



# WOODS CROSS CITY Culinary Water Impact Fee Facilities Plan

Prepared by:



**J-U-B ENGINEERS, INC.**

December 2, 2014





**J-U-B ENGINEERS, INC.**

J-U-B COMPANIES



THE  
LANGDON  
GROUP



GATEWAY  
MAPPING  
INC.

December 2, 2014

Mr. Gary Uresk  
Woods Cross City  
1555 S 800 W  
Woods Cross, UT 84087

RE: **Culinary Water Impact Fee Facilities Plan – Executive Summary**

Dear Gary,

The Impact Fee Law has changed frequently since initially adopted by the State of Utah Legislature. With this and other changes in the community, Woods Cross City has determined it necessary to update the Culinary Water Impact Fees. J-U-B Engineers, Inc. was commissioned to complete this Impact Fee Facilities Plan (IFFP). As shown in the enclosed certification, this study attempts to address the requirements of the Impact Fee Law.

J-U-B Engineers has done several impact fee related studies in years past for the City. Some major changes with this study are:

- The requirement that only projects to be built in the next 6 to 10 years can be considered for Impact Fee calculations.
- Reduction in peak day flows have been allowed by the State to better reflect actual flows.
- The Capacity of the System must be considered with this study for the buy-in of future residents. This includes Source, Storage, and Distribution. Even though Water Rights are discussed, there is no consideration in the Impact Fees for them.
- A growth rate of 2.4% has been considered for the community into the future.
- Both the existing 2345 Acres within the City and the additional 251 acres intended for annexation are considered in this study. This area represents the "at capacity" or built out area for Woods Cross.
- Other studies such as Parks and Storm Water are being revised at this time as well.

This study is a tool used by the Financial Consultant, Lewis Young Robertson & Burningham (LYRB), for their calculation of the actual fees in the Impact Fee Assessment (IFA). This study is a companion to the LYRB Study and both should be adopted and updated together.

Please let us know if you have any questions.

Sincerely,  
J-U-B ENGINEERS, Inc.

Gregory L Seegmiller, P.E.  
Project Manager

# WOODS CROSS CITY CORPORATION

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## CULINARY WATER IMPACT FEE FACILITIES PLAN (IFFP)

J-U-B #55-13-098

Prepared by:



**Culinary Water Impact Fee Facilities Plan (IFFP)**  
**Woods Cross City Corporation**  
**Dec 2, 2014**

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**WOODS CROSS CITY  
CULINARY WATER MASTER PLAN 2014  
IMPACT FEE FACILITIES PLAN (IFFP) CERTIFICATION**

In accordance with 11-36a-306., Certification of impact fee analysis,

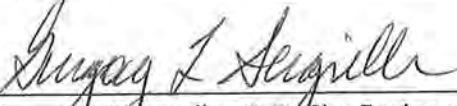
"I certify that the attached impact fee facilities plan:

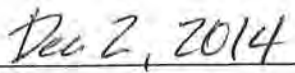
1. includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act."

With the following conditions:

1. All of the recommendations for implementations of the IFFP made in the IFFP documents or in the Impact Fee Analysis documents are followed by City Staff and elected officials.
2. If all or a portion of the IFFP or Impact Fee Analysis are modified or amended, this certification is no longer valid.
3. All information provided to J-U-B is assumed to be correct, complete, and accurate. This includes information provided by the City as well as outside sources.
4. Woods Cross City has agreed that the work performed in preparation of the Impact Fee Facilities Plan meets the industry Standard of Care for such plans.

Signed:

  
\_\_\_\_\_  
Gregory L. Seegmiller, P.E., City Engineer  
J-U-B Engineers, Inc.

  
\_\_\_\_\_  
Date

## 1.0 INTRODUCTION

Woods Cross City is located in Davis County, Utah. Since the original law was passed in 1995 for Impact Fees, Woods Cross has had impact fees and connection fees on the books and has been assessing and utilizing these fees.

There have been several master plans and updates done on the system since that time. Most of the upgrades have been accomplished for both future growth projects and deficiency projects. Woods Cross has commissioned JUB Engineers, to evaluate the effectiveness of past projects and to assess for future needs.

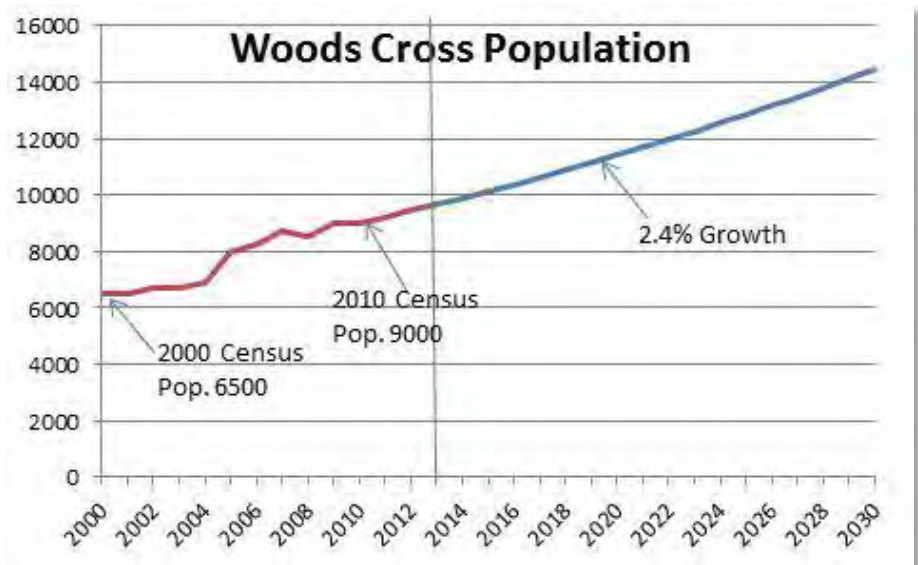
### 1.1 Scope

The Scope of this study is:

1. Evaluate the Sources of water for adequacy into the future, specifically, the Existing system (2013), 10 years into the Future (2023) and “at Capacity”.
2. Evaluate the Storage capacity of water storage into the same periods of time.
3. Review the Existing Distribution Model for deficiencies that may arise into the same future periods.
4. Summarize the findings in a report that would include growth projections, and updated cost estimates, and assemble into an Impact Fee Facilities Plan (IFFP) for the City adopt with their Impact Fee Analysis (IFA) to be done by Lewis Young Robertson & Burningham (LYRB).
5. Along with this, the City has worked with the Division of Drinking Water to establish a realistic source flow requirement which is representative of actual use in the City.
6. Additionally, separate from this IFFP, a depreciation plan for aging infrastructure will be assembled.

### 1.2 Growth Rate

Attempting to determine the future growth rate of a community is difficult as it has so many factors involved in foreseeing the future. Two sources have been investigated the Governor’s Office of Planning and Budget shows a growth rate of 1.5%, while the Wasatch Front Regional Council uses a rate of 2.4% to estimate traffic flows in the year 2040. Another evaluation of population done by J-U-B,



Graph 1.2 - Population

has shown a rate of growth between 2000 and 2007 at 2.4% as well.

This study uses a growth rate of 2.4% in projecting growth rate into the future, as shown in Graph 1.2.

## 2.0 IMPACT FEE FACILITIES PLAN

Recent changes in the Impact Fee Laws have required different components of this plan to be discussed. As stated in the require Certification, this plan attempts to meet the requirements of the Act. Several components are discussed herein, namely: Service Area Boundary, Demands, Level of Service, Inventory and an estimate of Excess Capacity. Capital improvements, needed for future growth are evaluated for the next 6 to 10 years. These discussions are separated by the different components of a Water System including Source, Storage, and Distribution.



### 2.1 Service Area

In Appendix B, Figure I shows the service area boundary for the City along with the existing City Limits. The future projects of this study take into account both the current city boundary and the Annexation Declaration for the City. This future area is near the Legacy Highway and 500 South as shown on Future piping model (Figures II) and Capital Facilities Plan (Figure III).

### 2.2 Demands

Several components of a water system must be considered in the demands. Summarized herein are the demands evaluated in this report. Woods Cross is fairly unique in that Irrigation flows are managed by two irrigation districts for the community. In Water Rights and Distribution, the current capacities exceed the requirements of the State.

**Table 2.2 - System Demands**

	Required/ERU	Year 2013 5393 ERUs	Year 2023 6761 ERUs	"At Capacity" 10118 ERUs
<b>Water Rights</b>	0.45 Acft/ERU	2427 Acft	3042 Acft	4553 Acft
<b>Source Flow*</b>	400 gpd/ERU	1498 gpm	1878 gpm	2811 gpm
<b>Storage</b>	400 gpd/ERU	1498 gpm	1878 gpm	2811 gpm
<b>Distribution Peak Day</b>	800 gpd/ERU	2996 gpm	3756 gpm	5621 gpm

\*Note: Source flow of half the State require flow reflected in this table (usually 800gpd).

As per "Reduction of Peak Day Demand Source Requirements" letter dated Aug 25, 2014.

## 2.3 Level of Service

The current level of service has been defined by the State. Requirements are given for Source, Treatment, Storage, and Distribution.

### 2.3.1 Source – Level of Service

Water Source Requirements have typically been defined by the State Division of Drinking Water as 800gpd/ERC, however this recently was approved as a reduction to 400gpd/ERC. This is done in an effort to better match the actual usage needs for the wells and treatment of the City's. Appendix C contains the letter of reduction from the State DDW explaining the conditions.

### 2.3.2 Treatment – Level of Service

As a part of the system, Woods Cross treats their raw water with Granular Activated Carbon (GAC) for a PCE (Perchloroethylene) contamination plume in the ground water capture zone of the wells. In 2014 the City bonded for and constructed a treatment facility for this purpose. Associated transmission pipes, distribution pipes, filtering, chlorination, GAC treatment and building size were all constructed as part of this system. The Level of Service for the City is that all source water is PCE free, rather than the EPA standard of the minimum 0.5ppm for other water systems. This project was constructed to maintain that level.



### 2.3.3 Storage – Level of Service

State Rules show 400gpd/ERC as the amount of storage required. This amount is evaluated for the system in a following section.

### 2.3.4 Distribution – Level of Service

The Distribution System LOS is defined as having pipes adequate to supply fire flow demands combined with peak day user demands. The fire flows are defined by the Fire Marshall and the Uniform Fire Code. The flow rate 2000gpm in residential, commercial, and industrial areas have been defined for the Distribution Level of Service in accordance with the 20-30-40 rule of the Division of Drinking Water.

The State Division of Drinking Water rules describe the 20-30-40 rule that sets the standard for the level of service for water systems.

20 psi pressures in all areas of the system with peak day demands and a fire flow;



30 psi pressures in all areas of the system with instantaneous flows; and

40 psi pressures in all areas of the system with only peak day demands and no fire flow.

All three conditions must be met to satisfy this rule of the State’s.

In our evaluation of the system, these requirements met flow requirements in the system. These flows were then evaluated for the years 2013 (Existing Conditions); 2023; and “At Capacity”.

In an effort to differentiate between the water usage for multi-family and single family categories, several possibilities were reviewed including census data, meter capacity, and actual metered water use. It was determined that actual metered water usage from the two categories would be the most equitable. Appendix C contains meter flows from both categories for the past three years. No correlation was found in comparing summertime and wintertime flows. The average for the past three years is that Multifamily uses 77% of the Single family use per dwelling unit. For ease in calculation the amount of 75% is used, with a recommendation to continue observing this metric.

## 2.4 Inventory

The following table is a tabulation of the lineal feet of pipe in the system. There are multiple types of pipe that are not indicated including PVC, Ductile Iron, Cast Iron, HDPE, and techite pipe. Different types have been allowed over time depending upon soil conditions and material availability and economy. No attempts have been made to assess the value of the Water System as current Impact Fee laws require the value to be determined based upon actual cost at the time of construction.

Pipe Size	Total Feet
2"	85
4"	7,683
6"	83,901
8"	133,071
10"	19,183
12"	36,190
14"	0
16"	9,167
PRV Stations	6
Fire Hydrants	449

## 2.5 Excess Capacity

To obtain the overall capacity of the system, three scenarios were observed: the 2013 Flow; 2023 Flow; and “At Capacity” Flow. It is discussed for Source, Treatment, Storage, and Distribution below. Water Rights are not discussed as they are not part of the Impact Fee Calculation.

### 2.5.1 Source – Excess Capacity

Figure 3.2 shows the capacity of the sources in comparison to the needs. There are four capable sources that have a capacity to handle demands into the future, however, power requirements are such that the wells usually run only at off-peak power times, reducing the average daily flow in peak water days to 1/3 the pump capacity. The Weber Basin source usually runs in the fall time as well, not helping with the peak day demand in the summer. According to Figure 3.2 there is only 24% excess capacity in the Sources (1498gpm used capacity, versus 1961gpm available flow or 76% used capacity). Since GAC treatment is sold 1000gpm increments, well projects are in forecasted in 750 to 1000gpm increments.

### 2.5.2 Treatment – Excess Capacity

The GAC project, initiated in 2013 was designed with oversized capacity in mind.

**Table 2.5.2 GAC Treatment - Excess Capacity (Treatment plant 1)**

	Year 2013		Year 2023		Capacity	
	gpm	Percent	gpm	Percent	gpm	Percent
<b>Pipelines</b>	1498	50%	1878	63%	3000	100%
<b>Treatment Building</b>	1498	50%	1878	63%	3000	100%
<b>GAC Trains</b>	1498	75%	1878	94%	2000	100%

As shown on Figure 3.2, this excess capacity is anticipated to be needed in the next ten years. Since GAC treatment is done with vessels sold in 1000gpm increments, future projects are shown in these incremental steps.

### 2.5.3 Storage – Excess Capacity

The City is currently adequate for Storage requirements. 3.4Mg new storage was constructed in 2009. Figure 3.3 shows the required storage in comparison to the excess capacity. Approximately 8% of the excess storage will be used in the next 10 years.

**Table 2.5.3 Excess Storage Capacity**

	Year 2013	Year 2023	"At Capacity"
<b>Total Storage</b>	7,040,000	7,040,000	7,040,000
<b>Less Fire Storage</b>	630,000	630,000	630,000
<b>Less Emergency</b>	2,500,000	2,500,000	2,500,000
<b>Available Storage</b>	3,910,000	3,910,000	3,910,000
<b>Equilization needs</b>	2,157,200	2,704,429	4,047,388
<b>% used</b>	55%	69%	104%
<b>% Excess Capacity</b>	45%	31%	-4%

\*Fire Storage = 3.5kgpm for 3hrs

### 2.5.4 Distribution – Excess Capacity

The flow in each pipe was observed and compared to the At-Capacity flow, assuming that flow would represent the highest flow in the system. The percentage of that flow was tabulated and summed for each scenario. Those flows and percentages are summarized in the following table. The percentages may not correlate with that of other models for the City since ERU calculations do not correlate. Based upon the undeveloped property, we assume for this study that At-Capacity or build out will occur around 2040 with 10118 ERU's.

**Table 2.5.4 - Distribution System Flow Capacity**

	Year 2013	Year 2023	At-Capacity
<b>Connections</b>	5393 ERU	6761 ERU	10118 ERU
<b>Flow</b>	2912 gpm	3636 gpm	5463 gpm
<b>% of At-Cap</b>	53%	67%	100%

### 2.6 Prioritization

Some of the prioritization, as mentioned earlier, is a moving target. Table A-2, in appendix A, is an attempt to allocate need to the time and location needed as best as possible. As development occurs,

the locations of the most needed projects will move. This is done to assist the Impact Fee Assessment in estimating the magnitude of funds needed for the future funds in the next 10 years.

