated overall water use reduction goal and an implementation plan for each of the water conservation measures it chooses to use, including a timeline for action and an evaluation process to measure progress;*
 - (ii) *a requirement that each water conservancy district and retail water provider devote part of at least one regular meeting every five years of its governing body to a discussion and formal adoption of the water conservation plan, and allow public comment on it;*
 - (iii) *a requirement that a notification procedure be implemented that includes the delivery of the water conservation plan to the media and to the governing body of each municipality and county served by the water conservancy district or retail water provider; and*
 - (iv) *a copy of the minutes of the meeting and the notification procedure required in Subsections (2)(a)(ii) and (iii) which shall be added as an appendix to the plan.*

As required, the City of South Jordan has submitted and approved two previous conservation plans, one in March 1999 and one in October 2004. The City's new 2009 Water Management and Water Conservation Plan Update will fulfill the requirements of the Act. This document will include a copy of the advertisement and minutes of the public hearing as well as a copy of all public comments received.

1.2 Background

South Jordan City is located in Salt Lake County, Utah. South Jordan City is currently one of the fastest growing cities in the Salt Lake Valley and is a year-round water retail provider to a population of approximately 54,309 residents.

The City has two water distribution systems; one for culinary water and the other consisting of mostly gravity-fed secondary (non-potable) water. Master plans have been prepared for both of the water systems. Presently, the City is in the process of completing the recommendations made in the existing 2006 Culinary Water System Master Plan which details what system improvements are needed to prepare for the future growth of South Jordan City. The City is also adding as many residential connections to the secondary water system as feasible, and as funds become available, in an effort to decrease the amount of potable water used for irrigation purposes.

1.3 Inventory of Water Resources

1.3.1 Culinary Water System

South Jordan City currently distributes culinary water to a total of 13,792 connections, including both residential and commercial connections. Table 1 shows the number of connections in the City by type. The culinary water system is a pressurized system that delivers water for both indoor and irrigation use to all connections within its service boundaries, and also provides fire protection for the City.

Table 1. Number of Connections by Type

Type	Number of Connections
Residential Connections	13,174
Commercial Connections	422
Other Connections	196

The City of South Jordan purchases 100 percent of the culinary water used in the City from Jordan Valley Water Conservancy District (JVWCD). JVWCD delivers and meters the water to the City through aqueducts and transmission lines, and then the City delivers it to the residents through the City's distribution system. Both agencies are in charged of maintaining and operating their own transmission lines, meters, and water delivery points.

The City's existing culinary water system consists of:

- **One Joint Storage Tank:** JWCD and the City share the ownership of a tank with a capacity of 3.0 million gallons of water. South Jordan City owns 2.5 million gallons and JWCD owns 0.5 million gallons of the tank.
- **Delivery Point Connections:** There are sixteen connections from JWCD transmission lines to the City's water system.
- **Distribution System:** Network of pipes ranging in size from 6-inch to 30-inch diameters. Most of the pipeline is relatively new polyvinylchloride (PVC), ductile iron, and HDPE.
- **Water Storage Tanks:** Six water storage tanks with an approximate total capacity of 21.1 million gallons plus two future tanks under construction with a capacity of 12.5 million gallons.
- **Connections:** 13,792 connections to residential and commercial users.
- **Water Meters:** Water master meters at each JWCD transmission line connection to measure total flow of water to the system, and individual meters on all residential, commercial, and any municipal connections to measure water delivered to the user.
- **Pressure Reducing Valves:** Pressure reducing valves located throughout the system with a pressure ranging from 50 - 170 psi.
- **Pump Stations:** Three pump stations, two stations with two booster pumps and one with three booster pumps and one high capacity pump.
- **Backflow Prevention Devices:** The City requires by law that water users must install and maintain a backflow prevention assembly in their properties to prevent the reverse flow of contaminated water or other substances from a user's water system back into the public drinking water system. Backflow assemblies located in City parks and City owned buildings are installed and maintained by the City. Residential and commercial backflow assemblies are installed and maintained by homeowners and business owners respectively.
- **Fire Hydrants:** Fire hydrants are located throughout the service area to provide fire flow protection.
- **Water Quality:** JWCD and the City closely monitor the quality of the water on a monthly basis and make reports available to the public annually.

1.3.2 Secondary Water System

The City's secondary water system is primarily used for irrigation purposes and serves approximately 30 percent of the City's service area. A proposed full build out for a secondary water system was proposed in the Secondary Water Master Plan in October 2004. The implementation of the Secondary Water Master Plan has been put on hold until it becomes financially and logistically more feasible to proceed with the development. Currently the City evaluates secondary water systems for all new development on a case by case basis.

The City's existing secondary water system consists of:

- **Canals:** Secondary water is supplied from Utah Lake and the Jordan River delivered via five irrigation canals that run across the City – South Jordan Canal, Welby Jacob Canal, Utah Lake Distributing Canal, Beckstead Canal, and the Utah Salt Lake Canal. South Jordan City owns water shares in several canal companies as shown below, Table 2. Water provided under these shares is used for irrigation purposes. A Protected Water Rights Use Analysis was done in March 2009 to project the use of these water shares in the future.
- **Irrigation Season:** Secondary water is generally available only from April through October.
- **Secondary Distribution System:** Primarily a gravity-fed pipe network with a few areas throughout the City that have City maintained pumps for pressurized water. South Jordan City maintains and operates the public secondary water system.
- **Water Quality:** Secondary water is non-potable water characterized for poor water quality factors such as odor, debris, residual minerals, and chemical content.
- **Weirs:** The City owns several weirs on the different canals. The City is responsible of the cost associated with installing and maintaining the structures.
- **Pumps and Filters:** Homeowners are responsible to install and maintain pumps and filters in their own residences, except for the small areas the City pressurizes.
- **Metering:** Secondary water in the City is not metered.

Table 2. City-Owned Canal Water Shares

Canal Company	No. of Shares	Acre-Feet
South Jordan	626	3,092
Utah Lake Irrigation	610	3,117
Utah & Salt Lake	676	3,103
Welby Jacob	2294	2,294
Beckstead	205	838

SECTION 2

2.1 Water Conservation Goal

South Jordan's water conservation goal is to reduce 25 percent per capita water use by 2025 using 2000 as the benchmark year. This goal was initially set and adopted by Jordan Valley Water Conservancy District as a district-wide conservation goal in May 2002. The City's established goal exceeds the State goal of 25 percent reduction by 2050. South Jordan City is on track to meet and exceed this conservation goal by 2025.

In 2000 the per capita water use in South Jordan was 265 gallons per capita per day (gpcd). A 25 percent reduction in per capita water use for South Jordan would decrease per capita use from 265 gpcd to 199 gpcd by 2025, Figure 2-1.

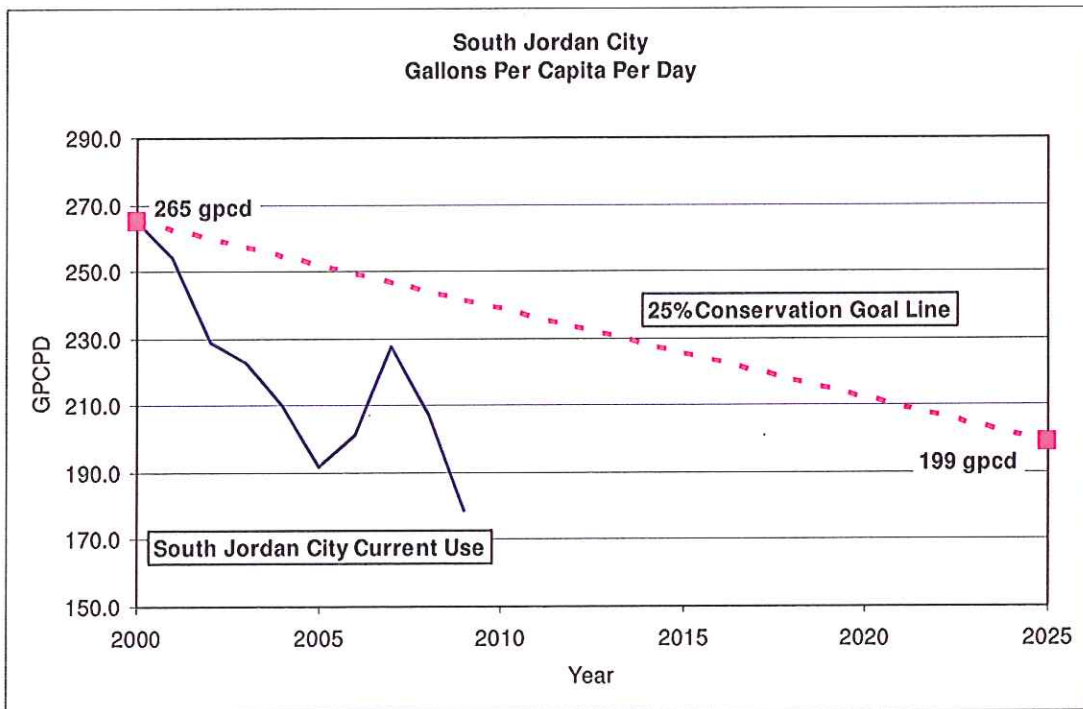


Figure 2-1. South Jordan City Water Conservation Goal

SECTION 3

3.1 Existing and Future Water Use

South Jordan City is a governmental agency that provides water to residents living within the City's boundaries for both domestic and irrigation purposes. South Jordan has experienced substantial population growth in the few last years. South Jordan City expects population growth to reach 85,000 - 90,000 by the year 2025. See Table 3 for projected future populations for the City.

Table 3. Population Projections 2010 – 2030

Year	Projected Population	Projected Number of Connections
2009	54,309	13,852
2010	55,210	15,536
2015	69,780	19,250
2020	80,894	23,046
2025	92,868	26,978
2030	97,606	29,879
2050	121,650	36,550

While the projected growth takes place as a result of the land still available for development, the City will need to purchase additional water from JWCD in order to supply water to the community. In addition Table 3 shows the additional number of culinary water connections needed to meet the population increase. Figure 3-1 shows the projected growth and increase in connections in a graph.

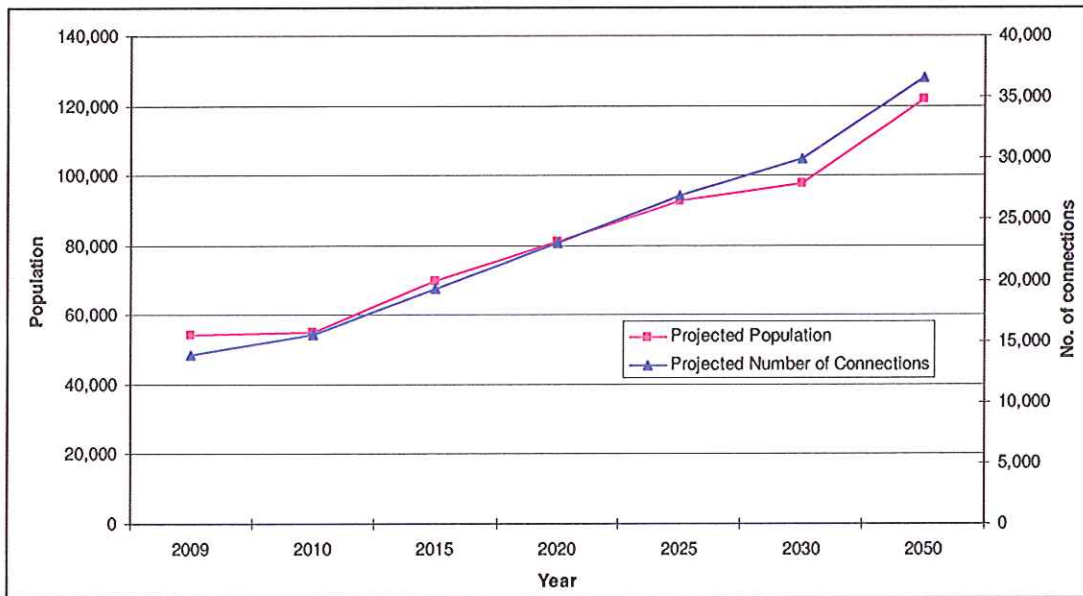


Figure 3-1. South Jordan Population Growth Through 2020

3.1.1 Culinary Water System Current and Future Water Use

South Jordan City does not own any water rights for culinary water and purchases all potable water from JWCD. The City currently has a water purchase contract with JWCD to use 9,725 acre-ft annually. However, JWCD allows a purchasing and using up to 20 percent more water than contracted without getting prior permission from JWCD. The current winter rate for water is \$324.98 per acre-foot of non-pumped water and \$358.83 and \$386.08 per acre-foot of pumped water for Zones 3 and 4.. The current summer rate for water is \$406.23 per acre-foot of non-pumped water and \$440.08 and \$467.33 per acre-foot of pumped water for Zones 3 and 4.. South Jordan City is also charged a monthly base rate according to meter size by JWCD.

Water deliveries from JWCD in 2008 totaled 12,352.15 acre-feet including remediated water. Table 4 shows the amount of water contracted and used from JWCD.

Table 4. Water Contracted and Used From JWCD

Year	Minimum Contracted Amount (acre-feet)	Culinary Water Used (acre-feet)
2000	8,175	8,279
2001	8,675	8,993
2002	8,675	8,655
2003	8,675	9,040
2004	8,675	9,169

2005	8,675	9,088
2006	8,675	10,436
2007	8,675	12,758
2008	8,675	12,352
Oct 2009	9,725	10,856

The culinary water demand in the City during the winter is 4.8 million gallons per day (mgd) and 17.2 mgd during the summer which includes both indoor and outdoor use. The average daily demand recorded by the City's SCADA system is 11.0 mgd with a peak daily demand of 25.4 mgd recorded in July 2008. The weekly demand in the City is 77.4 mgd. Water storage tanks are used to manage peak demands and reserve water for fire protection.

The projected water demand calculated for the year 2025 is 199 gpcd assuming conservation has been successful. As shown in Figure 3-2, the per capita water use in the City has decrease significantly from the 265 gallons per day in 2000 to 207 gallons per day calculated for 2008. As of October 2009, the water use per capita calculated was 179 gallons per day. Table 5 summarizes the existing water savings since the year 2000.

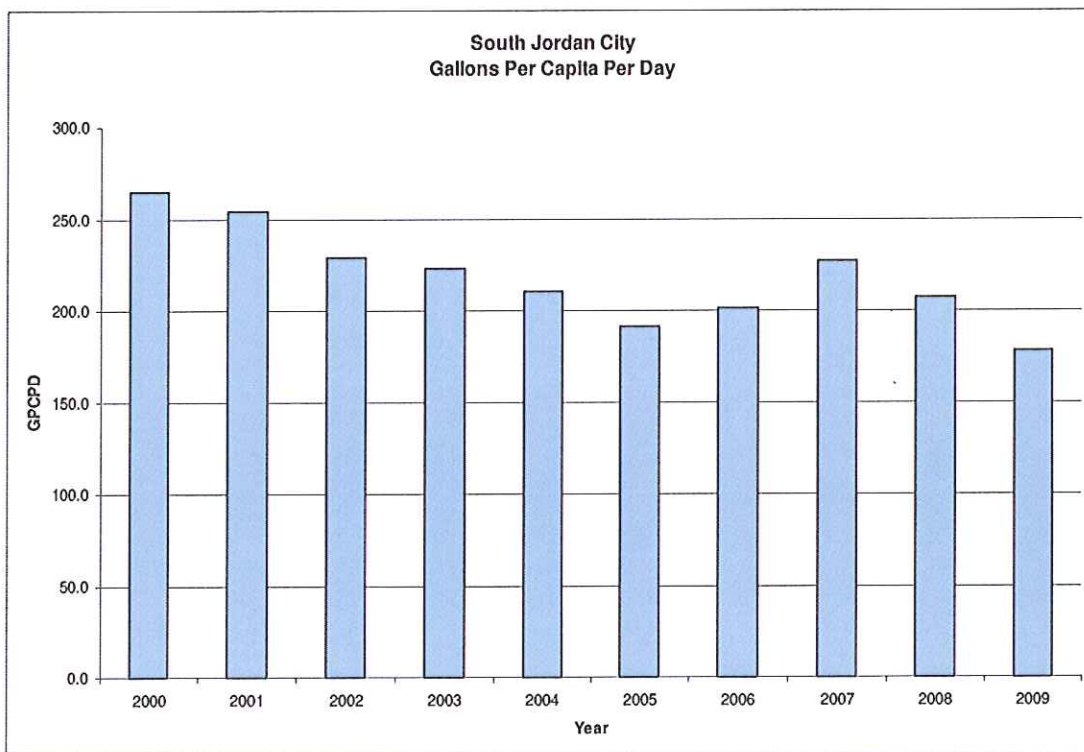


Figure 3-2. South Jordan City Water Consumption from 2000 - 2008, (GPCPD)

Table 5. South Jordan City Per Capita Water Use 2000-2008

Year	Population	Culinary Water Used (acre-feet)	Calculate Water Usage Rate (gpcd)
2000	30,303	8,279	264.94
2001	31,869	8,993	254.39
2002	33,748	8,655	228.97
2003	36,194	9,040	222.97
2004	38,916	9,169	210.35
2005	42,324	9,088	191.70
2006	44,276	10,436	201.19
2007	50,109	12,758	227.30
2008	53,208	12,352	207.25
Oct 2009	54,309	10,856	178.45

In December 2006, South Jordan City adopted a block water rate structure to promote water conservation while providing income for operations and maintenance of the water system, as well as repayment funds for culinary water project bonds. The water rate structure is divided in two groups, residential and commercial, and into geographical areas based on JWCD wholesale prices. Each of the groups are then divided into five consumption blocks with the unit price increasing more steeply as the consumption increases. The five water rate structure blocks are designed with the intent to send a strong signal to conserve water. Impact fees are also collected with new connections based on the size and location of the new connection to the culinary water system. Appendix 2 includes a list of the current culinary water rate structure.

3.1.2 Secondary Water System Current and Future Water Use

South Jordan City currently owns 5,507 water shares in five canals that run through the City. The amount of shares account for a total of 15,185 acre-ft of water that currently serve about one third of the residents. Secondary water is used for irrigation purposes only due to low water quality characteristics such as odor and suspended and dissolved solids.

In order to plan for future growth in the City, the City requires land developers to submit irrigation water shares for new residential subdivisions. A Protected Water Rights Use Analysis was done in March 2009 by Hansen, Allen and Luce, Inc., to project the use and need for water shares even though culinary water still accounts for the majority of residential outdoor water use and much of the municipal applications in the future.

The City has completed a Secondary Water Master Plan proposing a city wide pressurized water system, with the exception of the Daybreak and Sunstone Developments. Also a Secondary Water Feasibility Study has been completed including a guide to do Master Planned improvements. The Secondary Water System Master Plan is currently not being implemented. Currently, South Jordan City examines all new development on a case by case basis to determine if the installation of a secondary water irrigation system meets feasibility requirements. When new proposed development meets the feasibility requirements, a secondary water system is installed with the development. The City will continue to evaluate the implementation of the secondary water system master plan in the future.

Secondary water rates are \$17.25 per month for non-pumped connections and \$21.35 per month for pumped connections to meet maintenance and operational costs. These monthly fees are charged to secondary water users throughout the year regardless of the amount of water used since secondary water is not metered. The absence of secondary water metering has made evaluation and quantification of secondary water use difficult.

SECTION 4

4.1 Existing and Potential Water Management and Conservation Programs

The Water Management and Conservation Plan adopted in 1999 established goals and proposed improvement projects to help reduce water consumption. In 2004, an update of this plan was done to review the objectives in order to ensure the City meets its goal to decrease the per capita culinary water use by 25 percent by the year 2025, using the year 2000 as the benchmark.

4.1.1 Current Water Management and Conservation Measures

The City has implemented the following measures to conserve water and promote water conservation since 1999:

- **Improvements to the culinary water system** – Improvements done to the culinary water system were implemented as recommended in the 2006 Culinary Water Master Plan. Storage tanks were installed to reduce peaking demands and minimize the use of pump stations while pressure zones were combined to reduce pressure problems in the water system. Tanks have also been sized to account for indoor and outdoor demands. The installation of new transmission and distribution lines has improved the water distribution in the City. Fire protection has been improved by upsizing water lines on locations where the water system showed deficiencies. A SCADA system was also installed to efficiently manage the water system and monitor water usage.
- **Secondary water system development** – South Jordan City encourages new developments to connect to the existing secondary water system if water sources are available and if there is low impact on existing infrastructure. Daybreak development has designed the use of secondary water in common areas. The City maintains the existing secondary water system to ensure water delivery to residents and evaluates on a case-by-case basis the connection of subdivisions to the existing system.
- **Water metering** – The City retrofitted old meters with radio transmitters to make the reading process easier and quicker throughout the City. Installation of meters on municipal connections, such as City facilities, parks, and park strips, has also taken place.
- **Develop water conservation ordinances** – South Jordan City adopted an ordinance for Water Efficient Landscaping on June 18, 2002, Appendix 3. The

goal of this ordinance is to provide policies for commercial, industrial, multi-family and single family residential developments. The ordinance goals are:

- Protect and enhance the community's environmental, economic, recreational, and aesthetic resources by promoting efficient use of water in the community's landscaped areas.
- Reduce water waste.
- Establish a process for design, installation and maintenance of water efficient landscaping throughout the City.

Also, South Jordan City Water System has adopted the Control of Backflow and Cross Connection (backflow prevention program) ordinance to maintain a safe drinking water system according to State and Federal rules and regulations, Appendix 4.

- **Operation and maintenance policies** – South Jordan Public Works Department has a maintenance and operations schedule to ensure the culinary and secondary water systems work efficiently.
- **Establishment of water rate structure** – A tiered culinary water rate structure has been established to promote water conservation as well as to create a fund to operate and maintain the system.
- **Public education and involvement** – South Jordan City has provided residents conservation information through fliers, the City website, during the free biannual irrigation and conservation workshops and annually at a Water Week open house. Irrigation and conservation workshops are free and provide a classroom-type orientation to residents where topics related to water conservation, irrigation system set up and maintenance, backflow prevention, and secondary water are presented. Irrigation workshops take place twice a year, one at the beginning of the irrigation season in April and the other at the end of the irrigation season in October. The Water Week open house allows residents to learn about the water system distribution and a variety of water related topics including water conservation and allowing personal interaction with city staff. Also, the City promotes water conservation among school aged children by encouraging elementary school students to participate in a contest with drawings and essays demonstrating the importance of water in our community.
- **Promoting JWCD's residential and commercial water audits, landscaping classes, and conservation goal**– As a water retailer of JWCD, South Jordan City helps promote conservation programs managed by JWCD. The residential and commercial water audit program consists of a water check of the homeowner's landscape. The results of the water check will include information about type of soil, sprinkle pressure and distribution, and a recommended irrigation schedule. The City also promotes landscaping classes offered by JWCD in an effort to help residents to improve the aesthetics of landscapes while considering lowering water use for irrigation. South Jordan City also invites

JVWCD staff to participate in the biannual irrigation workshops and Water Week open house. The City supports and works hand-in-hand with JVWCD to achieve the set conservation goal to reduce water use per capita by 25 percent by the year 2025.