### 3.0 CULINARY WATER SYSTEM COMPONENTS

The components of Water Rights, Source, Storage and Distribution are discussed below for the Water System. Appendix A contains a figure for the existing system and also the future system. Wells, Tanks and pipes are shown on these figures based upon the models and evaluation of the system.

#### 3.1 Water Rights

Table 3.1 shows water rights owned by the City. These rights are in excess of the amount required for indoor use of the system. All rights are in good standing with the State Division of Water Rights. This information is shown for reference and not part of the IFFP nor calculated in the IFA.

**Table 3.1 - Woods Cross City Water Rights Summary**

Revision Date: May 13, 2014

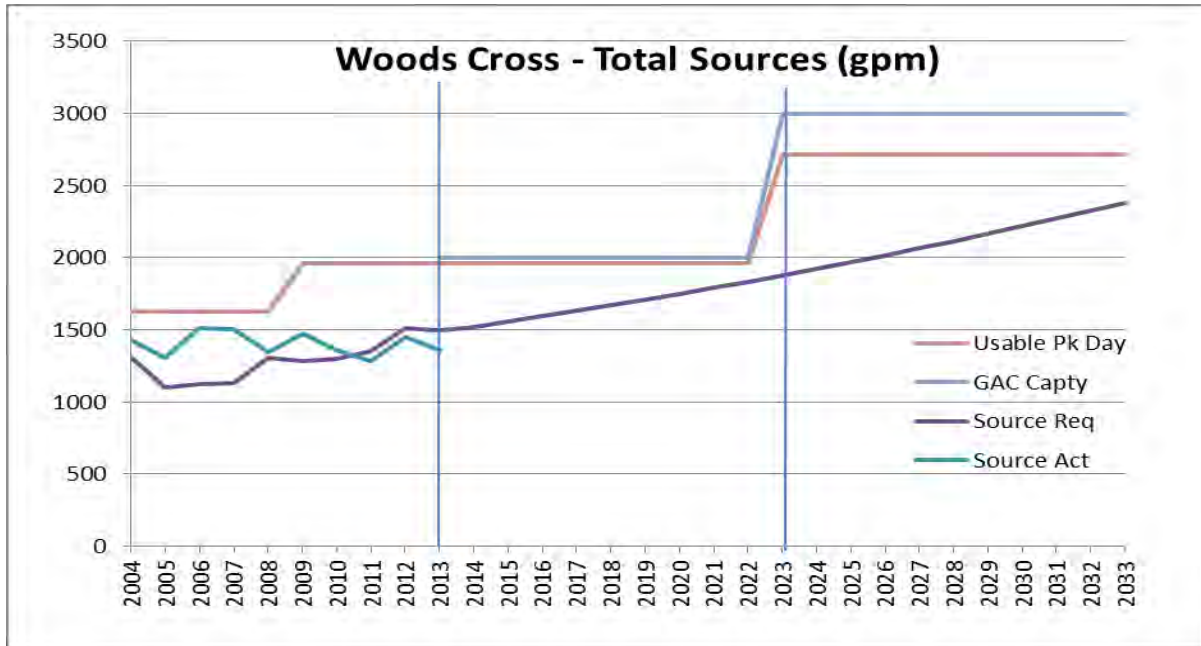
WR#	Description	Flow (cfs)	Flow(gpm)	Volume (AF)	Priority Date	Proof Due
31-3971	Well #3	2	897.6	1447.93	10/29/1969	
31-2091	Well #2	0.5	224.4	361.98	5/5/1960	
31-4569	Well #4 and #5	5.66	2540.2	4097.65	2/15/1979	9/30/2023
31-5209	Well #4 and #5	4.34	1947.8	3142.02	2/15/1979	9/30/2023
31-2398	Well #1	0.668	299.8	483.61	6/13/1934	
31-3849	Well #1	0.25	112.2	180.99	10/19/1966	
31-2084	Well #1	0.303	136.0	219.36	12/17/1953	
31-2059	Well #1, #2, #3, #4, #5	0.4604	206.6	333.31	00/00/1905	5/31/2019
31-2068	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	5/31/2019
31-2069	Well #1, #2, #3, #4, #5	0.3524	158.2	255.13	00/00/1896	5/31/2019
31-2070	Well #1, #2, #3, #4, #5	0.103	46.2	74.57	00/00/1900	5/31/2019
31-2071	Well #1, #2, #3, #4, #5	0.1801	80.8	130.39	00/00/1896	5/31/2019
31-2145	Well #1, #2, #3, #4, #5	0.2857	128.2	206.84	00/00/1886	5/31/2019
31-2147	Well #1, #2, #3, #4, #5	0.3524	158.2	255.13	00/00/1896	5/31/2019
31-2148	Well #1, #2, #3, #4, #5	0.1249	56.1	90.42	00/00/1896	5/31/2019
31-2149	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	5/31/2019
31-2150	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	5/31/2019
<b>TOTAL</b>		<b>16.0515</b>	<b>7203.9</b>	<b>11620.76</b>		

#### 3.2 Source Improvements

Woods Cross Water has several sources of water. They include, several wells and one contract from Weber Basin Water. The wells are used continually throughout the year. The contract water from Weber Basin is a “use or loose” contract. The small amount of contract water is also used until the contract is filled.

The following figure 3.2 summarizes the sources and their input for several recent years and estimates future needs. The “Source Act” line on the graph shows the actual usage of the system. The “Source Required” line is based upon the amount of 400 gallons per day required by the State. A copy of the letter from the State is included in Appendix C. This line is projected into the future to estimate when future sources and treatments will be needed. “GAC Capacity” plots the capacity of the treatment plant. A new train of GAC vessels (1000gpm) will be needed in 2023 for future needs. “Total Source” refers to the capacity of the wells and sources available. Table 3.2 summarizes those sources.

**Figure 3.2 Water Sources (GPM)**



**Table 3.2 Existing Water Sources (gpm)**

Source	Source Capacity (gpm)	Status	Available Flow (gpm)	Usable Pk Day Flow Pre2009**	Usable Pk Day Flow 2010***	Usable Pk Day Flow 2023
Well #1	500	PCE*		0	0	0
Well #2	234	PCE*		0	0	0
Well #3	984	Treated	984	328	328	328
Well #4	1300	Treated	1300	1300	1300	1300
Well #5	1000	Clean	1000	0	333	333
WBW	300	Clean	300	0	0	0
New #6		New	New	0	0	750
<b>TOTAL</b>	<b>4318</b>		<b>3584</b>	<b>1628</b>	<b>1961</b>	<b>2711</b>

Note: \*Well not used due to PCE contamination

\*\*Well #4 used all day and #3 used 8 hours at night

\*\*\*Well #4 used all day with #3 and #5 used 8 hours at night

The above projections in Figure 3.2, show that the supply will be inadequate by the year 2029. At capacity, the City will be delinquent by as much as 2000 Acre feet or 1239gpm. We have indicated two new wells to account for this need. Both should be capable of around 700 to 1000gpm so they won't need to run constantly. We have two additional projects which are for the property purchase and Drinking Water Source Protection work required for the new wells.

### 3.3 Storage Improvements

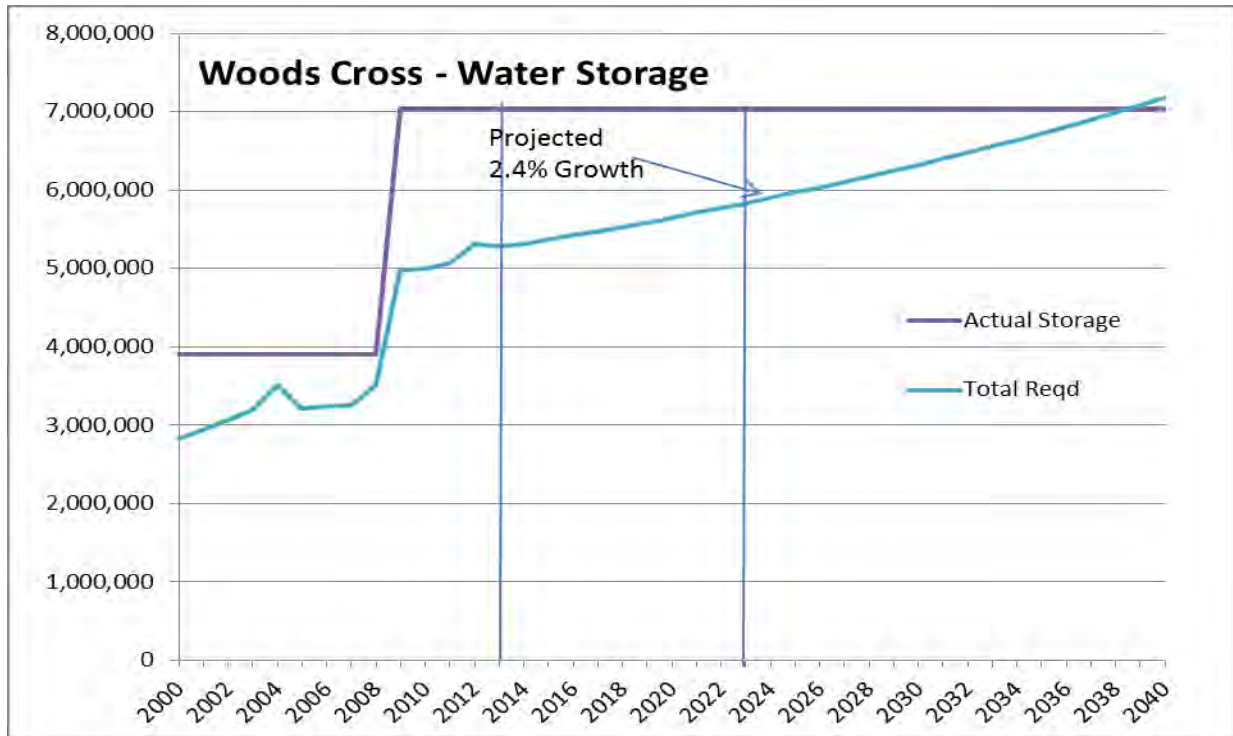
The City maintains water reservoirs throughout the system. They are summarized in Table 3.3.

**Table 3.3 Water Storage**

Tank Name	Volume (gal)
1500 S 0.5MG	500,000
1500 S 3.14MG	3,140,000
2600 S	1,300,000
2600 S.	1,050,000
2600 S	1,050,000
TOTAL	7,040,000

This study assumes that Irrigation needs remain fairly constant due to the pressurized irrigation systems in the area. It also assumes that the Fire Flow requirements remain constant as well. Figure 3.3 shows the storage requirement vs actual storage. The 3.14M gallon tank was built in 2009 showing the large increase in actual storage capacity. Based upon this information, it appears as if adequate storage will be available until 2039, unless conditions change. These conditions could include additional fire flow requirements or an increased growth rate.

**Figure 3.3 Storage**



### 3.4 Distribution Improvements

Woods Cross City has required that all new developments have 2000gpm fire capacity. This policy has been in place for several years. With the exceptions of a few areas developed prior to this policy, all areas in the current model met this requirement during peak day demands.

Several projects are shown on the Capital Facilities Plan (Figure III in Appendix B) that will be needed as growth occurs. The model showed that, with existing demands, the existing pipes were adequate. Table A-1 (in Appendix A) summarizes the cost of the projects and assigns the sources of funds in the three categories discussed in section 4.0, below.



### 4.0 CAPITAL FACILITIES PROJECTS

Two differences between a Capital Facilities Plan and an Impact Fee Facilities Plan are that the IFFP projects can only reach out 6 to 10 years into the future and also that IFFP projects can only apply to future growth needs. Capital Facilities Plans can include other time horizons so long as the funding comes from other sources. The Figure III in appendix B is a Capital Facilities plan since it includes more projects for the water system. The priority table A-2 in Appendix A defines which of the projects are considered part of the IFFP.

Table A-1 in appendix A shows the project listing and responsibility allocation for the projects discussed in this report. Cost estimates are shown in three areas of responsibilities: The first is Existing System Deficiencies. These are for projects that would be needed today if no other development were to come along. In our review of the System, there were no existing deficiencies in capacity since the model of existing system is able to meet the demands of the exiting users. There are deficiencies as they relate to the age and longevity of the system. These are not calculated into the Impact Fee as discussed earlier.

The second category is for Future Growth for new development. This category would be used for impact fee calculations. Some efforts have been made to determine when some increments of oversizing will be required which are shown in the individual cost estimate. All these projects are considered System Improvements.

The third is for Developer Base Cost. This is for projects that would be within new development areas, where the contractor would be responsible for a minimum 8" main as a Project Improvement, but the City would need a larger main as a System Improvement.

Table A-2 is used to assign a time frame and priority to the project for the next 10 years. This is done to help gauge the demand on funds and possible need of other sources. Efforts had been made to assign the projects to the time and location where the project may be needed. However, the priority for many of the projects may shift depending upon where development is occurring. Furthermore, most of the future growth will happen in new areas requiring oversized infrastructure to be extended to those areas necessitating many of these projects being built before the ERU's require them.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

There were 18 projects evaluated with this report. A summary of the costs of the projects is included in the summary table A-1 in Appendix A. The total cost of the projects is about \$14 Million.

Our recommendations are as follows:

1. The City should pursue a plan that will provide funding for these projects. This plan should include several possibilities including: Impact Fees adoption or updates, Grants, Loans and development agreements.
2. The City Council needs to be apprised often of these projects and their need. This may include an annual update while working on the budget.
3. The City needs to secure a financial consultant who can take this information from this study and calculate the legally acceptable impact fees that would then be adopted by the City.
4. We recommend that Woods Cross City share this plan with other adjacent Cities and Utilities within the Boundary in order to coordinate projects that may affect several entities. These include, but are not limited to: South Davis Sewer District, Weber Basin Secondary Water, UDOT, Davis County, West Bountiful, North Salt Lake and Bountiful, Gas, Phone, Power, and Internet.
5. We recommend that the City establish a fund for at least the purchase of Right-of-way as properties change hands over time, in accordance with this Master Plan
6. The City Attorney may need to confirm these recommendations and follow up with any additional recommendations.
7. We recommend that these projects and fees be reviewed at least every other year, to keep them current with City needs.