- **Establish water conservation programs for residents and businesses** – South Jordan City creates water conservation awareness among the community by encouraging residents to use new irrigation technology to improve the efficiency of residential and commercial irrigation systems. JVWCD has granted South Jordan City funds to run a rebate program that reimburses some of the cost of the purchase of smart controllers. This rebate is offered to residents and businesses located within the City boundaries. City staff inspects the installation and use of the device two times a year. As part of the program, residents are requested to allow City staff to monitor their water use, and water records are used to evaluate the performance and water savings that the controllers provide. As part of the grant contract with JVWCD, South Jordan City submits a document to JVWCD reporting the results of the program. In addition, the City plans to introduce the use of smart controllers in five city parks.
- **Flow sensors on city parks and open space** – An irrigation central control system was installed on some South Jordan City parks and open space as part of a grant received by the City from JVWCD on 2006. The central control is used to shut irrigation valves from a central location when extreme weather or maintenance issues arise to avoid water waste. The central control has help saved water because operators do not need to visit the location of the park to close valves if there is a leak or during a storm event. Also, the use of flow sensors allows the City to monitor the amount of water that is deliver to the parks and verify water line breaks and water usage. The central system allows the City to determine if the installation and use of master valves is necessary in all of the controllers. Although not all of City parks and open spaces are configured on this system, the design of the irrigation central control system can be expanded to include all City Parks, open areas, and developments in the future.
- **Reduction in lost and unaccounted water** – South Jordan City is currently mapping and inspecting the entire City’s water system in an effort to locate water connections that are unmetered and illegal. The City expects to reduce water loss by keeping an inventory of the existing water meters and water use. This will also be useful to track water that was previously unaccounted.
- **Water reuse** – The City studied the concept of water reuse of both potable and non-potable water in 2008. The City explored potential water sources, reuse sites, and water savings. However, the costs associated with new pipes to divert the flow to and from a treatment facility has been found to not be economically feasible. The City is not currently pursuing the use of reclaimed water.
- **Backflow program** – South Jordan City maintains a backflow prevention program to provide residents and customers with safe, clean, drinking water. The

City's backflow technician performs a hazard assessment of all commercial buildings and residential irrigation systems every three years. Assemblies and devices that require annual testing are the responsibility of the property owner; however, the City sends a reminder notice as the due date approaches. Every new business is inspected prior to the issuing of the Certificate of Occupancy. An ordinance titled Control of Backflow and Cross Connection was adopted prior to 2000.

4.1.2 Potential Water Management and Conservation Measures

South Jordan City has reviewed a list of Best Management Practices (BMPs) that the Utah Division of Water Resources has provided. Below is a review of the actions that the City has taken to implement the recommendations:

BMP 1 – Comprehensive Water Conservation Plan

South Jordan City satisfies this requirement with the current 2009 Water Management and Conservation Plan and the two previous water conservation plans submitted to the State in 1999 and 2004.

BMP 2 – Universal Metering

The City has installed radio transmitting water meters on all culinary water connections. Secondary water connections are not metered, but the City will study the options available to meter secondary water.

BMP 3 – Incentive Water Conservation Pricing

A water rate structure has been adopted by the City by implementing five consumption blocks with the unit price increasing more steeply as the consumption block increases.

BMP 4 – Water Conservation Ordinances

Water conservation ordinances have been adopted by South Jordan City including ordinances to protect the culinary water system from contamination as mentioned previously – Water Efficient Landscaping and Control of Backflow and Cross Connection.

BMP 5 – Water Conservation Coordinator

The City of South Jordan has assigned the responsibility to coordinate water conservation programs to a City employee who receives support from employees of other divisions and departments within the City.

BMP 6 – Public Information Program

South Jordan City is a member of the Slow the Flow program that JWCD developed and is consistent with the recommendations of the Governor's Water Conservation Team. The City participates with JWCD to promote the program among the residents.

BMP 7 – System Water Audits, Leak Detection and Repair

Water records are kept by the City to account for all water purchases from JWCD and deliveries to residents. The City also does monthly unaccounted water totals which have decreased in the past few years. South Jordan City maintains the culinary and secondary water system in order to prevent, detect and repair leaks.

BMP 8 – Large Landscape Conservation Programs and Incentives

The City is working on implementing conservation measures in five city parks by implementing the use of smart controllers and flow meters to record water use. Also, city employees attend training on regular basis in water conservation and other water related topics.

BMP 9 – Water Survey Programs for Residential Customers

JWCD water check program is promoted among South Jordan City residents.

BMP 10 – Plumbing Standards

The City's building, engineering, and water department follow new plumbing codes in all new construction. Also, as part of the City's water conservation program, the City offers residents water savings kits which contain a low-flow shower head and faucet aerators for the kitchen and bathrooms.

BMP 11 – School Education Programs

As part of the South Jordan Water Week Open House, elementary school students are requested to participate in a drawing and essay contest. Students submit drawings to the City describing the importance of water and water conservation in our community. The City plans to create more interactive educational programs with schools.

BMP12 – Conservation Programs for Commercial, Industrial and Institutional Customers

The majority of the businesses in South Jordan City are required to install a separate water meter for landscape. Also, the City's water conservation and JWCD water check programs are offered to commercial customers.

BMP 13 – Reclaimed Water Use

The City considered the use of reclaimed water in 2008; however, the costs associated with the implementation of the infrastructure to carry out this project have been found to be economically unfeasible.

BMP 14 – “Smart Controller” Technology

JWCD has granted South Jordan City funds to implement a water conservation rebate program for smart controllers. The rebate is offered to all South Jordan City's residents and businesses. Also, the City plans to install smart controllers in five City parks which will be used to set up efficient irrigation schedules. It is expected that the City will decrease the amount of water used in these five City parks by 15 – 20 percent during the irrigation season. The City will use water record data to evaluate the use of smart controllers in the area to determine the water conservation savings.

4.1.3 Additional Conservation Measures

South Jordan City has identified potential conservation measures as a result of the preparation of the 2009 Water Management and Conservation Plan described below:

Ordinance Revisions

- Xeriscaping – City ordinances could include the limited use of grass on developed lands and include plants that can survive on limited amounts of water. JWCD has an educational garden that is open to the public free of charge.
- Water Rationing Policies – The City currently asks residents on a volunteer basis to water outdoor only on a schedule according to their house number and during the time of the day when evapotranspiration is low (even numbered homes to only water outdoors on even calendared days and odd numbered homes on odd numbered days.) Although there are no mandatory restrictions on this request, a water rationing policy should be developed to be implemented as drought conditions become critical. Costs related to maintain a code enforce group to respond to resident complains is not currently feasible.

Water System Monitoring Improvements

- Secondary Water System Metering – South Jordan City is not currently metering secondary water connections. The City could implement a program to install meters to manage and record secondary water use. As new meter technologies become available, the City will explore the feasibility of using meters for secondary water.

Water System Operations and Maintenance Programs

- Pipe Replacement Plan – As water pipe lines become older the need for replacement becomes essential to avoid leaks. A pipe replacing plan could be used to keep track of the age of the pipe and plan schedules for replacement. Costs associated with pipe inventory to include age of the pipe and constant maintenance of records seem to be feasible.

Public Education and Involvement

- Public Education – The City offers water conservation information through the City’s website, conservation fliers, irrigation workshops, water week open house, and water conservation program in an effort to involve and educate the public. Additionally, South Jordan City also promotes programs such as the “Slow the Flow” water conservation campaign, free access to the JWCD demonstration garden, free water checks, landscaping classes, and water-wise landscaping information sheets that are offered by JWCD.

SECTION 5

5.1 Periodic Evaluation, Public Involvement and Associated Plans

5.1.1 Periodic Evaluation and Public Involvement

South Jordan City requests homeowners and business owners to participate in city meetings and contribute in establishing priorities for conservation activities. It is important that conservation goals reflect the interests of customers and the City to create a water wise community.

The public is encouraged to suggest and make comments regarding water conservation priorities through advance notification. Notification could take place via distributed material (billing enclosures or other appropriate means) and/or public media announcements (newspaper, radio, or television). The selected method(s) must ensure that sufficient opportunity for public involvement is provided.

The City Council will evaluate the possibility of creating an advisory committee consisting of city officials and residents. This would allow the City and residents to meet on a regular basis to discuss the needs of the City as growth continues and water demands increase. The residents would be able to voice what concepts have been effective and work together with the City to determine what measures need to be taken to develop the culinary and secondary systems. An advisory committee was formed to research a centralized secondary system. These discussions would be conducted in a public forum during a City Council meeting to which residents and other water customers would be invited.

5.1.2 Associated Plans

An Emergency Response Plan for earthquakes and major leaks was adopted by South Jordan City in 2003. The plan describes what actions must be taken to minimize damage if breaks occur in the water systems. Although the plan does not include plans for drought, this plan could be expanded to include how water distribution would be affected by shortages due to drought and what agreements could be made with nearby cities for emergency conditions. The City is currently updating the Emergency Response Plan.

If a severe drought or other water supply shortage occurred, the following measures could be taken to conserve water until the supply was restored:

- Educate the public regarding the water supply situation.

- Establish mandatory public conservation measures (i.e. odd/even watering days) which may include:
 - No outside watering from 10 a.m. to 6 p.m.
 - Distribute information flyers on how to reduce residential water use.
- Eliminate watering of City property in cases of severe shortages.
- Strictly enforce all conservation policies with significant fines imposed for noncompliance.
- Physically restrict water supplies to (in order of priority):
 - Park properties and other non-essential support facilities.
 - Commercial businesses, restricting largest users first.
 - Residential areas.
- Other associated plans for South Jordan City include the following:
 - Emergency Response Plan for Contamination and Natural Disasters of Culinary Systems prepared by Baker Engineering & Energy in January 2004.
 - Culinary Water System Vulnerability Assessment prepared by Hansen, Allen & Luce in June 2004.

SECTION 6

6.1 Recommendations

South Jordan City water conservation goals in 2004 have been implemented during the last five years with positive results. The following recommendations have been proposed to assist the City over the next five years to stay on track to achieve the water conservation goal to reduce the per capita water use by 25 percent by the year 2025, with the year 2000 as the benchmark:

- Develop city policies for water rationing under emergency situations.
- Continue public education about landscape irrigation to reduce outdoor water demands.
- Organize biannual irrigation workshops and an annual water week open house to encourage residents to learn about the secondary and culinary water system as well as other water related topics.
- Continue promoting the use of smart controllers for residential and commercial landscape use.
- Install smart controllers in city parks to automatically manage irrigation schedules.
- Install water or flow meters to manage amount of water use for irrigation purposes.
- Promote JWCD water conservation programs and information such as the Water Check program, landscaping classes, and water-wise landscaping information sheets.
- Promote the JWCD demonstration gardens to encourage residents to use water-wise plants.
- Establish a conservation program funding mechanism to have a consistent funding source for conservation activities.

The purpose of the 2009 Water Management and Conservation Plan Update is to provide the State with the City's current goals and plans for water conservation. To ensure the water conservation goal is achieved, a schedule has been proposed to implement the recommendations. The schedule is included in Table 6 below. The City will continue reviewing the plan and will work towards achieving the water conservation goals.

Table 6. Water Conservation Activities Five-Year Schedule

Recommendation	Implementation Schedule				
	2010	2011	2012	2013	2014
Ordinances		x	x	x	
Public Education	x	x	x	x	x
Water Conservation Rebate Program	x	x	x	x	x
Secondary Water Metering		x	x	x	x
Promote JWCD Programs and Information	x	x	x	x	x
Smart Controller Installation in City Parks	x	x			

The 2009 Water Conservation Plan Update was added to the December 15, 2009 City Council Meeting Agenda and adopted by the City Council. City Council members include:

List of City Officers

Mayor..... W. Kent Money
Council Member District 1..... Leona Winger
Council Member District 2..... Kathie L. Johnson
Council Member District 3..... Brian Butters
Council Member District 4..... Aleta Taylor
Council Member District 5..... Larry Short
City Manager John Geilmann
City Attorney Rob Wall

6.2 References

City of South Jordan, Water Management & Conservation Plan. Prepared by Franson-Noble & Associates, Inc., American Fork, UT. March 1999.

City of South Jordan, Water Management & Conservation Plan Update 2004. Prepared by Franson-Noble & Associates, Inc., American Fork, UT. October 2004.

State of Utah, Conservation Plan Sample. Prepared by State of Utah., Salt Lake City, UT. March 2009.

City of South Jordan, 2006 Culinary Water Master Plan. Prepared by Allen, Hansen and Luce, Inc., Midvale, UT. June 2006.

City of South Jordan, Secondary Water Master Plan. Prepared by Franson-Noble & Associates, Inc., American Fork, UT. October 2004.

City of South Jordan, Culinary Water Rate Study and Secondary Water Rate Structure Analysis. Prepared by Shaun Pigott Associates Dovon Enterprises., Portland, OR. December 2005.

City of South Jordan, Projected Water Rights Use Analysis. Prepared by Allen, Hansen and Luce, Inc., Midvale, UT. March 2009.

City of South Jordan, Secondary Water System Feasibility Study. Prepared by Franson Noble Engineering, American Fork, UT. January 2003.