## **APPENDIX A – COST ESTIMATES**



Woods Cross City Corporation  
 Culinary Water  
 Impact Fee Facilities Plan  
 Revision Date: Dec 2, 2014



Table A-1

Project Number	Project Location	Project Description	Existing Deficiencies	IFFP New Development	Development Base Cost	Beyond IFFP Projects	Total Estimate Cost
CW-01	GAC Treatment Plant	Third GAC Train in the building				\$462,000	\$462,000
CW-02	1100 W-1500S to 600S	12" mainline		\$509,504			\$509,504
CW-03	1100 W to new Well	Transmission pipe from new well				\$81,016	\$81,016
CW-04	Well #6 below 1100W	Develop Well w/GAC treatment				\$3,517,800	\$3,517,800
CW-05	1050S from 1200 to 1450	Upsized Main		\$64,862	\$204,789		\$269,651
CW-06	1050S from 1450 to Redwd	Upsized Main		\$79,282	\$206,824		\$286,106
CW-07	2600S from 1300W to Rdwd	Upsized Main	\$378,428	\$231,940			\$610,368
CW-08	Redwood from 2600 to 2000	Upsized Main	\$295,632	\$181,194			\$476,825
CW-09	Redwood from 2000 to 1500	Upsized Main	\$180,888	\$110,867			\$291,754
CW-10	1500S Tank site	Construct New 1.5M gal tank				\$2,401,200	\$2,401,200
CW-11	Mt View Blvd near school	Upsized Main		\$72,528	\$189,203		\$261,731
CW-12	Mt View to 500 S	Upsized Main		\$100,064	\$261,035		\$361,099
CW-13	1800 W and 400 S	Upsized Main and crossing		\$111,349	\$430,891		\$542,240
CW-14	Well#7-1450 W and 500 S	Develop Well w/GAC treatment				\$3,517,800	\$3,517,800
CW-15	1900 South, 1425 W to 1300 W	Upsize Main for Future growth		\$173,640			\$173,640
CW-16	1500 South, 1250 W to 1100 W	Upsize Main for Future growth	\$124,332	\$76,203			\$200,535
CW-17	1450W-1000S to 500S	Install New 10" Waterline		\$24,634	\$149,189		\$173,823
CW-18	450S from Redwood to 1500W	Install New 10" Waterline		\$31,941	\$191,647		\$223,588
TOTAL ESTIMATES			\$979,279	\$1,768,008	\$1,633,577	\$9,979,816	<b>\$14,360,680</b>

Notes: "IFFP New Development" indicates System Improvements in the next 10 years. "Developer Base Cost" indicates projects improvements that may need oversizing for future development outside of the existing development. Some assumptions have been made on minimum pipe sizing, however, the developer must take care of their development inspite of these assumptions.

"Existing Deficiency" indicates System Improvements that are currently deficient, independent of any new growth.

"Beyond IFFP Projects" indicate System Improvements beyond the 10 year window.

**Woods Cross - Culinary Water IFFP**  
**Project Schedule**  
**Revision Date: Oct 13, 2014**



**Table A-2**

Proj#	Project Location	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Beyond
CW-01	GAC Treatment Plant						\$462,000					
CW-02	1100 W-1500S to 600S					\$509,504						
CW-03	1100 W to new Well										\$81,016	
CW-04	Well #6 below 1100W			\$99,000						\$3,418,800		
CW-05	1050S from 1200 to 1450								\$269,651			
CW-06	1050S from 1450 to Redwd				\$286,106							
CW-07	2600S from 1300W to Rdwd	\$610,368										
CW-08	Redwood from 2600 to 2000							\$476,825				
CW-09	Redwood from 2000 to 1500				\$291,754							
CW-10	1500S Tank site											\$2,401,200
CW-11	Mt View Blvd near school			\$261,731								
CW-12	Mt View to 500 S			\$361,099								
CW-13	1800 W and 400 S		\$542,240									
CW-14	Well#7-1450 W and 500 S					\$99,000						\$3,418,800
CW-15	1900 South, 1425 W to 1300 W								\$173,640			
CW-16	1500 South, 1250 W to 1100 W					\$200,535						
CW-17	1450W-1000S to 500S						\$173,823					
CW-18	450S from Redwood to 1500W				\$223,588							
	TOTAL	\$610,368	\$542,240	\$721,830	\$801,448	\$809,039	\$635,823	\$476,825	\$443,291	\$3,418,800	\$81,016	\$5,820,000

TOTAL ALL PROJECTS \$14,360,680

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-01  
**Location:** GAC Treatment Plant  
**Description:** Third GAC Train in the building

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	Additional train of GACAS tanks (1000gpm)		1	LS	\$350,000.00	\$350,000.00

Subtotal	\$350,000.00
25% Contingency	\$87,500.00
7% Engineering	\$24,500.00

<b>Total Estimate Cost</b>	<b>\$462,000.00</b>
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**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-02  
**Location:** 1100 W-1500S to 600S  
**Description:** 12" Main Line

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	814	745	LF	\$83.00	\$61,835.00
2	12" Main Line	816	416	LF	\$83.00	\$34,528.00
3	12" Main Line	819	403	LF	\$83.00	\$33,449.00
4	12" Main Line	301	1261.75	LF	\$83.00	\$104,725.25
5	12" Main Line	P561	321.21	LF	\$83.00	\$26,660.43
6	6" Connection		1	EA	\$3,500.00	\$3,500.00
7	8" Connection		2	EA	\$4,000.00	\$8,000.00
8	Asphalt Replacement		25175.68	SF	\$4.00	\$100,702.72
9	Sawcut Asphalt		12587.84	SF	\$1.00	\$12,587.84

Subtotal	\$385,988.24
25% Contingency	\$96,497.06
7% Engineering	\$27,019.18

<b>Total Estimate Cost</b>	<b>\$509,504.48</b>
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**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-03  
**Location:** 1100 W to new Well  
**Description:** Transmission pipe from new well

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	Upsizing 8" to 12" Pipes	555	712	LF	\$23.00	\$16,376.00
2	12" PRV Station		1	LS	\$45,000.00	\$45,000.00
Subtotal						\$61,376.00
25% Contingency						\$15,344.00
7% Engineering						\$4,296.32
<b>Total Estimate Cost</b>						<b>\$81,016.32</b>

Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-04  
 Location: Well #6 below 1100W  
 Description: Develop Well w/GAC treatment

Item	Description	Quantity	Units	Price	Cost
1	Well site property	1.5	Ac	\$50,000.00	\$75,000.00
2	Engineering for DWSP and Waterrights	1	LS	\$50,000.00	\$50,000.00
3	Well Drilling 100gpm 300' deep; 16" dia.	1	LS	\$250,000.00	\$250,000.00
4	Pump House/Treatment building	4500	SF	\$368.00	\$1,656,000.00
5	Well pump 1000gpm 250Hd	1	LS	\$154,000.00	\$154,000.00
6	GACAS train 1000 gpm	1	LS	\$350,000.00	\$350,000.00
7	Sodium Hypochlorite 1000gpm	1	LS	\$130,000.00	\$130,000.00

Subtotal	\$2,665,000.00
25% Contingency	\$666,250.00
7% Engineering	\$186,550.00

Total Estimate Cost	\$3,517,800.00
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1	Property portion from above	1.5	Ac	\$50,000.00	\$75,000.00
				32% Contingency & Engr	\$24,000.00
				Total	\$99,000.00
				Remainder Portion (less Prpty)	\$3,418,800.00

Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-05  
 Location: 1050S from 1200 to 1450  
 Description: Upsized Main

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P591	802.95	LF	\$83.00	\$66,644.85
2	12" Main Line	P589	1116.1	LF	\$83.00	\$92,636.30
3	12" PRV Station		1	LS	\$45,000.00	\$45,000.00
Subtotal						\$204,281.15
25% Contingency						\$51,070.29
7% Engineering						\$14,299.68
Total Project Cost						\$269,651.12

Developer's Base Cost

1	8" Main line	P591	802.95	LF	\$60.00	\$48,177.00
2	8" Main line	P589	1116.1	LF	\$60.00	\$66,966.00
3	8" PRV Station		1	LS	\$40,000.00	\$40,000.00
Subtotal						\$155,143.00
25% Contingency						\$38,785.75
7% Engineering						\$10,860.01
Total Estimate Cost						\$204,788.76

Difference (New Development Cost)	\$64,862.36
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Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-06  
 Location: 1050S from 1450 to Redwd  
 Description: Upsized Main

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P635	415.18	LF	\$83.00	\$34,459.94
2	12" Main Line	P633	473.11	LF	\$83.00	\$39,268.13
3	12" Main Line	P631	646.72	LF	\$83.00	\$53,677.76
4	12" Main Line	P629	516.49	LF	\$83.00	\$42,868.67
5	12" Main Line	P627	559.91	LF	\$83.00	\$46,472.53
Subtotal						\$216,747.03
25% Contingency						\$54,186.76
7% Engineering						\$15,172.29
Total Project Cost						\$286,106.08

Developer Base Cost

1	8" Main Line	P635	415.18	LF	\$60.00	\$24,910.80
2	8" Main Line	P633	473.11	LF	\$60.00	\$28,386.60
3	8" Main Line	P631	646.72	LF	\$60.00	\$38,803.20
4	8" Main Line	P629	516.49	LF	\$60.00	\$30,989.40
5	8" Main Line	P627	559.91	LF	\$60.00	\$33,594.60
Subtotal						\$156,684.60
25% Contingency						\$39,171.15
7% Engineering						\$10,967.92
Total Estimate Cost						\$206,823.67

Difference (New Development Cost)	\$79,282.41
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**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-07  
**Location:** 2600S from 1300W to Rdwd  
**Description:** Upsized Main

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	10" Main Line	1605	731.28	LF	\$70.00	\$51,189.60
2	10" Main Line	P671	327.81	LF	\$70.00	\$22,946.70
3	10" Main Line	1601	894	LF	\$70.00	\$62,580.00
4	10" Main Line	33	370.51	LF	\$70.00	\$25,935.70
5	10" Main Line	37	555.25	LF	\$70.00	\$38,867.50
6	10" Main Line	1701	1091.33	LF	\$70.00	\$76,393.10
7	10" Main Line	P735	268.23	LF	\$70.00	\$18,776.10
8	10" Main Line	P737	372.21	LF	\$70.00	\$26,054.70
9	Asphalt Replacement		31034.72	SF	\$4.00	\$124,138.88
10	Sawcut Asphalt		15517.36	SF	\$1.00	\$15,517.36
Subtotal						\$462,399.64
25% Contingency						\$115,599.91
7% Engineering						\$32,367.97
Total Project Cost						\$610,367.52

Note: The computer model shows the exiting pipes adequate for current demand. Additional upsize is for both future growth. The replace portion of the old line is based on the population percent of at-capacity growth:

% of Capacity: 62%	Existing Deficiency Cost	\$378,427.87
	New Development Cost	\$231,939.66

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-08  
**Location:** Redwood from 2600 to 2000  
**Description:** 12 Main Line

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P159	274.93	LF	\$83.00	\$22,819.19
2	12" Main Line	P157	663.02	LF	\$83.00	\$55,030.66
3	12" Main Line	P155	283.94	LF	\$83.00	\$23,567.02
4	12" Main Line	P471	180.49	LF	\$83.00	\$14,980.67
5	12" Main Line	P153	737.99	LF	\$83.00	\$61,253.17
6	12" Main Line	P315	327.46	LF	\$83.00	\$27,179.18
7	12" Main Line		956	LF	\$83.00	\$79,348.00
8	Asphalt Replacement		17122.96	SF	\$4.00	\$68,491.84
9	Sawcut Asphalt		8561.48	SF	\$1.00	\$8,561.48
<b>Subtotal</b>						<b>\$361,231.21</b>
25% Contingency						\$90,307.80
7% Engineering						\$25,286.18
<b>Total Estimate Cost</b>						<b>\$476,825.20</b>

Note: The computer model shows the exiting pipes adequate for current demand. Additional upside is for both future growth. The replace portion of the old line is based on the population percent of at-capacity growth:

% of Capacity: 62%	Existing Deficiency Cost	\$295,631.62
	New Development Cost	\$181,193.57

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-09  
**Location:** Redwood from 2000 to 1500  
**Description:** 12" Main Line

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P151	584.25	LF	\$83.00	\$48,492.75
2	12" Main Line	P149	673.11	LF	\$83.00	\$55,868.13
3	12" Main Line	P147	600	LF	\$83.00	\$49,800.00
4	Asphalt Replacement		14858.88	SF	\$4.00	\$59,435.52
5	Sawcut Asphalt		7429.44	SF	\$1.00	\$7,429.44
<b>Subtotal</b>						<b>\$221,025.84</b>
<b>25% Contingency</b>						<b>\$55,256.46</b>
<b>7% Engineering</b>						<b>\$15,471.81</b>
<b>Total Estimate Cost</b>						<b>\$291,754.11</b>

Note: The computer model shows the exiting pipes adequate for current demand. Additional upsize is for both future growth. The replace portion of the old line is based on the population percent of at-capacity growth:

% of Capacity: 62%	Existing Deficiency Cost	\$180,887.55
	New Development Cost	\$110,866.56

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-10  
**Location:** 1500S Tank site  
**Description:** Construct New 1.5M gal tank

Item	Description	Quantity	Units	Price	Cost
1	Demolition of two 500k existing tanks	1	LS	\$30,000.00	\$30,000.00
2	Construct 1.5Mgal Rectangular Tank	1500000	gal	\$1.14	\$1,710,000.00
3					
4					
5					
6					
7					
Subtotal					\$1,740,000.00
25% Contingency					\$435,000.00
13% Engineering					\$226,200.00
Total Estimate Cost					\$2,401,200.00

Note: The computer model shows the exiting pipes adequate for current demand. Additional upsize is for both future growth. The replace portion of the old line is based on the population percent of at-capacity growth:

% of Capacity: 62%	Existing Deficiency Cost	\$1,488,744.00
	New Development Cost	\$912,456.00

Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-11  
 Location: Mt View Blvd near school  
 Description: Upsized Main

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P181	805.78	LF	\$83.00	\$66,879.74
2	12" Main Line	P467	333.54	LF	\$83.00	\$27,683.82
3	12" Main Line	P479	341.57	LF	\$83.00	\$28,350.31
4	12" Main Line	P183	626.28	LF	\$83.00	\$51,981.24
5	12" Main Line	P481	281.76	LF	\$83.00	\$23,386.08
Subtotal						\$198,281.19
25% Contingency						\$49,570.30
7% Engineering						\$13,879.68
Total Estimate Cost						\$261,731.17

Development Base Cost

1	8" Main Line	P181	805.78	LF	\$60.00	\$48,346.80
2	8" Main Line	P467	333.54	LF	\$60.00	\$20,012.40
3	8" Main Line	P479	341.57	LF	\$60.00	\$20,494.20
4	8" Main Line	P183	626.28	LF	\$60.00	\$37,576.80
5	8" Main Line	P481	281.76	LF	\$60.00	\$16,905.60
Subtotal						\$143,335.80
25% Contingency						\$35,833.95
7% Engineering						\$10,033.51
Total Estimate Cost						\$189,203.26

Difference (New Development Cost)	\$72,527.91
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Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-12  
 Location: Mt View to 500 S  
 Description: Upsized Main

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P707	352.84	LF	\$83.00	\$29,285.72
2	12" Main Line	P711	604.17	LF	\$83.00	\$50,146.11
3	12" Main Line	P713	1322.39	LF	\$83.00	\$109,758.37
4	12" Main Line	P717	704.84	LF	\$83.00	\$58,501.72
5	12" Main Line	P279	311.66	LF	\$83.00	\$25,867.78
Subtotal						\$273,559.70
25% Contingency						\$68,389.93
7% Engineering						\$19,149.18
Total Project Cost						\$361,098.80

Developer Base Cost

1	8" Main Line	P707	352.84	LF	\$60.00	\$21,170.40
2	8" Main Line	P711	604.17	LF	\$60.00	\$36,250.20
3	8" Main Line	P713	1322.39	LF	\$60.00	\$79,343.40
4	8" Main Line	P717	704.84	LF	\$60.00	\$42,290.40
5	8" Main Line	P279	311.66	LF	\$60.00	\$18,699.60
Subtotal						\$197,754.00
25% Contingency						\$49,438.50
7% Engineering						\$13,842.78
Total Estimate Cost						\$261,035.28

Difference (New Development Cost)	\$100,063.52
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Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-13  
 Location: 1800 W and 400 S  
 Description: Upsized Main and crossing