City of South Jordan, Draft Water Supply Study. Prepared by Franson-Noble & Associates, Inc., American Fork, UT. February 1999.

Appendix 1 – House Bill 71

Appendix 2 – Culinary Water Rates

Appendix 3 – Water Efficient Landscaping Ordinance

Appendix 4 – Control of Backflow and Cross Connection

Appendix 5 – City Council Resolution and Meeting Minutes

APPENDIX 1

WATER CONSERVATION PLANS

2004 GENERAL SESSION

STATE OF UTAH

Sponsor: Judy Ann Buffmire

Ralph Becker
Duane E. Bourdeaux
Neil A. Hansen

Rosalind J. McGee
Carol Spackman Moss

David Ure
Stephen H. Urquhart

LONG TITLE

General Description:

This bill amends certain provisions related to water conservation plans.

Highlighted Provisions:

This bill:

- ▶ provides for publishing of a report identifying entities who do not have a current water conservation plan;
- ▶ requires that water conservation plans contain existing and proposed water conservation measures;
- ▶ requires that water conservation plans contain a description of the extent to which a retail provider will use certain measures to achieve its conservation goals;
- ▶ requires that water conservation plans contain a clearly stated water use reduction goal and implementation plan for each conservation measure, including a timeline for action and an evaluation process to measure progress; and
- ▶ requires that the Board of Water Resources' report be presented to the Natural Resources, Agriculture, and Environment Interim Committee at its November 2004 meeting.

Monies Appropriated in this Bill:

None

Other Special Clauses:

None

Utah Code Sections Affected:

AMENDS:

73-10-32, as last amended by Chapter 119, Laws of Utah 1999

Be it enacted by the Legislature of the state of Utah:

Section 1. Section 73-10-32 is amended to read:

73-10-32. Definitions -- Water conservation plan required.

(1) As used in this section:

(a) "Board" means the Board of Water Resources created under Section 73-10-1.5.

(b) "Division" means the Division of Water Resources created under Section 73-10-18.

(c) "Retail" means the level of distribution of culinary water that supplies culinary water directly to the end user.

(d) "Retail water provider" means ~~[a person who]~~ an entity which:

(i) supplies culinary water to end users; and

(ii) has more than 500 service connections.

(e) "Water conservancy district" means an entity formed under Title 17A, Chapter 2, Part 14, Water Conservancy Districts.

~~[(e)(i)] (f)~~ "Water conservation plan" means a written document that contains [ideas, suggestions, or recommendations as to] existing and proposed water conservation measures describing what [can] will be done by [state and local governments,] retail water providers, water conservancy districts, and the end user of culinary water to help conserve water and limit or reduce its use in the state in terms of per capita consumption so that adequate supplies of water are available for future needs.

~~[(ii)] (2)(a)~~ Each ^[u]water conservation plan^[u] shall contain ~~[recommendations for water saving measures that may include]:~~

(i) a clearly stated overall water use reduction goal and an implementation plan for each of the water conservation measures it chooses to use, including a timeline for action and an evaluation process to measure progress;

(ii) a requirement that each water conservancy district and retail water provider devote

part of at least one regular meeting every five years of its governing body to a discussion and formal adoption of the water conservation plan, and allow public comment on it;

(iii) a requirement that a notification procedure be implemented that includes the delivery of the water conservation plan to the media and to the governing body of each municipality and county served by the water conservancy district or retail water provider; and

(iv) a copy of the minutes of the meeting and the notification procedure required in Subsections (2)(a)(ii) and (iii) which shall be added as an appendix to the plan.

(b) A water conservation plan may include information regarding:

~~[(A)]~~ (i) the installation and use of water efficient fixtures and appliances, including toilets, shower fixtures, and faucets;

~~[(B)]~~ (ii) residential and commercial landscapes and irrigation that require less water to maintain;

~~[(C)]~~ (iii) more water efficient industrial and commercial processes involving the use of water;

~~[(D)]~~ (iv) water reuse systems, both potable and not potable;

~~[(E)]~~ (v) distribution system leak repair;

~~[(F)]~~ (vi) dissemination of public information regarding more efficient use of water, including public education programs, customer water use audits, and water saving demonstrations;

~~[(G)]~~ (vii) water rate structures designed to encourage more efficient use of water;

~~[(H)]~~ (viii) statutes, ordinances, codes, or regulations designed to encourage more efficient use of water by means such as water efficient fixtures and landscapes;

~~[(I)]~~ (ix) incentives to implement water efficient techniques, including rebates to water users to encourage the implementation of more water efficient measures; and

(x) other measures designed to conserve water.

~~[(J) other measures designed to conserve water:]~~

(c) The Division of Water Resources may be contacted for information and technical resources regarding measures listed in Subsections (2)(b)(i) through (2)(b)(x).

~~[(2)]~~ (3) (a) Before April 1, 1999, each water conservancy district under Title 17A, Chapter 2, Part 14, Water Conservancy Districts, and each retail water provider shall:

(i) (A) prepare ~~[or]~~ and adopt a water conservation plan if one has not already been adopted; or

(B) if the district or provider has already adopted a water conservation plan, review the existing water conservation plan to determine if it should be amended and, if so, amend the water conservation plan; and

(ii) file a copy of the water conservation plan or amended water conservation plan with the division.

(b) Before adopting or amending a water conservation plan, each water conservancy district or retail water provider shall hold a public hearing with reasonable, advance public notice.

~~[(3)]~~ (4) (a) The board shall:

~~[(i) study ways to implement the water conservation plans of the water conservancy districts and the retail water providers;]~~

~~[(ii) develop recommendations on how to implement those plans; and]~~

(i) provide guidelines and technical resources to retail water providers and water conservancy districts to prepare and implement water conservation plans;

(ii) investigate alternative measures designed to conserve water; and

(iii) report [its recommendations] regarding its compliance with the act and impressions of the overall quality of the plans submitted to the Natural Resources, Agriculture, and Environment Interim Committee of the Legislature at its meeting in November [1999] 2004.

~~[(b) The board's report to the Natural Resources, Agriculture, and Environment Interim Committee may include a recommendation:]~~

~~[(i) that each water conservancy district and retail water provider devote part of at least one regular meeting of its governing body to a discussion of the water conservation plan and allow public comment on it;]~~

~~[(ii) to implement a notification procedure that includes the delivery of the water conservation plan to the media and to the governing body of each municipality and county served]~~

by the water conservancy district or retail water provider;]

~~[(iii) that certain eligibility requirements, including the adoption of a water conservation plan, be met before a water conservancy district or retail water provider may receive any state funds for water development;]~~

~~[(iv) for the coordination of conservation and drought management plans; and]~~

~~[(v) regarding any other measure designed to conserve water.]~~

(b) The board shall publish an annual report in a paper of state-wide distribution specifying the retail water providers and water conservancy districts that do not have a current water conservation plan on file with the board at the end of the calendar year.

(5) A water conservancy district or retail water provider may only receive state funds for water development if they comply with the requirements of this act.

~~[(4)] (6) Each water conservancy district and retail water provider specified under Subsection ~~[(2)] (3)~~(a) shall:~~

~~(a) update its water conservation plan no less frequently than every five years; and~~

~~(b) follow the procedures required under Subsection ~~[(2)] (3)~~ when updating the water conservation plan.~~

~~[(5)] (7) It is the intent of the Legislature that the water conservation plans, amendments to existing water conservation plans, and the ~~[study] studies~~ and ~~[recommendations] report~~ by the board be handled within the existing budgets of the respective entities or agencies.~~

APPENDIX 2

2009-10 Fee Schedule

DESCRIPTION	Current FY 2009-2010
Residential	Rolled into property tax
PUD	Rolled into property tax

Waste Collection Fees

Dumpster	\$39.00	per weekday
	\$78.00	per weekend
1st Can	\$9.70	per month
Each additional can	\$8.45	per month
Senior Option	70 gallon can	\$9.35 per month
Early Return of 2nd can < 1 yr	\$54.00	
Recycling	\$3.80	per container per month
Suspension Fee (period must be >30 days)	\$22.00	
Special Services	\$10.00	minimum fee. Fees will be assessed based on the type of items and quantity of items and/or determination by the Public Services Director.
New Move-Ins & Misc. (Trash 5'x5'x5' pile of debris)	\$15.00	per pile

Water Rates

Secondary Water	Base Rate	\$17.25	per month for pumped/non-pumped connections
	Pumped Rate	\$4.10	per month for additional tier applied to pumped connections only
Culinary Water			
Residential Rate			
Area A			
Monthly Base Rate		\$34.88	per 1000 gallons
Monthly Usage Rate	up to 10,000 gal.	\$1.55	per 1000 gallons
	10,001 to 28,000 gal.	\$1.77	per 1000 gallons
	28,001 to 48,000 gal.	\$1.96	per 1000 gallons
	48,001 gal. and up	\$2.15	per 1000 gallons
Area B			
Monthly Base Rate		\$34.88	per 1000 gallons
Monthly Usage Rate	up to 10,000 gal.	\$1.64	per 1000 gallons
	10,001 to 28,000 gal.	\$1.84	per 1000 gallons
	28,001 to 48,000 gal.	\$2.05	per 1000 gallons
	48,001 gal. and up	\$2.25	per 1000 gallons
Area C			
Monthly Base Rate		\$34.88	per 1000 gallons
	up to 10,000 gal.	\$1.71	per 1000 gallons

2009-10 Fee Schedule

DESCRIPTION		Current FY 2009-2010	
Monthly Usage Rate	10,001 to 28,000 gal.	\$1.93	per 1000 gallons
	28,001 to 48,000 gal.	\$2.13	per 1000 gallons
	48,001 gal. and up	\$2.36	per 1000 gallons
HOA Landscape Rate	*HOA Rates apply to landscape, clubhouse, and common area meters. Rates are a reduction from the Commercial Rate, which was previously charged, and will take effect on the first utility bill mailed after July 1, 2007.		
Area A			
Monthly Base Rate		\$47.64	per 1000 gallons
Monthly Usage Rate	up to 10,000 gal.	\$1.63	per 1000 gallons
	10,001 to 28,000 gal.	\$1.80	per 1000 gallons
	28,001 to 48,000 gal.	\$1.98	per 1000 gallons
	48,001 to 75,000 gal.	\$2.16	per 1000 gallons
	75,001 to 100,000 gal.	\$2.38	per 1000 gallons
	100,001 gal. and up	\$2.63	per 1000 gallons
Area B			
Monthly Base Rate		\$47.64	per 1000 gallons
Monthly Usage Rate	up to 10,000 gal.	\$1.70	per 1000 gallons
	10,001 to 28,000 gal.	\$1.88	per 1000 gallons
	28,001 to 48,000 gal.	\$2.07	per 1000 gallons
	48,001 to 75,000 gal.	\$2.26	per 1000 gallons
	75,001 to 100,000 gal.	\$2.50	per 1000 gallons
	100,001 gal. and up	\$2.77	per 1000 gallons
Area C			
Monthly Base Rate		\$47.64	per 1000 gallons
Monthly Usage Rate	up to 10,000 gal.	\$1.76	per 1000 gallons
	10,001 to 28,000 gal.	\$1.97	per 1000 gallons
	28,001 to 48,000 gal.	\$2.17	per 1000 gallons
	48,001 to 75,000 gal.	\$2.37	per 1000 gallons
	75,001 to 100,000 gal.	\$2.60	per 1000 gallons
	100,001 gal. and up	\$2.90	per 1000 gallons
Commercial Rate			
Zone A			
Monthly Base Rate		\$73.98	per month with 8000 gal
Monthly Overage Rate	over 8,000 gal.	\$1.84	per 1000 gallons
	over 25,000 gal.	\$1.99	per 1000 gallons
	over 50,000 gal	\$2.17	per 1000 gallons
	over 75,000 gal	\$2.40	per 1000 gallons
	over 100,000 gal	\$2.66	per 1000 gallons
Zone B			
Monthly Base Rate		\$73.98	per month with 8000 gal
	over 8,000 gal.	\$1.93	per 1000 gallons

2009-10 Fee Schedule

DESCRIPTION		Current FY 2009-2010	
Monthly Overage Rate	over 25,000 gal.	\$2.10	per 1000 gallons
	over 50,000 gal	\$2.28	per 1000 gallons
	over 75,000 gal	\$2.51	per 1000 gallons
	over 100,000 gal	\$2.79	per 1000 gallons
Zone C			
Monthly Base Rate		\$73.98	per month with 8000 gal
Monthly Overage Rate	over 8,000 gal.	\$2.00	per 1000 gallons
	over 25,000 gal.	\$2.19	per 1000 gallons
	over 50,000 gal	\$2.38	per 1000 gallons
	over 75,000 gal	\$2.62	per 1000 gallons
	over 100,000 gal	\$2.91	per 1000 gallons
Cash in lieu of water shares required by development		Market Rate (per acre foot)	
New Service Fee		\$17	
Transfer of Service within City Limits		\$12	
Turn on service (excluding new of transferred service)		\$35	
Turn off service (excluding permanent discontinuance of service)		\$35	
Reconnection Fee		\$75	
Residential Construction Water (Shall not be prorated)		\$212	for each 90 days
Commercial Construction Water (Shall not be prorated)		\$2.18	per 1000 gallons used
Fire Hydrant Usage (shall not be prorated)		\$2.18	per 1000 gallons used
Fire Hydrant Meter Deposit		\$1,050	refundable-2 weeks max. use \$10/day rental including weekends
Fire Hydrant Administration Fee		\$55	
Flushing Fee		\$250	plus the cost of water
Commercial Backflow Inspection		\$130	
Water Pressure Inspection Fee		\$65	
Water Sample Fee		\$65	
Water Meter Installation Call Back		\$40	and \$40 per additional call back
Water Meter Tampering Fee		\$70	per tampering
Water Meter Fee		\$308	
Non-Metered Base Rate Service Fee		\$1.50 per month	
Right of Way Construction Fee		\$258	
Broken Transponder Replacement Fee		\$102.50	
Late Fee		\$0.50 or 5% per month, whichever is larger	

APPENDIX 3

Chapter 16.30

WATER EFFICIENT LANDSCAPING

16.30.010: PURPOSE:

- A. The city council has found that: 1) water resources are limited and conservation efforts must be implemented to sustain growth, 2) much of the city culinary water resources are used for outdoor purposes, including watering landscaping, and 3) the city desires to promote the design, installation and maintenance of landscapes that are both attractive and water efficient.
- B. The city council has determined that it is in the public interest to conserve the public water resources and to promote water efficient landscaping. The purpose of this chapter is to protect and enhance the community's environmental, economic, recreational and aesthetic resources by promoting efficient use of water in the community's landscaped areas, reducing water waste and establishing a process for design, installation and maintenance of water efficient landscaping throughout the city. (Ord. 2007-01, 1-16-2007)

16.30.020: DEFINITIONS:

The following definitions shall apply to this chapter:

ADMINISTRATIVE STANDARDS: The set of rules, procedures and requirements set forth in a landscaping ordinance associated with making permit application, assembling materials for public review, meeting the requirements of the landscaping ordinance, seeking approvals, enforcement, conducting site inspections and filing reports.

BUBBLER: An irrigation head that delivers water to the root zone by "flooding" the planted area, usually measured in gallons per minute. Bubblers exhibit a trickle, umbrella or short stream pattern.

DRIP EMITTER: A drip irrigation fitting that delivers water slowly at the root zone of the plant, usually measured in gallons per hour.

EVAPOTRANSPIRATION (ET): The quantity of water evaporated from adjacent soil surfaces and transpired by plants during a specific time, expressed in inches per day, month or year. See also definition of Reference Evapotranspiration Rate Or ETO.

EXTRA DROUGHT TOLERANT PLANT: A plant that can survive without irrigation throughout the year once established, although supplemental water may be desirable during drought periods for improved appearance and disease resistance.

GROUND COVER: Material planted in such a way as to form a continuous cover over the ground that can be maintained at a height not more than twelve inches (12").

HARDSCAPE: Patios, decks and paths, but does not include driveways, parking lots and sidewalks.

IRRIGATED LANDSCAPED AREA: All portions of a development site to be improved with planting and irrigation. Natural open space areas shall not be included in the irrigated landscaped area.

IRRIGATION CONTRACTOR: A person who has been certified by the Irrigation Association to install irrigation systems or as otherwise approved by the public services department.

IRRIGATION DESIGNER: A person who has been certified by the Irrigation Association to prepare irrigation system designs, or a landscape architect or as otherwise approved by the public services department.

IRRIGATION EFFICIENCY: The measurement of the amount of water beneficially applied divided by the total amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system hardware characteristics and management practices.

IRRIGATION PLAN: The plan which shows the components of the irrigation system with water meter size, backflow prevention, rain shutoff device, precipitation rates, flow rate operating pressure for each irrigation zone, and identification of all irrigation equipment.

LANDSCAPE ARCHITECT: A person who holds a certificate to practice landscape architecture in the state of Utah.

LANDSCAPE DESIGNER: A person who has been certified by the Utah Nursery and Landscape Association to prepare landscape plans or as otherwise approved by the public services department.

LANDSCAPE EDUCATION PACKAGE: A package of documents which is intended to inform and educate water users in the city about water efficient landscaping. The package includes the principles of water efficient landscape design, a listing of water conserving plants, a listing of certified landscape designers, landscape architects, certified irrigation designers, certified irrigation contractors, an information packet about various area demonstration projects, city's water rates, billing format for water use, and the economics of installing and maintaining water efficient landscaping.

LANDSCAPE IRRIGATION AUDITOR: A person who has been certified by the Irrigation Association to conduct a landscape irrigation audit or as otherwise approved by the public services department.

LANDSCAPE PLAN DOCUMENTATION PACKAGE: The preparation of graphic and written criteria, specifications and detailed plans to arrange and modify the effects of natural features such as plantings, ground and water forms, circulation, walks and other features to comply with the provisions of this chapter. The landscape plan documentation package shall include a project data sheet, a planting plan, an irrigation plan, a grading plan, a soils report, a landscape water allowance and an irrigation schedule.

LANDSCAPE WATER ALLOWANCE: For design purposes, the upper limit of annual applied water for the established landscaped area. It is based upon the local reference

evapotranspiration rate, the ET adjustment factor and the size of the landscaped area.

LANDSCAPED ZONE: A portion of the landscaped area having plants with similar water needs, areas with similar microclimate (i.e., slope, exposure, wind, etc.) and soil conditions, and areas that will be similarly irrigated. A landscaped zone can be served by one irrigation valve, or a set of valves with the same schedule.

LANDSCAPING: Any combination of living plants, such as trees, shrubs, vines, ground covers, flowers, turf or ornamental grass; natural features such as rock, stone or bark chips; and structural features, including, but not limited to, fountains, reflecting pools, outdoor artwork, screen walls, fences or benches.

MULCH: Any material such as bark, wood chips, rocks, stones or other similar materials left loose and applied to the soil.

NONDROUGHT TOLERANT PLANT: A plant that will require regular irrigation for adequate appearance, growth and disease resistance.

PLANTING PLAN: A plan which clearly and accurately identifies and locates new and existing trees, shrubs, ground covers, turf areas, driveways, trails, sidewalks, hardscape features and fences.

PRECIPITATION RATE: The rate at which water is applied per unit of time, usually measured in inches per hour.

RAIN SHUTOFF DEVICE: A device wired to an automatic controller that shuts off the irrigation system when it rains.

RECONSTRUCTED LANDSCAPING: Any existing approved landscaping and irrigation that is removed and replaced as part of new construction.

REFERENCE EVAPOTRANSPIRATION RATE OR ETO: The standard measurement of environmental parameters which affect the water use of plants. ETO is expressed in inches per day, month or year and is an estimate of the evapotranspiration of a large field of four (4) to five inches (5") tall, cool season grass that is well watered. The average growing season ETO for the South Jordan City area is based on the weekly calculation made by Utah State University which can be found on its internet web page. See also definition of Evapotranspiration (ET).

RUNOFF: Irrigation water that is not absorbed by the soil or landscaped area to which it is applied and which flows onto other areas.

SOILS REPORT: A report by a soils laboratory indicating soil type, soil depth, uniformity, composition, bulk density, infiltration rates, and pH for the topsoil and subsoil for a given site. The soils report also includes recommendations for soil amendments.

SPRAY SPRINKLER: An irrigation head that sprays water through a nozzle in a fixed and constant pattern.

STREAM SPRINKLER: An irrigation head (rotor or impact) that projects water in single or multiple streams.

TURF: A surface layer of earth containing mowed grass with its roots.

WASTE OF WATER: Means and includes, but is not limited to:

- A. The use of water for any purpose, including landscape irrigation, which consumes or for which is applied substantial amounts of excess water beyond the reasonable amount required by the use, whether such excess water remains on the site, evaporates, percolates underground, goes into the sewer system, or is allowed to run into the gutter or street. Every water consumer is deemed to have under his control at all times the water lines and facilities, other than water utility facilities, through which water is being supplied and used to his premises, and to know the manner and extent of his water use and excess runoff;
- B. The excessive use, loss or escape of water through breaks, leaks or malfunctions in the water user's plumbing for any period of time after such escape of water should reasonably have been discovered and corrected. It shall be presumed that a period of forty eight (48) hours after the water user discovers such break, leak or malfunction or receives notice from the city of such condition, whichever occurs first, is a reasonable time to correct such condition; and
- C. Washing sidewalks, driveways, parking areas, tennis courts or other paved areas except to alleviate immediate fire, health or safety hazards.

WATER CHECK: A water use efficiency review. See also definition of Water Use Efficiency Review.

WATER CONSERVING PLANT: A plant that can generally survive with available rainfall once established, although supplemental irrigation may be needed or desirable during the growing season.

WATER USE EFFICIENCY REVIEW: An on site survey and measurement of irrigation equipment and management efficiency, and the generation of recommendations to improve efficiency. (Ord. 2007-01, 1-16-2007)

16.30.030: COMMERCIAL, INDUSTRIAL AND MULTI-FAMILY DEVELOPMENT:

- A. Applicability: The provisions of this section shall apply to landscaping for all new and reconstructed landscaping for public agency projects, private commercial and industrial projects, developer installed landscaping in multi-family residential projects and developer installed landscaping in single-family projects that require project review and approval by the city. Such review may include site plan review, modified conditional use permit review and building permits issued for exterior modifications to commercial and multi-family buildings. This section does not apply to homeowner provided landscaping at single-family projects (see section 16.30.040 of this chapter), or registered historical sites.

B. Landscape Plan Documentation Package: A landscape plan documentation package shall be submitted to and approved by the public services department prior to the issuance of any permit or site plan approval. A copy of the approved landscape plan documentation package shall be provided to the property owner, developer or site manager and to the local retail water purveyor. The landscape plan documentation package shall be prepared by a registered landscape architect or a landscape designer. The irrigation plan shall be prepared by an irrigation designer or a landscape architect. City landscaping and irrigation standards shall be incorporated into the landscape plan documentation package. The landscape plan documentation package shall consist of the following items:

1. Project Data Sheet: The project data sheet shall contain the following:

- a. Project name and address.
- b. Applicant or applicant's agent name, address, phone and fax number.
- c. Landscape designer/landscape architect's name, address, phone and fax number.
- d. Landscape contractor's name, address, phone and fax number.

2. Planting Plan: A detailed planting plan shall be drawn at a scale that clearly identifies the following:

- a. Location of all plant materials, a legend with botanical and common names, and size of plant materials.
- b. Property lines and street names.
- c. Existing and proposed buildings, walls, fences, light poles, utilities, paved areas and other site improvements.
- d. Existing trees and plant materials to be removed or retained.
- e. Designation of landscaped zones.

3. Irrigation Plan: A detailed irrigation plan shall be drawn at the same scale as the planting plan and shall contain the following information:

- a. Layout of the irrigation system and a legend summarizing the type and size of all components of the system, including manufacturer name and model numbers.
- b. Static water pressure in pounds per square inch (psi) at the point of connection to the public water supply.
- c. Flow rate in gallons per minute and design operating pressure in psi for each valve and precipitation rate in inches per hour for each valve with sprinklers.