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	10" Main Line	P219	1185.06	LF	\$70.00	\$82,954.20
2	10" Main Line	P731	1003.58	LF	\$70.00	\$70,250.60
3	12" Main Line	P283	1356.88	LF	\$83.00	\$112,621.04
4	12" Main Line	P223	620.02	LF	\$83.00	\$51,461.66
5	Boring		170	LF	\$550.00	\$93,500.00
Subtotal						\$410,787.50
25% Contingency						\$102,696.88
7% Engineering						\$28,755.13
Total Project Cost						<b>\$542,239.50</b>

Developer Base Cost

1	8" Main Line	P219	1185.06	LF	\$60.00	\$71,103.60
2	8" Main Line	P731	1003.58	LF	\$60.00	\$60,214.80
3	8" Main Line	P283	1356.88	LF	\$60.00	\$81,412.80
4	8" Main Line	P223	620.02	LF	\$60.00	\$37,201.20
5	Boring		170	LF	\$450.00	\$76,500.00
Subtotal						\$326,432.40
25% Contingency						\$81,608.10
7% Engineering						\$22,850.27
Total Estimate Cost						<b>\$430,890.77</b>

Difference (New Development Cost)	<b>\$111,348.73</b>
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Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-14  
 Location: Well#7-1450 W and 500 S  
 Description: Develop Well w/GAC treatment

Item	Description	Quantity	Units	Price	Cost
1	Well site property	1.5	Ac	\$50,000.00	\$75,000.00
2	Engineering for DWSP and Waterrights	1	LS	\$50,000.00	\$50,000.00
3	Well Drilling 100gpm 300' deep; 16" dia.	1	LS	\$250,000.00	\$250,000.00
4	Pump House/Treatment building	4500	SF	\$368.00	\$1,656,000.00
5	Well pump 1000gpm 250Hd	1	LS	\$154,000.00	\$154,000.00
6	GACAS train 1000 gpm	1	LS	\$350,000.00	\$350,000.00
7	Sodium Hypochlorite 1000gpm	1	LS	\$130,000.00	\$130,000.00
Subtotal					\$2,665,000.00
25% Contingency					\$666,250.00
7% Engineering					\$186,550.00
<b>Total Estimate Cost</b>					<b>\$3,517,800.00</b>

1	Property portion from above	1.5	Ac	\$50,000.00	\$75,000.00
32% Contingency & Engr					\$24,000.00
Total					\$99,000.00
Remainder Portion (less Prpty)					\$3,418,800.00



**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-15  
**Location:** 1900 South, 1425 W to 1300 W  
**Description:** 8" Main Line

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	8" Main Line	1201	953.6	LF	\$60.00	\$57,216.00
2	8" PRV Station		1	LS	\$40,000.00	\$40,000.00
3	Asphalt Replacement		7628.8	SF	\$4.00	\$30,515.20
4	Sawcut Asphalt		3814.4	SF	\$1.00	\$3,814.40
<b>Subtotal</b>						<b>\$131,545.60</b>
25% Contingency						\$32,886.40
7% Engineering						\$9,208.19
<b>Total Estimate Cost</b>						<b>\$173,640.19</b>

Woods Cross City Corporation  
 Impact Fee Facilities Plan - Culinary Water  
 Estimate of Probable Cost  
 Revision Date: Dec 2, 2014



Proj #: CW-16  
 Location: 1500 South, 1250 W to 1100 W  
 Description: 12" Main Line

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	12" Main Line	P129	404	LF	\$83.00	\$33,532.00
2	12" Main Line	P127	111.75	LF	\$83.00	\$9,275.25
3	12" Main Line	60810D	1	LF	\$83.00	\$83.00
4	12" Main Line	60810U	1	LF	\$83.00	\$83.00
5	12" Main Line	247	115.25	LF	\$83.00	\$9,565.75
6	12" Main Line	811	263	LF	\$83.00	\$21,829.00
7	12" Main Line	822	236	LF	\$83.00	\$19,588.00
8	12" PRV Station		1	LS	\$45,000.00	\$45,000.00
8	Asphalt Replacement		1888	SF	\$4.00	\$7,552.00
9	Sawcut Asphalt		944	SF	\$1.00	\$944.00
Subtotal						\$147,452.00
25% Contingency						\$36,863.00
4% Buy America						\$5,898.08
7% Engineering						\$10,321.64
Total Estimate Cost						\$200,534.72

Note: The computer model shows the exiting pipes adequate for current demand. Additional upsize is for both future growth. The replace portion of the old line is based on the population percent of at-capacity growth:

% of Capacity: 62%	Existing Deficiency Cost	\$124,331.53
	New Development Cost	\$76,203.19

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-17  
**Location:** 1450W-1000S to 500S  
**Description:** Install New 10" Waterline

Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	10" Main Line	203	15	LF	\$70.00	\$1,050.00
2	10" Main Line	325	312.28	LF	\$70.00	\$21,859.60
3	10" Main Line	P555	316.84	LF	\$70.00	\$22,178.80
4	10" Main Line	P553	316.87	LF	\$70.00	\$22,180.90
5	10" Main Line	P547	325.52	LF	\$70.00	\$22,786.40
6	10" Main Line	P551	313.39	LF	\$70.00	\$21,937.30
7	10" Main Line	P557	281.3	LF	\$70.00	\$19,691.00
<b>Subtotal</b>						<b>\$131,684.00</b>
<b>25% Contingency</b>						<b>\$32,921.00</b>
<b>7% Engineering</b>						<b>\$9,217.88</b>
<b>Total Estimate Cost</b>						<b>\$173,822.88</b>

**Developer Base Cost**

1	10" Main Line	203	15	LF	\$70.00	\$1,050.00
2	8" Main Line	325	312.28	LF	\$60.00	\$18,736.80
3	8" Main Line	P555	316.84	LF	\$60.00	\$19,010.40
4	8" Main Line	P553	316.87	LF	\$60.00	\$19,012.20
5	8" Main Line	P547	325.52	LF	\$60.00	\$19,531.20
6	8" Main Line	P551	313.39	LF	\$60.00	\$18,803.40
7	8" Main Line	P557	281.3	LF	\$60.00	\$16,878.00
<b>Subtotal</b>						<b>\$113,022.00</b>
<b>25% Contingency</b>						<b>\$28,255.50</b>
<b>7% Engineering</b>						<b>\$7,911.54</b>
<b>Total Estimate Cost</b>						<b>\$149,189.04</b>

<b>Difference (New Development Cost)</b>	<b>\$24,633.84</b>
--	--------------------

**Woods Cross City Corporation**  
**Impact Fee Facilities Plan - Culinary Water**  
**Estimate of Probable Cost**  
**Revision Date: Dec 2, 2014**



**Proj #:** CW-18  
**Location:** 450S from Redwood to 1500W  
**Description:** Install New 10" Waterline

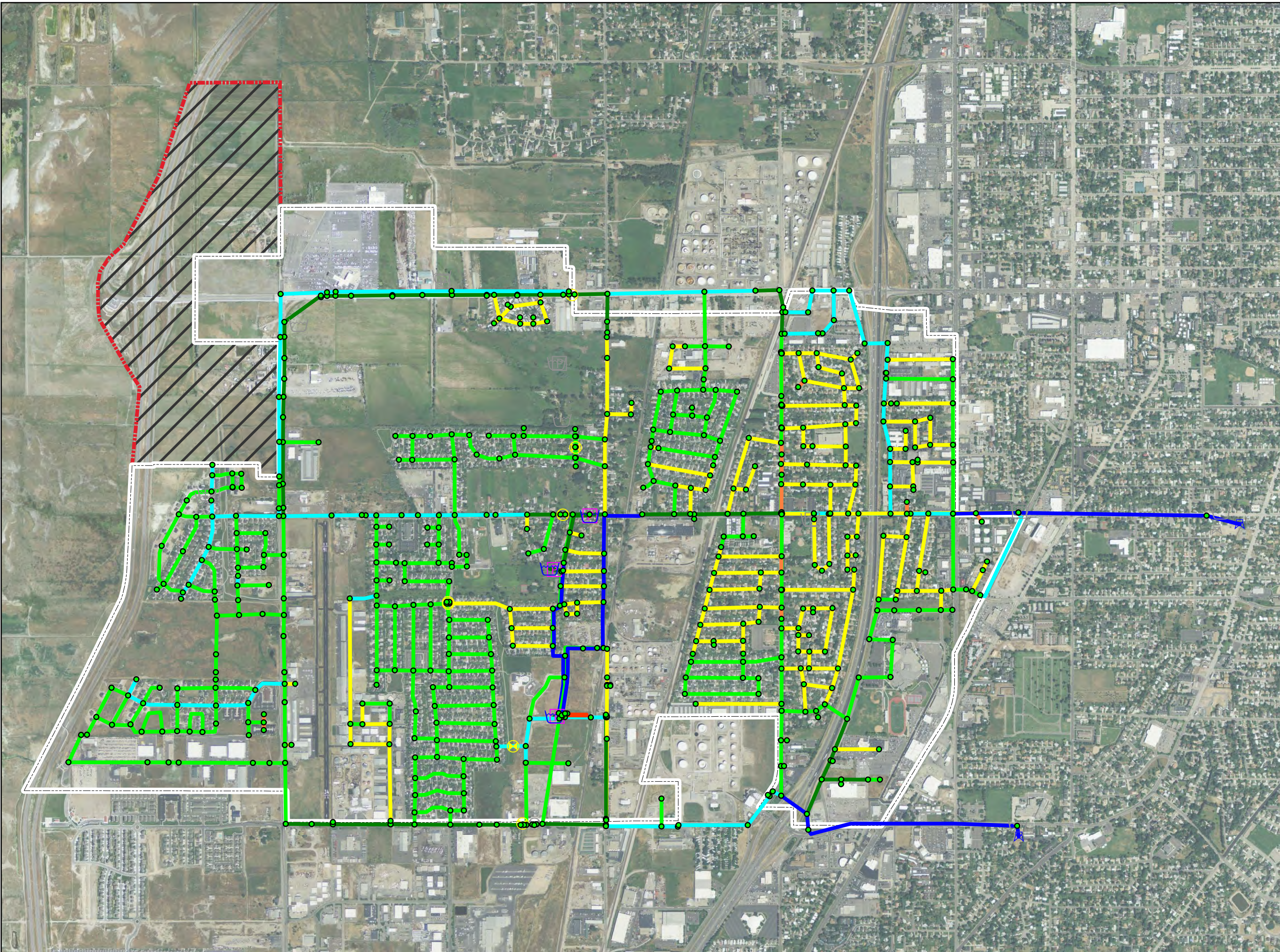
Item	Description	Pipe ID	Quantity	Units	Price	Cost
1	10" Main Line	P217	683.3	LF	\$70.00	\$47,831.00
2	10" Main Line	P879	1736.48	LF	\$70.00	\$121,553.60
<b>Subtotal</b>						<b>\$169,384.60</b>
25% Contingency						\$42,346.15
7% Engineering						\$11,856.92
<b>Total Project Cost</b>						<b>\$223,587.67</b>

**Developer Base Cost**

1	8" Main Line	P217	683.3	LF	\$60.00	\$40,998.00
2	8" Main Line	P879	1736.48	LF	\$60.00	\$104,188.80
<b>Subtotal</b>						<b>\$145,186.80</b>
25% Contingency						\$36,296.70
7% Engineering						\$10,163.08
<b>Total Estimate Cost</b>						<b>\$191,646.58</b>

<b>Difference (New Development Cost)</b>	<b>\$31,941.10</b>
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## **APPENDIX B – FIGURES**



# WOODS CROSS CITY

CULINARY WATER  
EXISTING PIPE SYSTEM  
FIGURE I

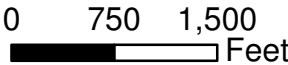
**Legend**

**RUN\_DIAM**

- 2.00
- 4.00
- 6.00
- 8.00
- 10.00
- 12.00
- 16.00
- 18.00
- 36.00
- City Limits
- Future\_Growth



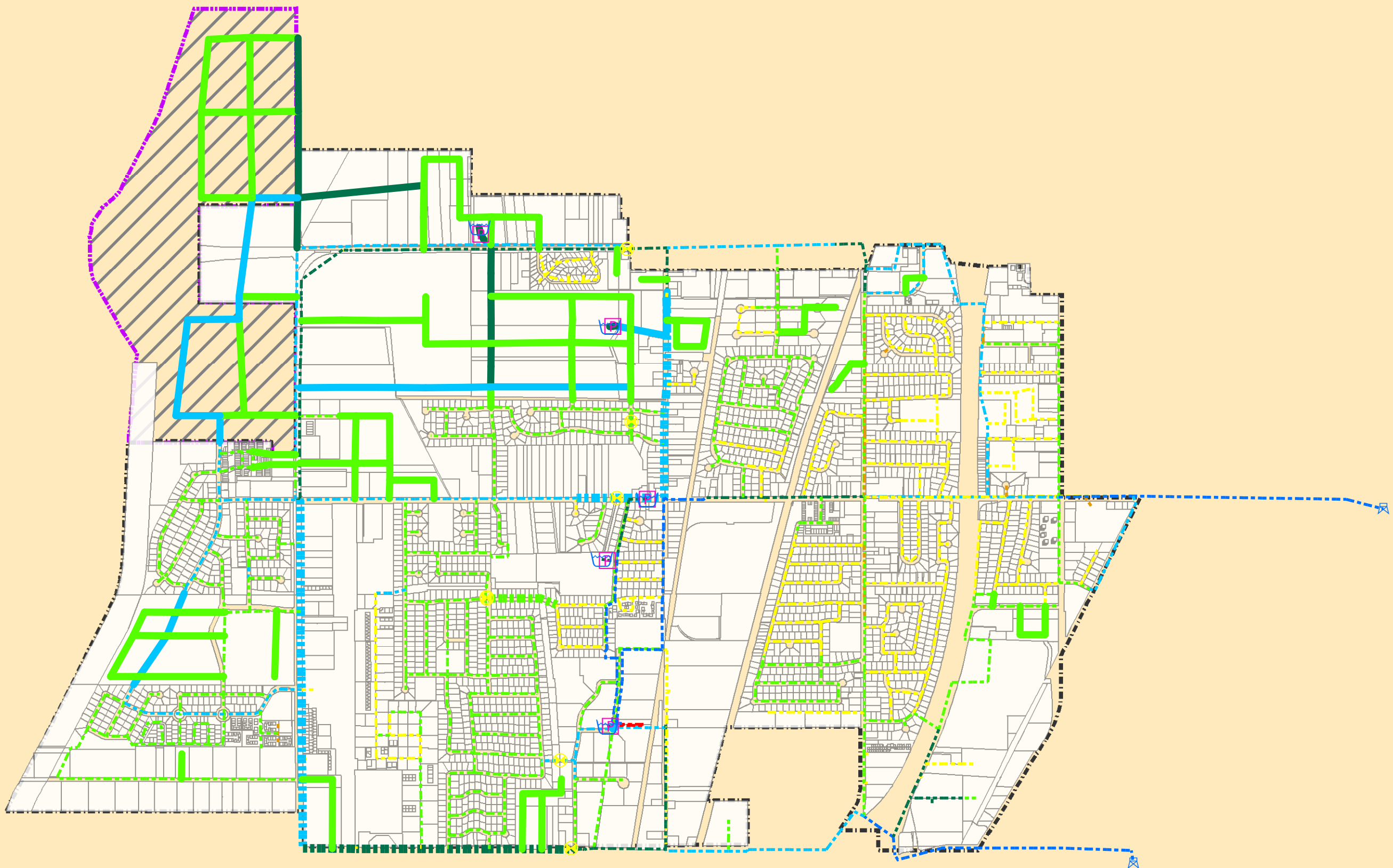
J-U-B ENGINEERS, INC.