4. Grading Plan: A grading plan shall be drawn at the same scale as the planting plan and

shall contain the following information:

- a. Property lines and street names, existing and proposed buildings, walls, fences, utilities, paved areas and other site improvements.
 - b. Existing and finished contour lines and spot elevations as necessary for the proposed site improvements.
5. Soils Report: A soils report will be required where irrigated landscaped areas consisting of grass or similar turf exceed thirty three percent (33%) of the overall landscaped area. The soils report shall describe the depth, composition and bulk density of the topsoil and subsoil at the site, and shall include recommendations for soil amendments. The planting plan shall incorporate the recommendations of the soils report into the planting specifications.

6. Landscape Water Allowance: The annual landscape water allowance shall be calculated using the following equation:

$$\text{Landscape water allowance} = \text{ETO} \times 1.0 \times 0.62 \times A$$

Where landscape water allowance is in gallons per growing season

ETO= Reference evapotranspiration rate in inches per growing season

- 1.0=ETO adjustment factor, one hundred percent (100%) of turf grass ETO (growing season adjustment factor)

0.62=Conversion factor, inches/year to gallons/year

A=Total irrigated landscape area in square feet

7. Irrigation Schedule: A monthly irrigation schedule shall be prepared that covers the initial ninety (90) day plant establishment period and the typical long term use period. This schedule shall consist of a table with the following information for each valve:

- a. Plant type (for example, turf, trees, low water use plants).
- b. Irrigation type (for example, sprinklers, drip, bubblers).
- c. Flow rate in gallons per minute.
- d. Precipitation rate in inches per hour (sprinklers only).
- e. Run times in minutes per day.
- f. Number of water days per week.
- g. Cycle time to avoid runoff.

C. Landscape Design Standards: The following standards shall be implemented in the design of landscaping:

1. Plant Selection: Plants selected for landscape areas shall consist of plants that are well suited to the microclimate and soil conditions at the project site. Plants with similar water needs shall be grouped together as much as possible. For projects located at the interface between urban areas and natural open space (nonirrigated), extra drought tolerant plants shall be selected that will blend with the native vegetation and are fire resistant or fire retardant. Plants with low fuel volume or high moisture content shall be emphasized. Plants that tend to accumulate excessive amounts of dead wood or debris shall be avoided. Areas with slopes greater than thirty percent (30%) shall be landscaped with deep rooting, water conserving plants for erosion control and soil stabilization. Park strips and other landscaped areas less than eight feet (8') wide shall be landscaped with water conserving plants and/or grass.

2. Mulch: After completion of all planting, all irrigated nonturf areas shall be covered with a minimum layer of four inches (4") of mulch to retain water, inhibit weed growth, and moderate soil temperature. Nonporous material shall not be placed under the mulch.

3. Soil Preparation: Soil preparation shall be suitable to provide healthy growing conditions for the plants and to encourage water infiltration and penetration. Soil preparation shall include scarifying the soil to a minimum depth of six inches (6") and amending the soil with organic material as per specific recommendations of the landscape designer/landscape architect based on the soils report.

4. Irrigation Design Standards:

a. Irrigation: Irrigation design standards for this chapter shall be as outlined in the latest version of the "Minimum Standards For Efficient Landscape Irrigation System Design And Installation" as specified in the city standard specifications. In addition, the following portions of this section shall also be applicable.

b. Landscape Water Meter: A water meter and backflow prevention assembly that are in compliance with state code shall be installed for landscape irrigation systems, and the landscape water meter and backflow prevention assembly shall be separate from the water meter and backflow prevention assembly installed for indoor uses. The size of the meter shall be determined based on irrigation demand.

c. Pressure Regulation: A pressure regulating valve shall be installed and maintained by the consumer if the static service pressure exceeds eighty (80) pounds per square inch (psi). The pressure regulating valve shall be located between the landscape water meter and the first point of water use, or first point of division in the pipe, and shall be set at the manufacturer's recommended pressure for sprinklers.

d. Automatic Controller: All irrigation systems shall include an electric automatic controller with multiple program and multiple repeat cycle capabilities and a flexible calendar program. All controllers shall be equipped with an automatic rain shutoff device.

e. Slope Runoff: On slopes exceeding thirty percent (30%), the irrigation system shall

consist of drip emitters, bubblers or sprinklers with a maximum precipitation rate of 0.85 inches per hour and adjusted sprinkler cycle to eliminate runoff.

f. Valves: Each valve shall irrigate a landscape with similar site, slope and soil conditions and plant materials with similar watering needs. Turf and nonturf areas shall be irrigated on separate valves.

g. Drip Emitters And Bubblers: Drip emitters or a bubbler shall be provided for each tree where practicable. Bubblers shall not exceed 1.5 gallons per minute per device. Bubblers for trees shall be placed on a separate valve unless specifically exempted by the public services department due to the limited number of trees on the project site.

h. Sprinklers: Sprinklers shall have matched precipitation rates with each control valve circuit.

i. Elevation Variations: Check valves shall be required where elevation differences will cause low head drainage. Pressure compensating valves and sprinklers shall be required where a significant variation in water pressure will occur within the irrigation system due to elevation differences.

j. Drip Lines: Drip irrigation lines shall be placed underground or otherwise permanently covered, except for drip emitters and where approved as a temporary installation. Filters and end flush valves shall be provided as necessary.

k. Overhead Sprinklers: Irrigation zones with overhead spray or stream sprinklers shall be designed to operate between six o'clock (6:00) P.M. and ten o'clock (10:00) A.M. to reduce water loss from wind and evaporation. This would exclude drip or bubbler zones.

l. Soils With Slow Infiltration: Program valves for multiple repeat cycles where necessary to reduce runoff, particularly slopes and soils with slow infiltration rates.

D. Plan Review, Construction Inspection And Postconstruction Monitoring: The following procedures shall be implemented in the plan review, construction inspection and postconstruction monitoring of landscaping:

1. As part of the site plan review and building permit process, a copy of the landscape plan documentation package shall be submitted to the city for review and approval before construction begins. With the landscape plan documentation package, a copy of the landscape water allowance worksheet shall be completed by a landscape designer and submitted to the city.
2. All landscape plan documentation packages submitted must be certified by a licensed landscape architect or approved landscape designer. The irrigation plan must be prepared by an approved irrigation designer or a landscape architect.
3. All landscape irrigation systems shall be installed by an irrigation contractor. The person representing the contracting firm shall be a full time employee of the firm and shall be directly involved with the project, including at least weekly site visits during construction.

4. All installers, designers and auditors shall meet state and local license, insurance and bonding requirements, and be able to show proof of such upon demand.
5. During construction, site inspection of the landscaping may be performed by the city (see section 16.30.060 of this chapter).
6. Following construction and prior to the release of the improvement guarantee bond posted for the project, an inspection shall be scheduled with the public services department to verify compliance with the approved landscape and irrigation plans.
7. Following construction and prior to release of the improvement guarantee bond posted for the project, a water use efficiency review will be conducted by a landscape irrigation auditor. The auditor shall be independent of the contractor, design firm and owner/developer of the project. The water performance audit will verify that the irrigation system complies with the minimum standards required by this chapter. The minimum efficiency required for the irrigation system is between fifty percent (50%) and sixty percent (60%) for distribution efficiency for all fixed spray systems and between sixty percent (60%) and seventy percent (70%) distribution efficiency for all rotor systems. The auditor shall furnish a certificate to the city, the designer, the installer and the owner/developer certifying compliance with the minimum distribution requirements, and an irrigation schedule. Compliance with this provision is required before the city will release the bond for the project. (Ord. 2007-01, 1-16-2007)

16.30.040: SINGLE-FAMILY RESIDENTIAL DEVELOPMENT:

- A. General: The provisions of this section apply to landscaping for all new and reconstructed landscaping for single-family residential dwellings. This section does not apply to residential developments with developer installed landscaping (see section 16.30.030 of this chapter), or registered historical sites.
- B. Provisions For New Or Reconstructed Landscapes:
 1. Landscape Education Package: A copy of a landscape education package shall be given to all new single-family homeowners by the city at the time of application for a building permit and all new or modified water account owners. The landscape education package, prepared by the public services department, shall consist of the following items:
 - a. Principles of water efficient landscape design.
 - b. A listing of water conserving plants.
 - c. A listing of certified landscape designers, certified irrigation system designers and suppliers and certified landscape irrigation contractors.
 - d. An information packet about the various area demonstration gardens.

- e. An information packet about the city water rate schedule, billing format for water use and the economics of installing and maintaining a water efficient landscape.
 - 2. Postinstallation: After the landscaping has been installed, the homeowner may notify the public services department of its completion and request a listing of landscape auditors who can perform a water use efficiency review, also called a water check. The water check will determine the irrigation system efficiency, make recommendations for improvements, and provide the homeowner with an irrigation schedule.
- C. Park Strips And Other Landscaped Areas: Park strips and other landscaped areas less than eight feet (8') wide shall be landscaped with water conserving plants and/or grass. (Ord. 2007-01, 1-16-2007)

16.30.050: PROHIBITED WATERING PRACTICES:

- A. Waste Of Water: Regardless of the age of a development (commercial, industrial, office or residential), water shall be properly used. Waste of water is prohibited.
- B. Restricted Watering Time: Watering hours may be restricted by resolution of the city council as needed. (Ord. 2007-01, 1-16-2007)

16.30.060: ENFORCEMENT AND PENALTY FOR VIOLATIONS:

- A. Enforcement Authority: The city building and engineering inspectors, code enforcement officers, police officers and others designated by the city manager are authorized to enforce all provisions of this chapter.
- B. Violation Of This Chapter: Any water consumer who violates any provisions of this chapter shall be issued a written notice of violation. The written notice shall be affixed to the property where the violation occurred and mailed to the consumer of record and to any other person known to the city who is responsible for the violation and its corrections. Such notice shall describe the violation and order that it be corrected, cured or abated immediately or within such specified time as the city determines is reasonable under the circumstances. Failure to receive such notice shall not invalidate further actions by the city. If the notice is not followed, the city may issue a citation for a misdemeanor infraction. If the alleged violator is convicted, the municipal court may order compliance with any of the provisions of this chapter as a condition for receiving continued water service. (Ord. 2007-01, 1-16-2007)

APPENDIX 4

13.04.370: CONTROL OF BACKFLOW AND CROSS CONNECTIONS:

- A. It shall be unlawful at any place supplied with water from the City of South Jordan Water Distribution System to do any of the following:
 - 1. To install or use any physical connection or arrangement of piping or fixtures which may allow any fluid or substance not suitable for human consumption to come in contact with the potable water.
 - 2. To install any connection, arrangement, or fixtures without using a backflow prevention device or assembly designed to prevent a violation of subsection (A.) (1.) of this Section. Any such device or assembly must be approved for installation by the South Jordan Water Division with respect to each application.
 - 3. To install any backflow prevention device or assembly described in subsection (A.) (2.) of this Section which is not installed as required in the current edition of the Plumbing Code, as adopted by the City and the State.
- B. Enforcement of this section shall be conducted by the Director of Public Works, or designee, under the provisions of this Title.
- C. Any user of water from the South Jordan Water Distribution System shall pay all costs of installation, maintenance and testing of backflow prevention devices or assemblies. The City of South Jordan shall not be financially responsible for the installation, annual testing, and/or maintenance of the resident or water user's backflow device or assembly.
- D. Backflow prevention devices or assemblies required by this section shall be tested not less than once each year by a technician certified by the State Division of Drinking Water and/or the American Backflow Prevention Association (ABPA). Test results shall be furnished to the South Jordan Water Division annually.
- E. Water service may be discontinued immediately to any user found to be in violation of this Section, and the violation presents an immediate threat to the water supply. Water service may be discontinued to any user found to be in violation of this section after sufficient notice has been given.
- F. Any person who violates the provisions of this Section shall be civilly liable to the City of South Jordan, and to third persons other than the City, for all damage proximately caused by said violation. The election to pursue civil remedies under this subsection does not prohibit the City from pursuing criminal remedies.
- G. Any violation of this Section shall be punished as an infraction. The election to pursue criminal remedies under this subsection does not prohibit the City from pursuing civil remedies.

APPENDIX 5

SOUTH JORDAN CITY CITY COUNCIL REPORT

Council Meeting Date: December 15, 2009

Issue: 2009 Water Management & Conservation Plan Update

Submitted By: Brad Klavano

Department: Engineering

First Reading Report Date:

Staff Recommendation (Motion Ready):
That Council approve and endorse:

1. The 2009 Water Management and Conservation Plan Update as required by The Water Conservation Plan Act of 1998 and amended in the 2004 as House Bill 71 Section 73-10-32 of the Utah State Code.
-

BACKGROUND:

The original South Jordan City Water Management and Conservation Plan was prepared in March 1999 pursuant to the Water Conservation Plan Act of 1998. This plan requires all water retailers to file a water conservation plan updates every five years.

The City of South Jordan has submitted and approved one previous conservation plan March 1999 and one update in October 2004. The City's new 2009 Water Management and Water Conservation Plan Update will fulfill the current requirement.

This update describes the water conservation activities taken since 1999 and outlines the City's current water conservation goals and strategies for the next five years.

TEAM FINDINGS, CONCLUSIONS & RECOMMENDATIONS:

FINDINGS:

The City has done the following to promote and conserve water since the adoption of the original Water Conservation Plan in 1999,

- Improvements to the culinary water system are being completed as suggested in the 2006 Culinary Water Master Plan.
- Old meters have been replaced with automated meters.
- Installed meters on municipal connections.
- A water rate structure was implemented with graduated rates to encourage water conservation.
- A Water Efficient Landscaping ordinance was adopted by the City in June 18, 2002.

- A Backflow and Cross Connection ordinance was adopted by the City in 2000.
- A water reuse feasibility analysis was performed in 2008.
- A central irrigation control system was installed in some City parks and open spaces.
- City hosts biannual irrigation workshops and an annual water week open house.
- City website has water conservation tips and provides a link to the Jordan Valley Water Conservation District website where more information is available.
- A water conservation rebate program funded by JWCD is currently in place.

In order to continue improving water conservation, the City needs to continue improving and refining existing programs and implement new proposed alternatives. The City's goal is to decrease water consumption by 25% per capita by the year 2025. This goal matches Jordan Valley Water Conservancy District's goal making the City eligible to seek grants from this agency. Proposed water conservation alternatives have been schedule to be completed throughout the next five years, 2010-2014. The schedule is included below.

- Develop City policies for water rationing under emergency situations.
- Continue public education about landscape irrigation to reduce outdoor water demands.
- Continue organizing biannual irrigation workshops and an annual water week open house to encourage residents to learn about the secondary and culinary water system as well as other water related topics.
- Continue promoting the use of smart controllers for residential and commercial landscape use.
- Install smart controllers in City Parks to automatically manage irrigation schedules.
- Install water or flow meters to manage amount of water use for irrigation purposes.
- Promote JWCD water conservation programs and information such as the Water Check program, landscaping classes, and water-wise landscaping information sheets.
- Promote the JWCD demonstration gardens to encourage residents to use water-wise plants.
- Establish a conservation program funding mechanism to have a consistent funding source for conservation activities.

Water Conservation Activities Five-Year Schedule

Recommendation	Implementation Schedule				
	2010	2011	2012	2013	2014
Ordinances		x	x	x	
Public Education	x	x	x	x	x
Water Conservation Rebate Program	x	x	x	x	x
Secondary Water Metering		x	x	x	x
Promote JWCD Programs and Information	x	x	x	x	x
Smart Controller Installation in City Parks	x	x			

The City will continue reviewing the plan goals and working towards achieving the water conservation goals.

CONCLUSIONS:

The 2009 Water Management and Conservation Plan Update lists the City's existing water resources and outline the City's current use and determination of future requirements. The Update also includes the City's current water management and conservation programs as well as potential water management and conservation programs. The 2009 Water Management and Conservation Plan Update meets the requirements of the Water Conservation Plan Act of 1998.

RECOMMENDATIONS:

Based on the Findings and Conclusions listed above, Staff recommends that the City Council take comments at the public hearing and approve the 2009 Water Management and Conservation Plan Update subject to the conditions listed, unless, during the hearing, facts are presented that contradict these findings or new facts are presented, either of which would warrant further investigation by staff.

FISCAL IMPACT:

Cost savings and expenses will be based on the Water Management and Conservation alternatives that are implemented.

ALTERNATIVES:

- Revise the 2009 Water Management and Conservation Plan Update for City Council approval.

SUPPORT MATERIALS:

- 2009 Water Management and Conservation Plan Update.

City Council Action Requested:

Brad Klawans
Department Head

12/7/09
Date

SOUTH JORDAN CITY
CITY COUNCIL MEETING

December 15, 2009

Present: Mayor Pro Tempore Leona Winger, Council Member Brian Butters, Council Member Kathie Johnson, Council Member Larry Short, Council Member Aleta Taylor, Police Chief Lindsay Shepherd, City Attorney Rob Wall, City Manager John Geilmann, ACM Administrative Services Laurie Johnson, ACM Municipal Services Gary Whatcott

Others: Joe McGriff, Michelle Ogden, Mitch Mecham, Tyler Ogden, Sam Brown, Aelanan Gutierrez, Jordan Palmer, Aaron Osmond, Steve Duckworth, Stacey Reeder, Marty Reeder, Motty Reeder, Alli Cowdell, Julie Davis, Allyson Davis, Steve Barnes, Christy Harris, Morgan Olson, Lexi Hansen, Angela Malmrose, SherRon Smith, Barbara Hansen

6:00 P.M.
CITY COUNCIL CHAMBERS

Mayor Pro Tempore Winger noted the Youth Mayor and council members that were present.

Mayor Pro Tempore Winger recognized Tom Hicks, Bingham High principal. She also recognized Dave Peck, Bingham High football coach, as well as his coaching staff. She noted that there are members of the drama department present as well as members of the tennis group. She noted that Principal Hicks is in favor of an indoor tennis court as well as a swimming facility that has lap lanes.

REGULAR MEETING

I. GENERAL BUSINESS

A. Welcome and Roll Call

Mayor Pro Tempore Winger welcomed everyone present. All members of the City Council were present. She excused Mayor Money who was not present at the meeting.

B. Opening Ceremony

I. Invocation

Council Member Butters offered the invocation.

2. Pledge of Allegiance

Travis McCray led the audience in the Pledge of Allegiance.

Mayor Pro Tempore Winger said the Police Chief has given a special invitation to the youth council and football players. Following their presentation, they will be offered a tour of the SWAT vehicle. There are also refreshments available.

Mayor Pro Tempore Winger said she and Council Member Johnson saw the emergency response staff in action recently. She commended the staff for the tremendous job that they do.

Proclamation – Recognition of the Bingham High School Football Team for Winning the Utah State Class 5-A State Football Championship for 2009.

Mayor Pro Tempore Winger read the proclamation in recognition of the 2009 Bingham High School Football Team.

Travis McCray presented the City with a picture of the football team signed by all of the players. He and the other football captain thanked the city for their support.

Dave Peck, Bingham High football coach, indicated that South Jordan is a great community. They have good support and good people. He said Mr. Hicks is the best principal in the state. He said he has great assistant coaches. He said he believes there is no better school in America than Bingham High School. He indicated that the football players put in a lot of time and they are great individuals.

Tom Hicks, Bingham High Principal, echoed the sentiments of Coach Peck. He said it is a pleasure to represent Bingham with the football programs. He said the school has hundreds of programs at the school that excel. He said he is proud of what they do academically and athletically. He said they display trophies and awards given to the different school groups each year. He said they already have 50-60 trophies from this school year so far. He invited the City Council to the Candlelight concert scheduled for next week. He said next year, they will be celebrating 100 years of Bingham High football. He said he is sorry to see a great group of Seniors go, but watch for them next year as well.

C. Motion to Approve Amended Agenda Items, If Any

None.

D. Minute Approval

1. December 1, 2009 Work Session Minutes
2. December 1, 2009 Regular Meeting Minutes

Council Member Butters made a motion to approve the December 1, 2009 City Council Work Session and Regular Meeting minutes.

Council Member Taylor made a change to page 5 of the work session minutes.

Council Member Butters accepted the change to the minutes. Council Member Johnson seconded the motion. The vote was unanimous in favor.

II. AWARDS, PRESENTATIONS

A. Presentation – City Manager John Geilmann

Marty Shob, President of the Utah Emergency Management Association, presented their Presidents award to Director of Emergency and Risk Services Dustin Lewis. She said Mr. Lewis is a past president and a long standing member of the Association. She said Mr. Lewis is the architect of their success as an Association.

Mayor Pro Tempore Winger said nothing worries her more than being prepared to handle any emergency. Mr. Lewis was recognized for taking control and building up the City's emergency preparedness program. His family was also recognized.

B. Tennis Association Update

Oz Balfour, South Jordan Tennis Association, recognized several that are at the meeting in support of him. He recognized Mayor Pro Tempore Winger for her vision with the City's tennis program. He said in 2005, they started the South Jordan Tennis Association and started a tournament. He noted that the US Tennis Association has a program that supports tennis at the grass roots level. He said the South Jordan Tennis Association has an annual tournament for about 100 players. They have tennis social events and offer free lessons. He said on the city courts, people have to wait their turn to use them. He said there are plans to enclose the courts so access is more controlled. He said they are working with the Parks and Recreation Department because they would like covered courts. He said tennis is viable in the area. They have men's and women's teams that have to play outside the City.

Jean Greenwood, Utah Tennis Association Board Member, passed out some information to the City Council regarding the benefits of having indoor courts on this side of town. She said it would be good for the schools and community. She said the High School tennis team does not have a state championship and she attributes that to the lack of indoor courts in this area for them to practice year round. She said tennis is a growing sport. It is for all ages; they are not just promoting this for a specific factor of the community. They are working with the city on plans for a covered facility and they hope to make that a permanent situation.

Parks and Recreation Director Don Tingey thanked the Tennis Association for their work in planning for an indoor tennis court. Mayor Pro Tempore Winger asked about money

available from the US Tennis Association. Ms. Greenwood said to get that money, there is a grant process. The funds are not as prevalent today as they were a couple of years ago. She said the US Tennis Association really looks at partnerships and are more willing to match funds. They cannot carry a whole project.

Mayor Pro Tempore Winger said no commitments will be made tonight on this issue. She noted that the City Council has talked about a person that lives in Las Vegas that promotes tennis. They may possibly make contact with that person and his group. Ms. Greenwood said tennis is expensive to play at the private level. To have courts on the city and county levels makes it much more affordable and possible for more individuals to play. She said they have an active league with 80 year old players.

Council Member Short asked about the utilization of the courts during the summer months. Ms. Greenwood indicated that there is typically a fan system installed. She said many people don't mind playing indoors to avoid sun exposure. She said with indoor courts the usage does not go down, especially if there is programming for the kids. It would be utilized 12 months out of the year.

Parks and Recreation Director Tingey said there is a small representation of the tennis players in South Jordan present at the meeting. They are great to work with. He concurred that there is standing room only at the tennis courts in the summer months. An indoor tennis court is desirable.

Sharon Weeks, Senior Citizens Committee, said the committee assisted the City with the certificates given out to veterans on Constitution Day. She discussed a fund raiser being done for senior activities. Council Member Taylor donated a doll and the seniors have made a wardrobe for the doll. It will be raffled off. Over \$500 in tickets have been sold for the raffle. Starting in the new year, the committee is offering free birthday lunches at the luncheons that they host. She said they hope this will encourage more membership. She said they have had a difficult time getting their group together due to illness. She thanked the City for their support.

Council Member Taylor said Ms. Weeks is responsible for the financial reports from the Seniors. She said the group has tremendous skills that they bring to this committee. They are a very committed group.

III. INFORMATIONAL ITEMS AND OTHER BUSINESS

A. CALENDARING ITEMS

Mayor Pro Tempore Winger said there is a meeting in Glenmoor at Welby Elementary on February 10th to address the situations in Glenmoor. She said it will be a quiet environment. It will be community oriented problem solving. The City Council will have a work session prior to the February 10th meeting to discuss how the meeting will be handled.

Council Member Butters noted the City Council visioning meeting on January 28th. CM Geilmann said it will start at 8:30 a.m. at the Gale Center.

Council Member Taylor noted Elected Officials Day on January 27th at the Capital.