# WOODS CROSS CITY

## CULINARY WATER FUTURE PIPE SYSTEM FIGURE II



**Legend**

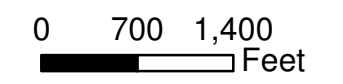
**DIAMETER**

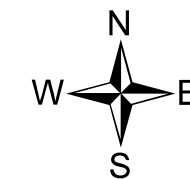
- EXISTING 2"
- EXISTING 4"
- EXISTING 6"
- EXISTING 8"
- EXISTING 10"
- EXISTING 12"
- EXISTING 16"
- EXISTING 36"
- EXISTING UPSIZE TO 8"
- EXISTING UPSIZE TO 10"
- EXISTING UPSIZE TO 12"
- FUTURE 8"
- FUTURE 10"
- FUTURE 12"

Future\_Growth  
City Limits  
County\_Parcels  
PUMP  
WELL  
TANK  
PRV

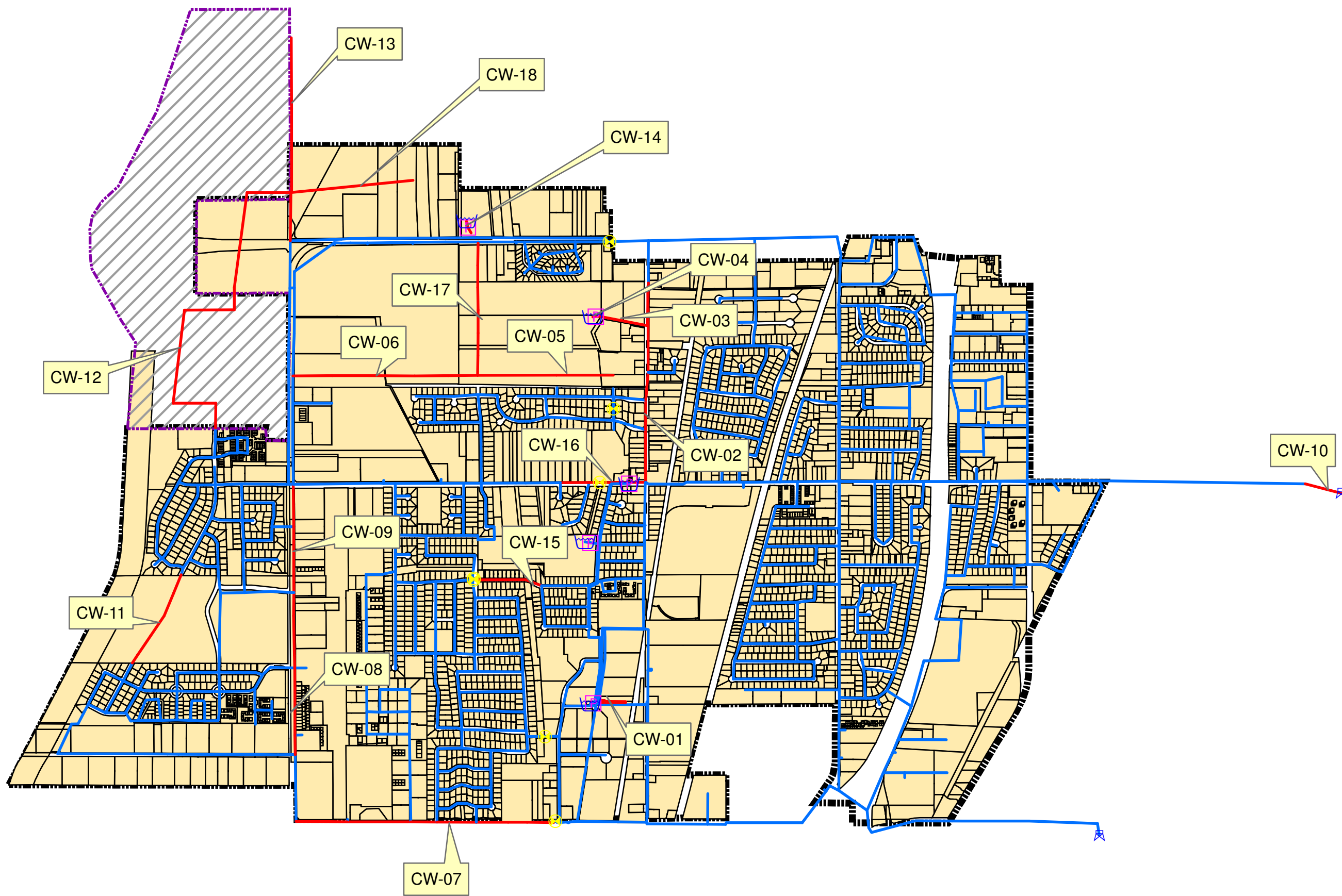


J-U-B ENGINEERS, INC.





# WOODS CROSS CITY



**Legend**

**Pipe**

- FUTURE PROJECTS (Red line)
- EXISTING (Blue line)

Future\_Growth (Purple hatched area)

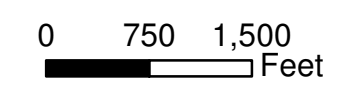
City Limits (Dashed black line)

County\_Parcel (Yellow area)

CULINARY WATER  
CAPITAL FACILITIES PLAN  
FIGURE III



J-U-B ENGINEERS, INC.



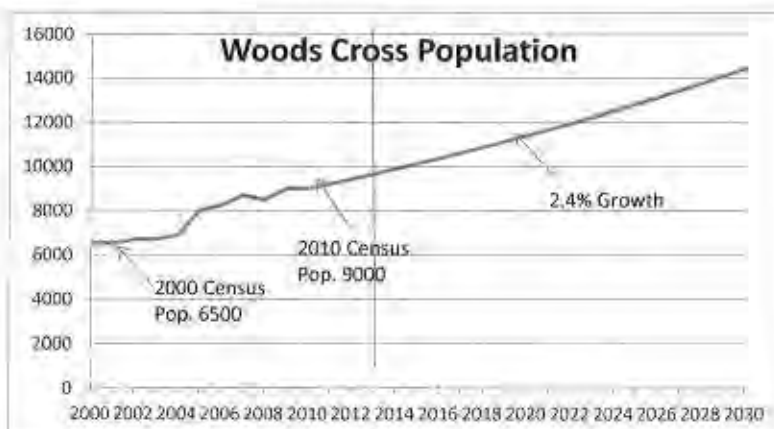


## **APPENDIX C – DATA/DOCUMENTATION**

Woods Cross City  
 Water Impact Fee Facilities Plan  
 Growth Projections  
 Revision Date: Dec 2013

TABLE C1

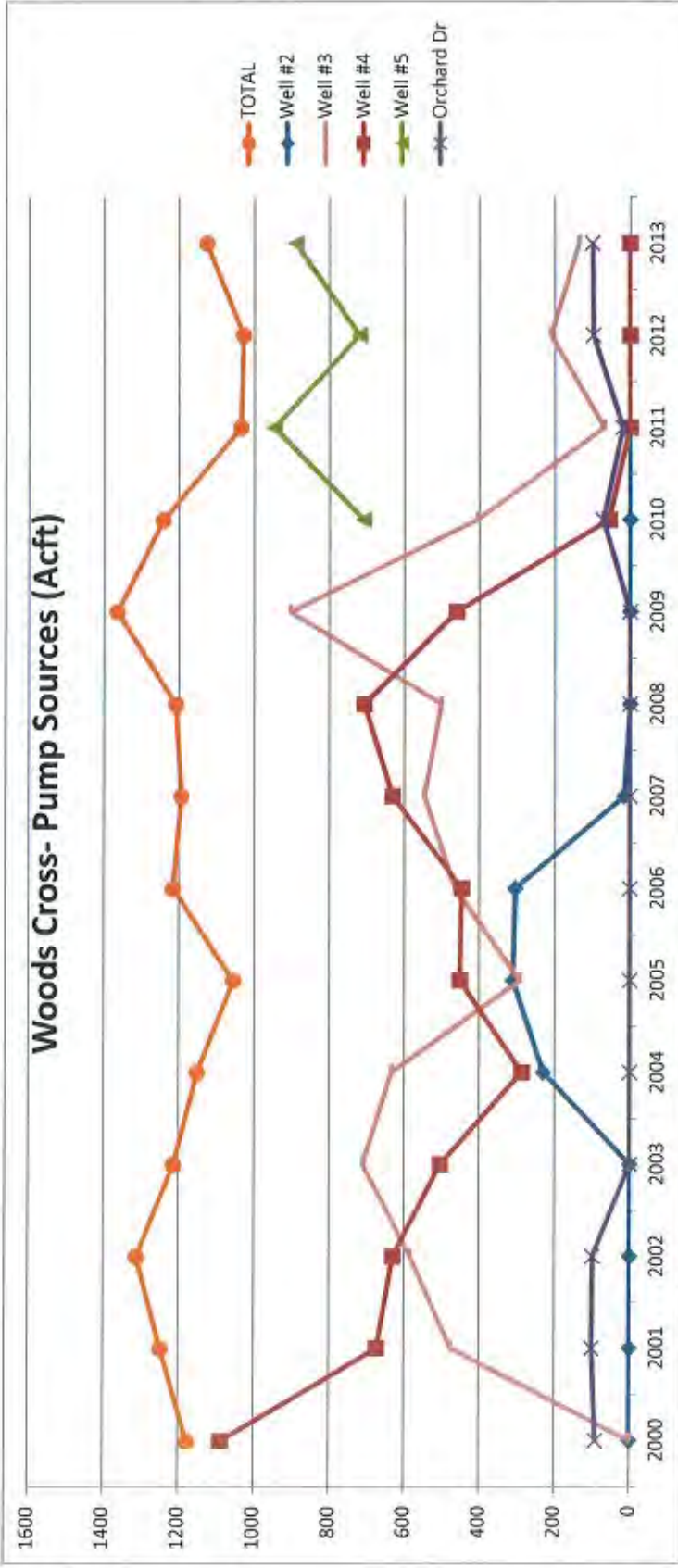
Future Growth Rate		Population	Connections	ERUs
2.4%	2000	6500	1953	2974
Connects to ERU ratio 1.523	2001	6500	2158	3287
	2002	6700	2363	3599
	2003	6700	2575	3922
	2004	6900	3085	4698
	2005	8000	2600	3960
	2006	8250	2652	4039
	2007	8700	2672	4069
	2008	8500	3198	4710
	2009	9000	3188	4619
	Census:	2010	9,000	3240
2011		9,216	3375	4858
2012		9,437	3415	5439
2013		9,664	3502	5393
2014		9,896	3586	5462
2015		10,133	3672	5593
2016		10,376	3760	5727
2017		10,625	3850	5864
2018		10,880	3943	6005
2019		11,141	4038	6149
2020	11,409	4134	6297	
2021	11,683	4234	6448	
2022	11,963	4335	6603	
2023	12,250	4439	6761	
2024	12,544	4546	6923	
2025	12,845	4655	7089	
2026	13,154	4767	7260	
2027	13,469	4881	7434	
2028	13,792	4998	7612	
2029	14,123	5118	7795	
2030	14,462	5241	7982	
2031	14,810	5367	8174	
2032	15,165	5496	8370	
2033	15,529	5627	8571	
2034	15,902	5763	8776	
2035	16,283	5901	8987	
2036	16,674	6042	9203	
2037	17,074	6187	9424	
2038	17,484	6336	9650	
2039	17,904	6488	9881	
2040	18,333	6644	10118	



Woods Cross City  
 Water Impact Fee Facilities Plan  
 Source Projections  
 Revision Date: Dec 2013

TABLE C2

Sources (Acft)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	ACFT Contract	ACFT Pump	Capacity
Well #2	0	0	0	0	230.62	311.15	304.9	15.71	0	0	0	0	0	0	0	0	1612
Well #3	0	474.92	583.88	710.39	633.75	291.99	463.87	546.2	501.38	903.92	404.37	68.86	210.54	135.7			
Well #4	1087.58	672.84	629.53	503.34	286.43	451.94	446.84	630.98	706.75	459.98	55.95	0	0	0	0	0	2798
Well #5										708.92	947.51	720.52	890.9				1612
Orchard Dr	89.95	100.27	98.62	0	0	0	0	0	0	0	72.28	19.4	98	100.1	100		
W.B. Mete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTAL</b>	<b>1177.53</b>	<b>1248.03</b>	<b>1312.03</b>	<b>1213.73</b>	<b>1150.8</b>	<b>1055.08</b>	<b>1215.61</b>	<b>1192.89</b>	<b>1208.13</b>	<b>1363.9</b>	<b>1241.5</b>	<b>1035.8</b>	<b>1029.1</b>	<b>1126.7</b>	<b>100</b>	<b>100</b>	<b>6022</b>



Woods Cross City  
 Water Impact Fee Facilities Plan  
 Water Source Projections  
 Revision Date: Dec 2013

TABLE C3

Source Req'd/ ERU ratio	400 gpd 1.523	Connectio	ERUs	Acre-Ft Source Ret	GPM Source Ret	gal/yr Pumped	Peak Day GPM Source Act	Peak Day GPM Avg*PF=	Z Contract	Acre-Ft Well Capty	Available Usable Pk	Usable Available		
												Total Pk So	Available GAC Capty gpm	
2000			1953	2974	1332.624	826.2275	383725000	730.070	1460.141	100	4410	4510	1628	
2001			2158	3287	1472.505	912.9539	406700000	773.782	1542.565	100	4410	4510	1628	
2002			2363	3599	1612.386	999.6803	427553000	813.457	1626.914	100	4410	4510	1628	
2003			2575	3922	1757.043	1089.368	395521000	752.513	1505.027	100	4410	4510	1628	
2004			3085	4698	2105.04	1305.126	375015000	713.499	1426.998	100	4410	4510	1628	
2005			2600	3960	1774.102	1099.944	343820431	654.148	1308.297	100	4410	4510	1628	
2006			2652	4039	1809.584	1121.943	396110000	753.634	1507.268	100	4410	4510	1628	
2007			2672	4069	1823.231	1130.404	395591000	752.646	1505.293	100	4410	4510	1628	
2008			3198	4710	2110.213	1308.333	352969000	671.554	1343.109	100	4410	4510	1628	
2009			3188	4619	2069.442	1283.056	387716000	737.664	1475.327	100	6022	6122	1961.33	
2010			3240	4663	2089.155	1295.278	356240291	677.778	1355.557	100	6022	6122	1961.33	
2011			3375	4858	2176.521	1349.444	337515000	642.152	1284.304	100	6022	6122	1961.33	
2012			3416	5439	2436.825	1510.833	379991127	722.966	1445.933	100	6022	6122	1961.33	
2013			3502	5393	2416.216	1498.056	356357000	678.000	1356.001	100	6022	6122	1961.33	
2014			3586.048	5462	2446.929	1517.098				100	6022	6122	1961.33	2000
2015			3672.113	5593	2505.655	1553.508				100	6022	6122	1961.33	2000
2016			3760.244	5727	2565.791	1590.792				100	6022	6122	1961.33	2000
2017			3850.49	5864	2627.37	1628.971				100	6022	6122	1961.33	2000
2018			3942.901	6005	2690.427	1668.066				100	6022	6122	1961.33	2000
2019			4037.531	6149	2754.997	1708.1				100	6022	6122	1961.33	2000
2020			4134.432	6297	2821.117	1749.094				100	6022	6122	1961.33	2000
2021			4233.658	6448	2888.824	1791.073				100	6022	6122	1961.33	2000
2022			4335.266	6603	2958.155	1834.058				100	6022	6122	1961.33	2000
2023			4439.312	6761	3029.151	1878.076				100	6022	6122	2711.33	3000
2024			4545.856	6923	3101.851	1923.15				100	6022	6122	2711.33	3000
2025			4654.956	7089	3176.295	1969.305				100	6022	6122	2711.33	3000
2026			4766.675	7260	3252.526	2016.569				100	6022	6122	2711.33	3000
2027			4881.076	7434	3330.587	2064.966				100	6022	6122	2711.33	3000
2028			4998.221	7612	3410.521	2114.525				100	6022	6122	2711.33	3000
2029			5118.179	7795	3492.373	2165.274				100	6022	6122	2711.33	3000
2030			5241.015	7982	3576.19	2217.241				100	6022	6122	2711.33	3000
2031			5366.799	8174	3662.019	2270.454				100	6022	6122	2711.33	3000
2032			5495.603	8370	3749.907	2324.945				100	6022	6122	2711.33	3000
2033			5627.497	8571	3839.905	2380.744				100	6022	6122	2711.33	3000
2034			5762.557	8776	3932.063	2437.882				100	6022	6122	2711.33	3000
2035			5900.858	8987	4026.432	2496.391				100	6022	6122	2711.33	3000
2036			6042.479	9203	4123.067	2556.304				100	6022	6122	2711.33	3000
2037			6187.498	9424	4222.02	2617.656				100	6022	6122	2711.33	3000
2038			6335.998	9650	4323.349	2680.479				100	6022	6122	2711.33	3000
2039			6488.062	9881	4427.109	2744.811				100	6022	6122	2711.33	3000
2040			6643.776	10118	4533.36	2810.686				100	6022	6122	2711.33	3000

Woods Cross City  
 Water Impact Fee Facilities Plan  
 Storage (Gallons)  
 Revision Date: Dec 2013

TABLE C4

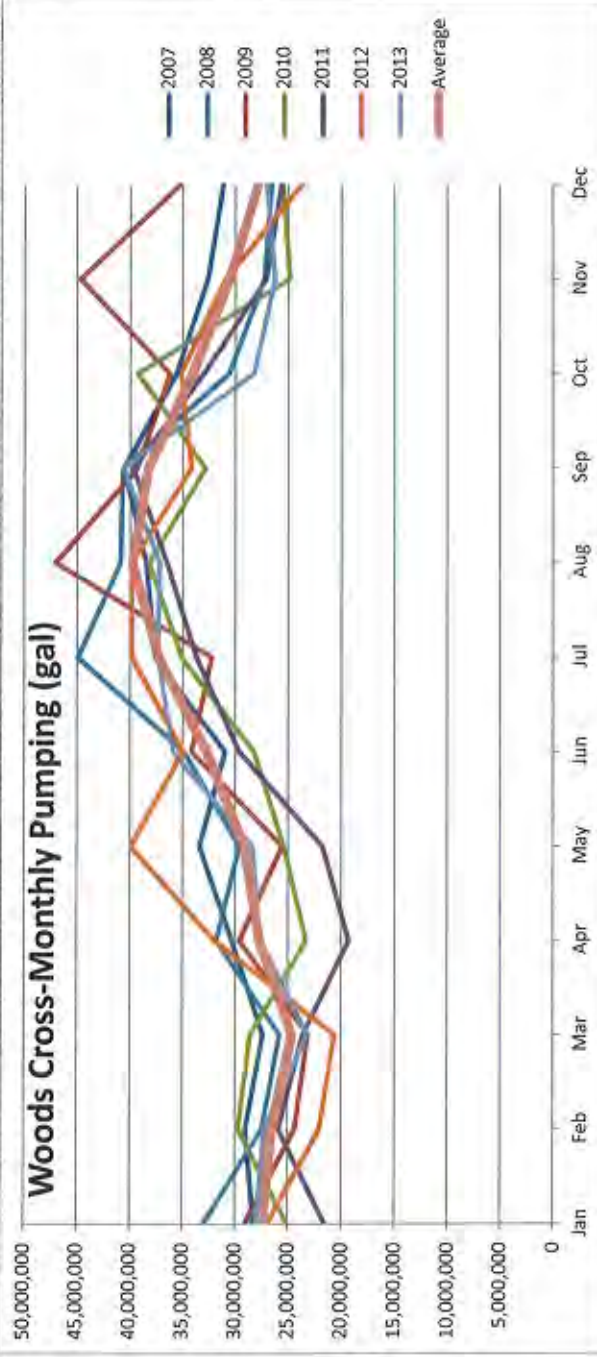
Indoor Storage: 400 gpd/ERU  
 Fire Storage: 3.5kgpm/3hrs

	Connector ERUs		(Indoor reqrd)			Total Reqd	Actual Stora
			Equilization	Fire Suppressi	Emergency		
2000	1953	2974	1,189,768	630,000	1,000,000	2,819,768	3,900,000
2001	2158	3287	1,314,654	630,000	1,000,000	2,944,654	3,900,000
2002	2363	3599	1,439,540	630,000	1,000,000	3,069,540	3,900,000
2003	2575	3922	1,568,690	630,000	1,000,000	3,198,690	3,900,000
2004	3085	4698	1,879,382	630,000	1,000,000	3,509,382	3,900,000
2005	2600	3960	1,583,920	630,000	1,000,000	3,213,920	3,900,000
2006	2652	4039	1,615,598	630,000	1,000,000	3,245,598	3,900,000
2007	2672	4069	1,627,782	630,000	1,000,000	3,257,782	3,900,000
2008	3198	4710	1,884,000	630,000	1,000,000	3,514,000	3,900,000
2009	3188	4619	1,847,600	630,000	2,500,000	4,977,600	7,040,000
2010	3240	4663	1,865,200	630,000	2,500,000	4,995,200	7,040,000
2011	3375	4858	1,943,200	630,000	2,500,000	5,073,200	7,040,000
2012	3416	5439	2,175,600	630,000	2,500,000	5,305,600	7,040,000
2013	3502	5393	2,157,200	630,000	2,500,000	5,287,200	7,040,000
2014	3586	5462	2,184,620	630,000	2,500,000	5,314,620	7,040,000
2015	3672	5593	2,237,051	630,000	2,500,000	5,367,051	7,040,000
2016	3760	5727	2,290,741	630,000	2,500,000	5,420,741	7,040,000
2017	3850	5864	2,345,718	630,000	2,500,000	5,475,718	7,040,000
2018	3943	6005	2,402,016	630,000	2,500,000	5,532,016	7,040,000
2019	4038	6149	2,459,664	630,000	2,500,000	5,589,664	7,040,000
2020	4134	6297	2,518,696	630,000	2,500,000	5,648,696	7,040,000
2021	4234	6448	2,579,145	630,000	2,500,000	5,709,145	7,040,000
2022	4335	6603	2,641,044	630,000	2,500,000	5,771,044	7,040,000
2023	4439	6761	2,704,429	630,000	2,500,000	5,834,429	7,040,000
2024	4546	6923	2,769,335	630,000	2,500,000	5,899,335	7,040,000
2025	4655	7089	2,835,799	630,000	2,500,000	5,965,799	7,040,000
2026	4767	7260	2,903,859	630,000	2,500,000	6,033,859	7,040,000
2027	4881	7434	2,973,551	630,000	2,500,000	6,103,551	7,040,000
2028	4998	7612	3,044,916	630,000	2,500,000	6,174,916	7,040,000
2029	5118	7795	3,117,994	630,000	2,500,000	6,247,994	7,040,000
2030	5241	7982	3,192,826	630,000	2,500,000	6,322,826	7,040,000
2031	5367	8174	3,269,454	630,000	2,500,000	6,399,454	7,040,000
2032	5496	8370	3,347,921	630,000	2,500,000	6,477,921	7,040,000
2033	5627	8571	3,428,271	630,000	2,500,000	6,558,271	7,040,000
2034	5763	8776	3,510,550	630,000	2,500,000	6,640,550	7,040,000
2035	5901	8987	3,594,803	630,000	2,500,000	6,724,803	7,040,000
2036	6042	9203	3,681,078	630,000	2,500,000	6,811,078	7,040,000
2037	6187	9424	3,769,424	630,000	2,500,000	6,899,424	7,040,000
2038	6336	9650	3,859,890	630,000	2,500,000	6,989,890	7,040,000
2039	6488	9881	3,952,528	630,000	2,500,000	7,082,528	7,040,000
2040	6644	10118	4,047,388	630,000	2,500,000	7,177,388	7,040,000

**Woods Cross City - Water Master Plan  
Pumped Amounts- Gallons**

**Table C5**

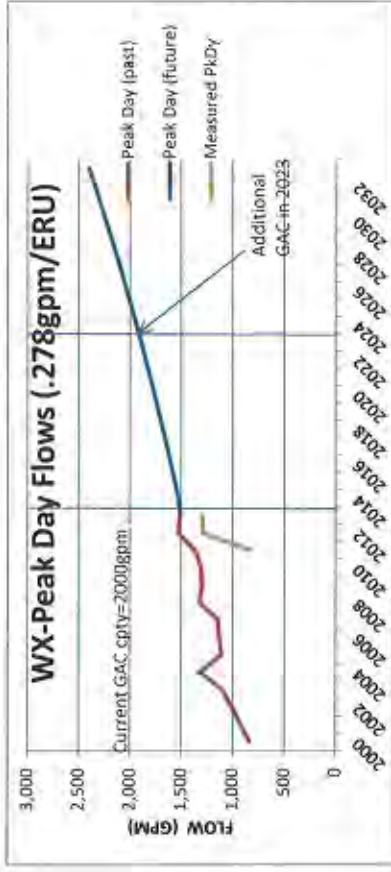
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL	Peak Month (gpd)
<b>2007</b>	28,236,000	29,039,000	27,404,000	30,329,000	33,413,000	31,005,000	37,626,000	38,481,000	40,598,000	35,632,000	32,634,000	31,194,000	395,591,000	1,353,267
<b>2008</b>	32,954,261	27,499,887	25,819,772	31,814,183	29,645,034	34,859,392	44,953,084	40,908,807	40,688,792	30,640,102	27,290,873	26,622,827	393,697,014	1,450,099
<b>2009</b>	29,073,000	24,370,000	23,138,000	29,606,000	25,552,000	34,138,000	32,236,000	47,048,000	39,278,000	36,245,000	44,703,000	35,229,000	400,616,000	1,517,677
<b>2010</b>	25,106,000	29,718,000	28,612,370	23,322,244	25,416,451	28,234,960	35,111,331	38,198,656	32,854,005	39,277,274	24,854,000	25,535,000	356,240,291	1,309,242
<b>2011</b>	21,548,000	25,909,000	23,618,000	19,277,000	21,769,000	29,640,000	33,701,000	36,506,000	39,720,000	33,039,000	27,103,000	25,685,000	337,515,000	1,324,000
<b>2012</b>	26,937,755	22,036,336	20,609,774	31,924,603	39,924,603	34,963,384	39,790,001	39,790,001	34,148,304	35,179,137	30,935,509	23,751,720	379,991,127	1,330,820
<b>2013</b>	28,001,341	27,250,915	23,207,460	27,605,642	28,401,311	35,938,886	37,365,453	37,214,610	40,639,099	28,274,158	26,266,736	27,037,118	367,202,729	1,354,637
<b>Average</b>	27,408,051	26,546,163	24,629,911	27,696,953	29,160,200	32,682,803	37,254,696	39,735,296	38,275,171	34,040,953	30,541,017	27,864,952	375,836,166	



Woods Cross City  
 Water Impact Fee Facilities Plan  
 Water Distribution Projections  
 Revision Date: Dec 2013

TABLE C6

	Ave flow Peak day Peak Inst	0 0.28 gpm/ERU	Connections	ERUs	Average Flow gpm	Peak Day Flow gpm	Peak Day Flow gpm	Peak Day Record(gpm)
2000			1953	2974	565	833	833	
2001			2158	3287	624	920	920	
2002			2363	3599	684	1,008	1,008	
2003			2575	3922	745	1,098	1,098	
2004			3085	4698	893	1,316	1,316	
2005			2600	3960	752	1,109	1,109	
2006			2652	4039	767	1,131	1,131	
2007			2672	4069	773	1,139	1,139	
2008			3198	4710	895	1,319	1,319	
2009			3188	4619	878	1,293	1,293	
2010			3240	4663	886	1,306	1,306	
2011			3375	4858	923	1,360	1,360	826
2012			3416	5439	1033	1,523	1,523	1,293
2013			3502	5393	1025	1,510	1,510	1,293
2014			2014	5462				1,529
2015			2015	5593				1,566
2016			2016	5727				1,604
2017			2017	5864				1,642
2018			2018	6005				1,681
2019			2019	6149				1,722
2020			2020	6297				1,763
2021			2021	6448				1,805
2022			2022	6603				1,849
2023			2023	6761				1,893
2024			2024	6923				1,939
2025			2025	7089				1,985
2026			2026	7260				2,033
2027			2027	7434				2,081
2028			2028	7612				2,131
2029			2029	7795				2,183
2030			2030	7982				2,235
2031			2031	8174				2,289
2032			2032	8370				2,344
2033			2033	8571				2,400
2034			2034	8776				2,457
2035			2035	8987				2,516
2036			2036	9203				2,577
2037			2037	9424				2,639
2038			2038	9650				2,702
2039			2039	9881				2,767
2040			2040	10118				2,833