Council Member Taylor said staff previously set up a legislative luncheon to discuss upcoming issues with their legislative representatives. She said staff also made a book with how the legislative issues affect the City. She said they went to a lot of work. Because of that, South Jordan is known and taken seriously by the legislators. Mayor Pro Tempore Winger concurred. She said Senator Howard Stephenson indicated that the meeting conducted by South Jordan was very informative.

Council Member Johnson said there is an organization being started in the City called Healthy South Jordan. It will promote healthy activities in the City. After the holidays, they are starting a biggest loser contest, which is a 12 week program.

Council Member Butters complimented the staff on the snow removal process in the City so far this winter. It has been excellent. Council Member Short concurred. Council Member Taylor said some revisions to the policies were made this year. She thanked them for the changes that will improve safety.

Council Member Short noted the General Plan meetings scheduled for January 7th and January 27th.

B. COMMENTS FROM MAYOR AND MEMBERS OF THE CITY COUNCIL

Mayor Pro Tempore Winger complimented the Arts Council on the production of *Annie*. She said they did a wonderful job and many children were involved.

C. CITY MANAGER BUSINESS

Finance Director Dean Lundell said there are bonds issues through the Municipal Building Authority. One was to construct the fitness center and the other was to purchase the library and build the Gale Center. There was another bond to purchase Mulligans. He said the City's bond rating has improved from AA- to AA. CM Geilmann said the only way to have a better rating is to increase their population.

City Engineer Klavano said there have been some issues between Rocky Mountain Power and UDOT regarding the relocation of power lines in the 11400 South corridor. He said the issue is that Rocky Mountain Power's existing lines are 46 kv. They want to purchase the easement and ready the area for a 138 kv line. He said to do that, a 29 ft. aerial easement is needed and it encroaches on a number of property owners from 1300 West to 3600 West. He said right now, the plan is for UDOT to approach the property owners

about purchasing a 21 ft. aerial easement in their back yards. They are going to start at 2700 West, going west.

Council Member Taylor asked if those property owners will be able to keep their property the way it is currently? City Engineer Klavano said there may be some height restrictions in the easement as they will need clearance for maintenance of the easement. They won't be allowed to have fire pits or to store flammable materials. If there are existing structures, those will be exempted.

Council Member Short said the trees will be a huge area of concern. City Engineer Klavano said they can have trees, but there will be height restrictions.

The Council discussed the value of an aerial easement. City Engineer Klavano said he is not sure what the rate is for an aerial easement. Council Member Butters asked if someone is unwilling to grant the aerial easement, will it go through condemnation? City Engineer Klavano said yes.

Mayor Pro Tempore Winger asked for an update on 10400 South. City Engineer Klavano said the road is totally open, except between 2200 and 2700 West, westbound. That section should open in a few weeks. There will be intermittent closures until Spring. They will be working on sidewalks and landscaping, and they are still working on some of the signal lights. The ribbon cutting for the road is scheduled for January 8th, 2009.

D. NEW BUSINESS

Mayor Pro Tempore Winger said Steve Duckworth is present as a nominee of the Board of Adjustments. CM Geilmann said they determined to hold off on Board of Adjustment nominees until after their visioning meeting. They will be having a discussion on the direction of the Board of Adjustments in the future.

The City Council determined to get an introduction from Mr. Duckworth.

Steve Duckworth, said he was employed with AT & T. He was also for the former President of The Cottages. Mr. Duckworth indicated that he appreciates the opportunity to serve the City. He lived in SLC his entire life. He and his wife raised their family in the East Millcreek area. He said he served on a state emergency preparedness board and he also served on the Salt Lake Olympic Committee. He said he believes in serving the community.

Mayor Pro Tempore Winger said they are fortunate to have Mr. Duckworth in our City. They will let him know what happens with the Board of Adjustments.

Mayor Pro Tempore Winger recognized some scouts present. Scout Venture Group 186 (from the Glenmoor area) were introduced.

IV. CITIZEN COMMENT

Mayor Pro Tempore Winger noted that several residents wished to discuss the need and desire for covered tennis courts. That issue was already discussed.

Aaron Osmond, 11466 Country Knoll Rd., said he recently ran for Mayor of the City. What he learned about the City was impressive. He said the Administration, the City Council, and staff do a great job in running the City. He said he was grateful for how kind and respectful Mayor Money was during the election. He offered congratulations for Council Member Short and Council Member Butters. He said the election was intense for him and there were issues that strained relationships. He apologized for that. He said he has a sincere desire to serve the City. He said any capacity that the City can use his time, he offers that now.

V. SUMMARY ACTION CALEDNAR

- A. Consideration of Resolution R2009-43, Approving the Establishment of a Community Service Citizen Committee for the Purpose of Reviewing and Analyzing Current Issues and Future Practices Relative to a Secondary Water System.
- B. Request for Approval of "Summer Jam West" Grant Application By Barbara Hansen in the Amount of \$8,000.
- C. Request for Approval of "Youth Theater Training" Grant Application By Michelle Wilden in the Amount of \$4,000.
- D. Appointment of Marlyn Bailey as Replacement for Exiting Member Harold Rossberg on the Senior's Committee; Appointment of Richard McMullin as Replacement for Exiting Member Elmo Turner on the Historical Committee.
- E. Re-Appointment of MaryAnn Mutsch to the Senior's Committee.
- F. Re-Appointment of Linda Auger to the Planning Commission.

Council Member Butters made a motion to approve items B., C., D., and F. on the Summary Action Calendar, and to pull items A. and E. Council Member Short seconded the motion. The vote was unanimous in favor.

VI. SUMMARY ACTION ITEMS HELD OVER

- A. Consideration of Resolution R2009-43, Approving the Establishment of a Community Service Citizen Committee for the Purpose of Reviewing and Analyzing Current Issues and Future Practices Relative to a Secondary Water System.

Mayor Pro Tempore noted that Mayor Money would speak highly of this Resolution. The purpose is to have citizen input to be given to the City Council.

Council Member Butters said in the Resolution he would like no provision given for anyone on the City Council to serve on the citizens committee. That committee should be bringing recommendations to the City Council. Council Member Short said as a City Council, they should stay out of the committee and see what the citizens have to say about this issue. Mayor Pro Tempore Winger concurred.

Council Member Taylor said Mayor Money asked her to work with the committee. She said she has the passion on the issue to look for some answers. She said she would not in any way sway the issues. Everything has to come back and be reviewed by the City Council. She said she would keep the committee cohesive and running.

Council Member Short said the passion should be from the citizens. They need to bring their ideas out. Council Member Taylor said she has invested many hours on this issue. The City has invested money in educating her on water issues. It was noted that she is in favor of a secondary water system if it is affordable and practical. Council Member Short said this should be an independent citizens committee. ACM Whatcott should run the committee. They may have ideas, as citizens, that the City Council has not thought about. It is important to leave this issue to the citizens.

Council Member Johnson said if there is a Council Member on the committee, the group will expect them to lead the committee. Sometimes, the position of City Council Member gets in the way. That could happen with this committee. She said that is a concern.

Council Member Taylor suggested that they pull this issue until Mayor Money is present. The City Council concurred to wait and discuss this issue when Mayor Money is present. CM Geilmann said the issue will be placed on the January 5th agenda.

Council Member Butters made a motion to table the Resolution until January 5th, 2010. Council Member Short seconded the motion. The vote was unanimous in favor.

E. Re-Appointment of MaryAnn Mutsch to the Senior's Committee.

Mayor Pro Tempore Winger said Council Member Taylor nominated Shirley Bell to serve on the Senior's Committee. As that was reviewed, her term was not up until 2010. Council Member Taylor is now proposing the re-appointment of MaryAnn Mutsch to the Senior's Committee. Ms. Bell will continue to serve as Mayor Money's representative to the Senior's Committee until her term is up.

Council Member Taylor made a motion to approve the re-appointment of MaryAnn Mutsch to the Senior's Committee. Council Member Johnson seconded the motion. The vote was unanimous in favor.

The Hansen's and Michelle Wilden were recognized and thanked for their service.

VII. PUBLIC HEARINGS AND POTENTIAL LEGISLATIVE ACTION ITEMS

- A.1. Public Hearing – Consideration of Resolution R2009-42, Adopting the 2009 Water Management and Conservation Plan Update for South Jordan City.

City Engineer Klavano reviewed the background information on this item. He noted that the City has exceeded the 25 percent reduction mandate.

Mayor Pro Tempore Winger opened the public hearing. There were no comments. She closed the public hearing.

- A.2. Potential Action Item – (See VII. A.1.) Resolution R2009-42

Council Member Johnson said on page 8 of the report, she noted a spike in water usage in approximately 2007. She asked for the reason for that increase? Public Works Director Bruey said that year was a wet spring and people were not as concerned about water conservation at that time.

Council Member Taylor said her concern is when the citizens realize that they now have to pay money out every year for someone to test their backflow system. She said more education is needed on that point. Public Works Director Bruey said at every house visit and at every meeting that they hold, it is clearly explained to the residents. Council Member Taylor said it needs to be addressed more clearly in the FOCUS or the water bills. CM Geilmann said they have done trainings and publications have gone out on how this program will work. They will continue to notify the residents. He said the professionalism from staff has been there. Council Member Taylor said they need to emphasize more clearly to the citizens that they will be responsible for the annual inspection. CM Geilmann said that will be added to the training done by staff. Public Works Director Bruey said they can meet and discuss how to get that education out there better.

Council Member Johnson said no matter how much education is out there, the residents will come in and complain when they are charged. Mayor Pro Tempore Winger said they will do the best they can to inform the residents of that requirement. She said putting information in the FOCUS is a good suggestion.

Council Member Short made a motion to approve Resolution R2009-42. Council Member Johnson seconded the motion. Roll call vote. The vote was unanimous in favor.

VIII. PUBLIC HEARINGS AND POTENTIAL ADMINISTRATIVE ACTION ITEMS

None.

IX. OTHER BUSINESS

None.

ADJOURNMENT

Council Member Butters made a motion to adjourn. Council Member Taylor seconded the motion. The vote was unanimous in favor.

The December 15, 2009 City Council meeting adjourned at 7:49 p.m.

These minutes were prepared by Council Secretary MaryAnn Dean.

This is a true and correct copy of the December 15, 2009 City Council meeting minutes, which were approved on January 5, 2010.

Auna M. West
South Jordan City Recorder

RESOLUTION R2009-42

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, UTAH, ADOPTING THE 2009 WATER MANAGEMENT AND CONSERVATION PLAN UPDATE FOR SOUTH JORDAN CITY.

WHEREAS, South Jordan City is a water retailer; and

WHEREAS, the Utah Code 73-10-32 requires that all water retailers file a water conservation plan with the Board of Water Resources by April 1, 1999 and provide plan updates every five years; and

WHEREAS, the City's original Water Management and Conservation Plan was prepared by Franson Noble in March of 1999; and

WHEREAS, the 2009 Water Management and Conservation Plan Update has been prepared pursuant to Utah Code 73-10-32; and

WHEREAS, the South Jordan City Council finds and determines that the 2009 Water Management and Conservation Plan Update will support the best interest of the City and will promote the public health, safety, and welfare of the citizens of South Jordan City.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF SOUTH JORDAN CITY, STATE OF UTAH:

Section 1. Adoption. That the document entitled "2009 Water Management and Conservation Plan Update" prepared by City staff, dated December 2009, a copy of which is attached, is hereby adopted as the Water Management and Conservation Plan Update of South Jordan City.

Section 2. Effective Date. This resolution will be effective immediately upon passage.

APPROVED BY THE CITY COUNCIL OF THE CITY OF SOUTH JORDAN, STATE OF UTAH, ON THIS 15th DAY OF DECEMBER, 2009, BY THE FOLLOWING VOTE:

	YES	NO	ABSTAIN	ABSENT
Leona Winger	X	___	___	___
Larry Short	X	___	___	___
Kathie L. Johnson	X	___	___	___
Brian C. Butters	X	___	___	___
Aleta A. Taylor	X	___	___	___

Mayor: *W. Kent Money*
W. Kent Money, Mayor

ATTEST: *Anna M. West*
City Recorder



Approved as to form:
[Signature]
Assistant City Attorney