**Woods Cross Water System**

**Land Use demands**

**Table C-7**

	Residential	Commercial	Industrial	Instituti	City Owned	Total Meter	Pump Info
<b>2008</b> Units	2,938	219	14	9	16	3,196	
YearlyFlo	217,691,000	107,017,000	21,381,000	2,933,000	3,947,000	<b>352,969,000</b>	<b>393,697,014</b>
gal/Unit	74,095	488,662	1,527,214	325,889	246,688	110,441	
<b>Ratio</b>	<b>1.00</b>	<b>6.60</b>	<b>20.61</b>	<b>4.40</b>	<b>3.33</b>		<b>1.115</b>
ERU's	2,938	1444.32	288.56	39.58		4,710	
<b>2009</b> Units	2,938	211	13	11	15	3,188	
YearlyFlo	208,652,000	94,603,000	21,217,000	3,561,000	30,414,000	<b>358,447,000</b>	<b>400,616,000</b>
gal/Unit	71,018	448,355	1,632,077	323,727	2,027,600	112,436	
<b>Ratio</b>	<b>1.00</b>	<b>6.31</b>	<b>22.98</b>	<b>4.56</b>	<b>28.55</b>		<b>1.118</b>
ERU's	2,938	1332.09	298.75	50.14		4,619	
<b>2010</b> Units	2,979	207	13	11	30	3,240	
YearlyFlo	207,510,000	87,261,000	26,531,000	3,513,000	17,093,000	<b>341,908,000</b>	<b>356,240,291</b>
gal/Unit	69,658	421,551	2,040,846	319,364	569,767	105,527	
<b>Ratio</b>	<b>1.00</b>	<b>6.05</b>	<b>29.30</b>	<b>4.58</b>	<b>8.18</b>		<b>1.042</b>
ERU's	2,979	1252.71	380.88	50.43		4,663	
<b>2011</b> Units	3,123	209	13	30		3,375	
YearlyFlo	206,399,000	84,680,000	23,785,000	6,254,000		<b>321,118,000</b>	<b>337,515,000</b>
gal/Unit	66,090	405,167	1,829,615	208,467		95,146	
<b>Ratio</b>	<b>1</b>	<b>6.13</b>	<b>27.68</b>	<b>3.15</b>			<b>1.051</b>
ERU's	3,123	1281.28	359.89	94.63		4,859	
<b>2012</b> Units	3,165	208	13	30		3,416	
YearlyFlo	210,656,000	88,505,000	34,412,000	28,470,000		<b>362,043,000</b>	<b>379,991,127</b>
gal/Unit	66,558	425,505	2,647,077	949,000		105,984	
<b>Ratio</b>	<b>1</b>	<b>6.39</b>	<b>39.77</b>	<b>14.26</b>			<b>1.050</b>
ERU's	3,165	1329.74	517.02	427.75		5,440	
<b>2013</b> Units	3,246	211	14	31		3,502	
YearlyFlo	211,278,000	91,000,000	19,036,000	29,687,000		<b>351,001,000</b>	<b>367,202,729</b>
gal/Unit	65,089	431,280	1,359,714	957,645		100,229	
<b>Ratio</b>	<b>1</b>	<b>6.63</b>	<b>20.89</b>	<b>14.71</b>			<b>1.046</b>
ERU's	3,246	1398.09	292.46	456.10		5,393	
Average Units	3,065	211	13	20	20		
YearlyFlo	210,364,333	92,177,667	24,393,667	12,403,000	17,151,333		
gal/Unit	68,751	436,753	1,839,424	514,015	948,018		
<b>Ratio</b>	<b>1.00</b>	<b>6.35</b>	<b>26.87</b>	<b>7.61</b>	<b>13.35</b>		<b>1.070</b>



**Woods Cross City  
Water Impact Fee Facilities Plan  
RESIDENTIAL ERU COMPARISON  
Revision Date: Dec 2014**

**Table C8**

**ANNUAL FLOWS**

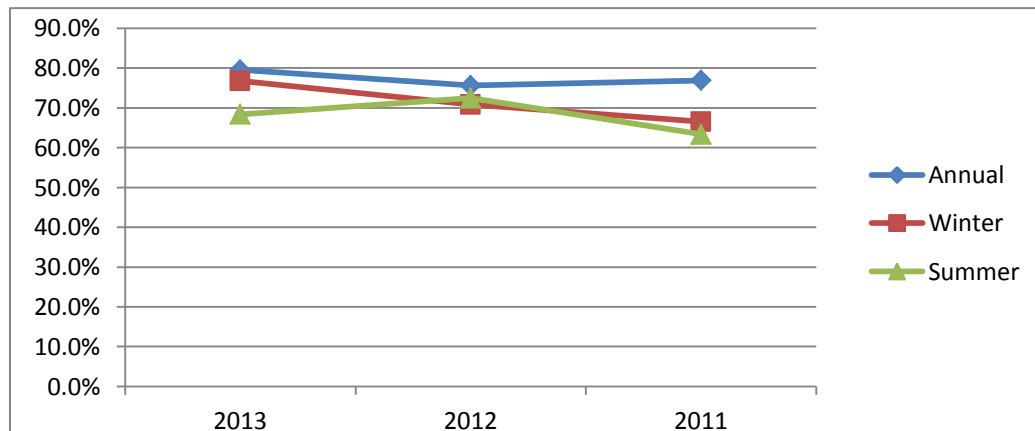
Year	Category	gallons	ERU	gal/ERU/yr	gpd	Percent
2013	Residential	187,898,000	2741	68,551	188	
	Multi Family	23,380,000	429	54,499	149	79.5%
2012	Residential	187,859,000	2663	70,544	193	
	Multi Family	22,870,000	429	53,310	146	75.6%
2011	Residential	183,318,000	2620	69,969	192	
	Multi Family	23,081,000	429	53,802	147	76.9%
3 year Average:						0.773217

**WINTER FLOWS**

Period	Category	gallons	ERU	gal/ERU/yr	gpd	Percent
Oct 2013-Apr 2014	Residential	88,871,000	2741	32,423	178	
	Multi Family	13,340,000	536	24,888	136	76.8%
Oct 2012-Apr 2013	Residential	82,241,000	2453	33,527	184	
	Multi Family	10,180,000	429	23,730	130	70.8%
Oct 2011-Apr 2012	Residential	25,090,000	2279	11,009	60	
	Multi Family	3,140,000	429	7,319	40	66.5%

**SUMMER FLOWS**

Period	Category	gallons	ERU	gal/ERU/yr	gpd	Percent
Apr- Oct 2014	Residential	100,739,000	2802	35,953	197	
	Multi Family	13,177,000	536	24,584	135	68.4%
Apr-Oct 2013	Residential	97,856,000	2588	37,811	207	
	Multi Family	11,750,000	429	27,389	150	72.4%
Apr-Oct 2012	Residential	91,667,000	2366	38,743	212	
	Multi Family	10,523,000	429	24,529	134	63.3%





State of Utah

GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

Department of  
Environmental Quality

Amanda Smith  
Executive Director

DIVISION OF DRINKING WATER  
Kenneth H. Bousfield, P.E.  
Director

August 25, 2014

Scott Anderson  
Woods Cross City Water System  
1555 South 800 West  
Woods Cross, Utah 84087

Dear Mr. Anderson,

**Subject: Reduction of Peak Day Demand Source Requirement** per *R309-510-5*, Woods Cross City Water System, System #06021, File #09658

On May 5, 2014, the Division of Drinking Water (the Division) received your request that the Director of the Division of Drinking Water allow the reduction of the required peak day demand per equivalent residential connection (ERC) for Woods Cross City, per State of Utah Administrative Rules for Public Drinking Water Systems *R309-510-5, Reduction of Requirements*. Rule *R309-510-5* states "*if acceptable data is presented, certain number of days of peak day demand to establish minimum source capacity...showing that the requirements made herein are excessive for a given project, the requirements may be appropriately reduced...on a case by case basis by the Division Director.*"

On May 8, 2014, a meeting was held with representatives from Woods Cross, JUB Engineers and the Division of Drinking Water to discuss the request and outline additional information that would be needed to consider the request. On July 25, 2014, the Division received additional information regarding the reduction request from JUB Engineers, with additional clarifications being sent on August 15, 2014.

Below is a summary of general information of the Woods Cross City Water System and the data and information provided supporting the request for reduction in source requirement.

Future Growth and Usage Projections

The Woods Cross City Water System is a community water system, which provides drinking water within the boundary of the City, an area under four square miles. The incorporated limits of the City are bounded on the North, East and the South by other cities, including West Bountiful, Bountiful, and North Salt Lake. The City is bounded on the west by Legacy highway and wetland areas of the Great Salt Lake, making future expansion of the water system's service area very limited, if at all possible.

The City was settled in 1865 and incorporated in 1935. Today, the City would be considered mostly developed, with some open space areas available for future development and some currently developed areas that might see some redevelopment in the future. A Master Plan for the City has been developed. A zoning ordinance is in place that limits the densities and type of development that can occur depending on the area of the City. The mayor and the City Council comprise the governing body of the City/water system and have authority to approve development as well as water system improvements within their boundaries. With an understanding of the limitation of the water system, they can make informed decisions on future development.

### Outdoor Water Use

The entire service area of the Woods Cross City Water System has access to secondary water for irrigation. The area is served by two different irrigation companies: Bountiful Irrigation Service District and Weber Basin Water Conservancy District. Title 9-01-510 of the Woods Cross Municipal Code states "*All new residential buildings sites shall be served by pressure irrigation in accordance with the City Subdivision Ordinance. No new building permits will be issued until the applicant has made arrangements to connect to an irrigation water system. Each owner shall extend to the pressure irrigation system and provide a connection for the building site concurrent with construction of the residence.*" The code further goes on to state in Title 11-12-050(f) "*The City Council may require non-residential subdivisions to acquire secondary water.*"

By ordinance, all residential users are required to have secondary water for outdoor use. Commercial users have access to secondary water service and may be required to use secondary water if required by the City Council.

### Equivalent Residential Connections

In evaluating the existing water use data for their system, the water use from commercial, industrial and institutional connections in Woods Cross City has been converted to equivalent residential connections (ERCs). This was done by dividing the actual residential water usage by the number of residential connections to obtain an average usage rate for each residential connection. This number was then used to determine the number of ERCs by dividing the water use of the commercial, industrial and institutional connections by the residential usage. Determining ERC's using the actual water use instead of the 800 gallons per day per connection (gpd/connection) is more accurate and avoids underestimating the number of ERC's.

### Water Use Data

Rule R309-510-7 *Source Sizing*, requires that sources meet the anticipated water demand on the day of highest water consumption, referred to as the peak day demand.

Woods Cross City has a Supervisory Control and Data Acquisition (SCADA) system that reads and records the City's well pumping data, the Weber Basin meter and tank levels at 15-minute time intervals. This data allows the City to see not only what the sources are pumping, but also what water is being used from the tanks to supplement the sources, providing the downstream usage. In general, the SCADA data was used to determine peak day demands by first identifying

the peak month for each year using monthly data and then reviewing the SCADA data for that month. The day with the highest peak flow was identified and used for peak day, with diurnal curve being developed for each of the identified peak days. This was done for 2011, 2012 and 2013.

There are limitations in analyzing the SCADA data. In general, the water level fluctuations in storage tanks are measured to the nearest 0.1 feet, which translates to a volume change of 388,000 gallons and minute accuracy is not possible with the 15-minute reads of data. More specifically, the 2011 and 2012 data was missing some exact pump turn-on/off times. And the City only had SCADA information for the month of July and first part of August for the 2013 year. Adjustments, interpretations and assumptions were made to account for these items in determining the peak day demand. In analyzing the 2011 and 2012 data, the slope of the curve for the tank level was analyzed for level parts when the tank is filling or steep descending curves when the tank cycle is emptying, indicating high demands.

- In 2011, September 11<sup>th</sup> was chosen as the peak day because of the leveling of the curve as the tank was filling and the fact that Well #5 was running all day. The peak instantaneous flow on that day was 0.17 gallons per minute per ERC (gpm/ERC).
- In 2012, August 7<sup>th</sup> was determined to be the peak day. There was a large leak found in the system that day. The peak instantaneous flow (not including the leak) for that day was 0.24 gpm/ERCs.
- The 6 weeks of SCADA data that the City had for 2013 in July and August were analyzed with July 15<sup>th</sup> being the peak day with a peak instantaneous flow of 0.239 gpm/ERC. This data has the exact turn-on/off times for the wells.

The City chose to use the peak instantaneous demand as a conservative value for the peak day demand. This approach provides a safety factor to the demand numbers and accounts for some of the uncertainties in the data. The highest peak day demand identified in the 3 years of data analyzed was 0.24 gpm/ERC, which is equivalent to 345 gpd/ERC.

#### Water Loss through the System

Woods Cross compared the measured water pumped from their wells and purchased from Weber Basin with the amount of water use read at the customers' meters for 6 years, from 2008 to 2013. Water loss in the system ranges from 4 percent to 11 percent with an average loss rate of 7 percent. This is a relatively low loss percentage compared to other drinking water systems and is an indication of a well maintained system.

Because the water use data that the City is using to determine the peak day demand is taken at the source and not at the customers' meters, the peak day numbers do not have to be adjusted to account for the loss factor.

#### Safety Factor

Woods Cross City requests a reduction from 800 gpd/ERC to 400 gpd/ERC (equivalent to 0.278 gpm/ERC). This reduced number (0.278 gpm/ERC) is 16% higher than the highest identified actual peak demand of 0.24 gpm/ERC. Therefore, it includes a safety factor of 16%.

### Storage

Woods Cross City does not intend to request a reduction in the storage requirement and will still use the 400 gallons/ERC in determining their minimum storage requirements. As evidenced by their water use data, the 400 gallons represent sufficient storage for one day of the water systems' actual peak day use, as opposed to the average daily demand required for storage. This also provides an additional safety factor.

### Summary

Woods Cross City water system has requested a reduction to their source requirements based on peak day data and other pertinent information. A summary of some of the factors is listed below:

1. Woods Cross City has been incorporated since 1935, with a stable history of development and water use to establish a good baseline.
2. The governing body of the water system is also the governing body of the City with the authority to approve or deny development. With the understanding of the limitation of the water system, educated development decisions can be made.
3. Future expansion of the water system service area is limited, if at all possible because of the restrictive boundaries on all sides of the incorporated limits.
4. The City maintains a Master Plan for development and a Zoning Ordinance. These tools have allowed the City to plan for the future with more accurate projections.
5. The City is served by secondary irrigation systems. By ordinance residents are required to connect to secondary water. The Woods Cross City Water System only supplies indoor water use.
6. Actual water use data was used in determining ERC's, providing a more accurate accounting of connections.
7. SCADA data that measures the source use and tank depletion was used to determine peak day demands.
8. To account for discrepancies and to be conservative, the peak instantaneous flow was identified and used as the peak day demand.
9. The highest peak day demand from 2011-2013 was 0.24 gpm/ERC (345 gpd/ERC).
10. The average loss percentage in the system is 7%, indicating a well-run system. The measured peak day demands are taken at the source, therefore, do not need to be adjusted to account for losses in the system.
11. The proposed peak day source demand of 400 gpd/ERC includes a 16% safety factor over the highest identified peak day demand.
12. Woods Cross City intends to **use 400 gallons/ERC in calculating the storage requirement, which is the default storage requirement without reduction.**

The Division finds the methodology used in the water usage study and peak day demand data acceptable. Based on the analysis of presented actual water use data, **the peak day demand source**

Scott Anderson  
Page 5  
August 25, 2014

**requirement is reduced from the default 800 gallons per day (gpd) to 400 gpd per ERC for Woods Cross City per Rule R309-510-5.**

**The Divisions may choose to reevaluate the reduced peak day demand requirements if the nature and use of the water system changes in the future.** You are encouraged to regularly monitor and verify the peak day water usage in your system to ensure that the reduced demand is still valid as development and other changes in your City occur.

Please maintain a copy of this letter with your permanent records for future reference.

If you have any questions regarding this letter, please contact Tammy North, of this office, at (801) 536-4293, or Ying-Ying Macauley, Engineering Section Manager, of this office, at (801) 536-4188.

Sincerely,



Kenneth H. Bousfield, P.E.  
Director

TN

cc: Dave Spence, Davis County Environmental Health Director, [davids@daviscountyutah.gov](mailto:davids@daviscountyutah.gov)  
Scott Anderson, Woods Cross City, [sanderson@woodscross.com](mailto:sanderson@woodscross.com)  
Gregory Seegmiller, JUB Engineers, [gseemiller@jub.com](mailto:gseemiller@jub.com)  
Ross Wilson, JUB Engineers, [RAW@jub.com](mailto:RAW@jub.com)  
Tammy North, Division of Drinking Water, [tnorth@utah.gov](mailto:tnorth@utah.gov)

DDW-2014-011827

ID (Char)	2013 Flow	% of Full Capacity (2013)	2023 Flow	% of Full Capacity (2023)	AtCap Flow	% of Full Capacity (AtCap)	Diameter	Length
301	161.51	27%	416.58	69%	604.56	100%	12	1261.75
814	163.42	29%	502.32	88%	568.53	100%	12	745
816	75.16	48%	330.43	211%	156.25	100%	12	416
819	162.08	28%	405.34	69%	584.14	100%	12	403
P561	161.51	25%	441.42	69%	636.42	100%	12	321.21
P559	161.51	25%	441.42	69%	640.74	100%	6	73.08
555	0	0%	0	0%	733.1	100%	12	1306.12
P589	0	0%	256.28	79%	324.25	100%	12	1116.1
P591	0	0%	158.35	80%	197.2	100%	12	802.95
P627	0	0%	137.84	64%	216.44	100%	12	559.91
P629	0	0%	137.84	64%	216.44	100%	12	516.49
P631	0	0%	137.84	64%	216.44	100%	12	646.72
P633	0	0%	137.84	64%	216.44	100%	12	473.11
P635	0	0%	181.04	65%	279.62	100%	12	415.18
1601	241.8	62%	326.17	84%	390.15	100%	10	894
1605	241.8	102%	202.67	85%	237.59	100%	10	731.28
1701	647.33	78%	764.57	92%	831.55	100%	10	1091.33
33	420.99	74%	501.06	88%	568.59	100%	10	370.51
37	378.48	77%	447.88	91%	490.21	100%	10	555.25
P671	241.8	63%	326.16	85%	382.05	100%	10	327.81
P735	647.33	89%	764.57	105%	727.73	100%	10	268.23
P737	647.33	76%	764.57	90%	849.38	100%	10	372.21
P153	33.11	32%	93.38	89%	104.56	100%	12	737.99
P155	141.31	60%	223.24	95%	235.69	100%	12	283.94
P157	141.31	60%	223.24	95%	235.69	100%	12	663.02
P159	155.11	60%	237.04	92%	257.53	100%	12	274.93
P315	33.11	32%	93.38	89%	104.56	100%	12	327.46
P471	33.11	32%	93.38	89%	104.56	100%	12	180.49
P147	29.52	17%	57.25	33%	172.39	100%	12	600
P149	16.14	21%	64.31	84%	76.98	100%	12	673.11
P151	16.14	21%	64.31	84%	76.98	100%	12	584.25
1702	179.2	98%	174.9	95%	183.62	100%	6	55
299	42.56	107%	36.5	92%	39.7	100%	6	1186.12
P181	0	0%	55.46	82%	67.54	100%	12	805.78
P183	0	0%	75.29	62%	121.34	100%	12	626.28
P467	0	0%	53.57	84%	63.89	100%	12	333.54
P479	0	0%	53.57	84%	63.89	100%	12	341.57
P481	0	0%	65.92	58%	113.3	100%	12	281.76
P279	0	0%	28.08	23%	124.44	100%	12	311.66
P707	0	0%	0	0%	105.54	100%	12	352.84
P711	0	0%	0	0%	69.17	100%	12	604.17
P713	0	0%	0	0%	69.17	100%	12	1322.39
P717	0	0%	0	0%	69.17	100%	12	704.84
P219	0	0%	0	0%	78.26	100%	10	1185.06
P223	0	0%	6.33	4%	162.15	100%	12	620.02
P283	0	0%	6.33	7%	90.06	100%	12	1356.88
P731	0	0%	0	0%	23.25	100%	10	1003.58
P855	127.84	83%	109.04	71%	153.24	100%	8	359.27
P853	127.84	113%	109.04	96%	113.31	100%	8	135.43
1201	442.41	97%	377.45	82%	458	100%	8	953.6
247	0	0%	0	0%	374.17	100%	12	115.25

811	146.22	33%	153.91	35%	441.61	100%	12	263
822	145.95	33%	153.64	34%	448.63	100%	10	236
P127	0	0%	0	0%	374.17	100%	12	111.75
P129	11.24	3%	11.24	3%	358.61	100%	12	404
60810U	0	0%	0	0%	374.17	100%	8	1
60810D	0	0%	0	0%	374.17	100%	8	1
325	0	0%	242.14	82%	295.61	100%	10	327.28
P547	0	0%	188.92	84%	224.95	100%	10	325.52
P551	0	0%	174.38	81%	214.08	100%	10	313.39
P553	0	0%	188.92	84%	224.95	100%	10	316.87
P555	0	0%	242.14	82%	295.61	100%	10	316.84
P557	0	0%	174.38	81%	214.08	100%	10	281.3
P199	127.84	99%	83.02	64%	129.46	100%	12	927.72
P201	127.84	125%	109.04	107%	102.04	100%	12	692.73
P203	127.84	125%	109.04	107%	101.95	100%	12	1031.39
P205	128.98	83%	110.18	71%	155.44	100%	12	120.02
1005	1398.48	51%	1800.28	66%	2733.31	100%	16	2928.17
1009	828	49%	1098.59	64%	1705.72	100%	12	58
1011	771.12	49%	1017.31	65%	1569.63	100%	12	276
1012	794.83	51%	1033.56	66%	1573.39	100%	12	382
1014	1028.39	50%	1338.42	65%	2051.1	100%	16	355
1015	1073.11	51%	1383.14	66%	2100.68	100%	16	660
1017	103.08	50%	134.46	65%	205.61	100%	16	6
102	77.88	82%	18.16	19%	94.96	100%	10	226
105	77.88	82%	18.16	19%	94.96	100%	10	639
106	77.88	82%	18.16	19%	94.96	100%	10	242
11	398.67	41%	582.26	60%	968.52	100%	12	241.75
13	163.83	47%	214.16	61%	349.61	100%	12	458.61
1331	929.8	136%	633.12	92%	684.62	100%	12	402.79
1414	204.63	49%	252.97	61%	416.52	100%	10	506
15	657.38	104%	458.38	73%	629.15	100%	10	1571.5
17	929.8	136%	633.12	92%	684.62	100%	12	236.51
1801	610.93	67%	634.35	70%	906.02	100%	10	1001
1803	657.38	104%	458.38	73%	629.15	100%	10	11
1805	1017.36	59%	1150.69	66%	1738.89	100%	10	25
1806	1017.36	59%	1150.69	66%	1738.89	100%	12	860.01
1809	815.58	98%	568.01	68%	832.87	100%	10	78
1810	1017.12	58%	1155.53	66%	1747.51	100%	12	20
1901	1168.07	54%	1440.86	67%	2158.14	100%	16	525
1902	1446.48	54%	1767.6	66%	2658.7	100%	16	252
1903	1017.12	58%	1155.53	66%	1747.51	100%	12	564
1904	4.2	61%	4.2	61%	6.9	100%	10	71
1905	4.2	53%	4.2	53%	7.98	100%	10	304
1906	259.43	54%	307.77	65%	476.72	100%	10	327
1908	1016.07	57%	1176.43	67%	1768.41	100%	12	147
1909	1016.07	57%	1176.43	67%	1768.41	100%	12	87
1910	20.9	100%	20.9	100%	20.9	100%	12	32
1912	240.71	53%	289.05	63%	455.84	100%	10	185
1917	0	0%	0	0%	1.08	100%	10	416
1918	263.64	54%	311.97	64%	484.7	100%	10	613
1919	1017.12	58%	1155.53	66%	1747.51	100%	12	1074
204	53.73	23%	127.13	54%	236.16	100%	10	113
214	5.87	4%	61.49	42%	146.42	100%	10	359



218	53.73	23%	127.13	54%	236.16	100%	10	541
219	73.03	31%	95.71	41%	234.75	100%	10	459
220	73.03	32%	95.71	43%	225.03	100%	10	464
221	5.88	4%	61.49	42%	146.42	100%	10	359
23	152.1	82%	145.18	78%	185.67	100%	10	19.25
237	1017.12	58%	1155.53	66%	1747.51	100%	12	255.01
243	4.44	1%	4.44	1%	584.46	100%	10	509.87
245	113.47	47%	43.54	18%	243.44	100%	10	443.25
251	508.49	70%	577.34	80%	723.21	100%	10	93.19
253	508.49	70%	577.34	80%	723.21	100%	10	93.91
261	161.09	16%	449.81	45%	999.48	100%	12	1502.55
265	395.09	35%	634.54	56%	1130.21	100%	10	371.52
281	42.32	111%	36.31	95%	38.23	100%	12	421.56
29	80.96	96%	80.96	96%	84.74	100%	10	20.01
31	929.8	136%	633.12	92%	684.62	100%	12	20.51
333	395.09	35%	634.54	56%	1130.21	100%	12	792.54
375	161.32	24%	445.38	66%	679.23	100%	10	598.25
385	137.83	59%	188.16	81%	232.97	100%	12	268.56
387	137.83	59%	188.16	81%	232.97	100%	12	587.79
389	226.68	37%	359.95	59%	606.43	100%	12	46.25
391	137.83	44%	188.16	61%	310.11	100%	12	46.77
407	333.71	41%	485.13	60%	806.37	100%	12	480
419	170.41	33%	274.6	52%	523.78	100%	10	334.71
421	226.68	37%	359.95	59%	606.43	100%	12	350.75
422	395.09	35%	634.54	56%	1130.21	100%	10	294
425	234.84	38%	368.11	59%	618.91	100%	12	328.25
426	395.09	35%	634.54	56%	1130.21	100%	10	83
427	226.68	37%	359.95	59%	606.43	100%	12	356
428	398.67	41%	582.26	60%	968.52	100%	12	916
429	398.67	41%	582.26	60%	968.52	100%	12	355
430	398.67	41%	582.26	60%	968.52	100%	12	461
5003D	0	0%	0	0%	733.1	100%	10	1
5003U	0	0%	0	0%	733.1	100%	10	1
5011U	989.94	99%	992.32	100%	996.46	100%	10	1
5013D	0	0%	0	0%	757.96	100%	10	94.46
5013U	0	0%	0	0%	757.96	100%	10	84.56
509	117.98	121%	109.5	113%	97.29	100%	10	1018.53
517	660.27	56%	745.48	63%	1183.77	100%	10	244.99
531	92.56	69%	99.44	75%	133.19	100%	10	700.62
545	416.6	49%	546.12	65%	841.97	100%	12	252.25
565	0	0%	0	0%	757.96	100%	12	112.93
603	106.94	317%	65.45	194%	33.71	100%	10	697.1
604	106.94	317%	65.45	194%	33.71	100%	10	1159.03
605	117.98	74%	109.5	69%	158.87	100%	10	128
70812U	0	0%	0	0%	0.00001	100%	99	1
817	1000.45	88%	799.15	71%	1133.02	100%	10	661.51
820	756.47	59%	806.07	63%	1288.2	100%	10	518
823	740.17	69%	696.69	65%	1078.64	100%	10	249
824	756.47	59%	806.07	63%	1274.7	100%	10	60
911	509.46	55%	598.17	64%	934.19	100%	10	583.05
913	111.45	53%	140.48	67%	209.51	100%	12	23
921	524.64	46%	720.3	63%	1142.87	100%	12	11
924	432.99	49%	569.63	65%	879.91	100%	12	499.75

937	488.64	50%	640.46	65%	985.99	100%	12	278
938	223.38	42%	322.76	60%	538.09	100%	12	376
941	581.52	49%	764.28	65%	1178.39	100%	12	153.12
942	619.14	52%	794.59	67%	1191.36	100%	12	510.4
943	205.7	40%	300.85	59%	510.12	100%	12	423
944	826.06	48%	1096.65	64%	1703.24	100%	12	255
946	272.51	42%	389.47	61%	642.36	100%	12	205
961	309.08	42%	445.9	60%	738.48	100%	12	277
965	255.81	41%	372.77	60%	624.04	100%	12	524
P107	14.45	15%	54.72	57%	96.77	100%	12	433.3
P109	18.25	15%	68.95	57%	121.27	100%	12	229.85
P131	27.56	8%	27.56	8%	335.27	100%	12	491.03
P133	28.04	8%	28.04	8%	333.17	100%	12	138
P135	28.04	9%	28.04	9%	325.07	100%	12	493.25
P137	37.03	14%	77.2	29%	270.22	100%	12	246.52
P139	126.49	38%	70.6	21%	335.27	100%	12	323.24
P141	126.49	38%	70.6	21%	333.65	100%	12	645.5
P143	336.78	81%	260.86	63%	416.58	100%	12	164.5
P145	336.78	86%	260.86	67%	391.74	100%	12	1279.55
P15	115.79	51%	172.61	76%	226.27	100%	12	494.54
P161	92.56	47%	144.09	73%	197.21	100%	10	927.91
P163	77.88	82%	18.16	19%	94.96	100%	10	96.88
P189	113.46	32%	77.52	22%	349.37	100%	12	722.63
P19	64.29	51%	95.85	75%	127.27	100%	12	228.94
P191	113.46	50%	101.83	45%	227.96	100%	12	666.61
P193	14.38	8%	78.64	43%	184.81	100%	16	63.48
P197	60.13	31%	106.26	54%	195.78	100%	12	665.27
P207	113.46	37%	43.54	14%	302.57	100%	12	1816.37
P209	113.46	32%	77.52	22%	354.55	100%	12	1797.91
P21	47	44%	78.56	74%	106.74	100%	12	507.99
P211	113.46	32%	77.52	22%	349.37	100%	12	132.03
P213	113.46	34%	43.54	13%	336.59	100%	12	49.02
P217	0	0%	6.33	4%	157.21	100%	10	683.3
P273	222.29	52%	282.68	66%	427.02	100%	12	1504.12
P285	647.33	76%	764.57	90%	849.38	100%	10	34.04
P287	647.33	76%	764.57	90%	849.38	100%	10	34.32
P289	647.33	76%	764.57	90%	849.38	100%	10	35.39
P291	508.49	70%	577.34	80%	723.21	100%	10	1
P293	508.49	70%	577.34	80%	723.21	100%	10	1
P307	217.65	52%	358.73	85%	420.72	100%	12	211.51
P309	1.38	12%	1.38	12%	11.64	100%	12	660.53
P327	0	0%	0	0%	0.00001	100%	12	197.92
P329	0	0%	0	0%	0.00001	100%	12	257.04
P335	50.93	12%	387.28	93%	414.64	100%	12	462.93
P337	217.65	51%	361.16	85%	425.32	100%	12	427.47
P363	15.69	89%	14.61	83%	17.64	100%	12	150.45
P375	6.27	7%	6.27	7%	85.21	100%	12	253.76
P377	1.14	1%	1.14	1%	106.45	100%	12	159.73
P389	0	0%	0	0%	0.00001	100%	10	996.46
P393	0	0%	0	0%	0.00001	100%	16	120.32
P395	1320.29	100%	1320.41	100%	1320.45	100%	12	61.04
P399	1000.45	88%	799.15	71%	1133.02	100%	16	592.19
P405	1171.08	106%	1199.67	108%	1108.94	100%	16	714.29

P407	1101.38	118%	1128.06	120%	937.25	100%	16	249.38
P409	1058.45	125%	1083.75	128%	848.65	100%	16	235.98
P411	1033.68	125%	1057.6	128%	827.7	100%	16	275.16
P413	1018.99	125%	1039.89	128%	813.21	100%	16	611.54
P415	1387.11	151%	967.65	106%	915.94	100%	16	1583.54
P419	1515.5	56%	1836.62	67%	2730.42	100%	16	3295.09
P423	2267.75	100%	2265.6	100%	2262.55	100%	36	714.32
P425	929.8	60%	1429.56	93%	1544.07	100%	16	25.7
P427	0	0%	796.43	91%	871.4	100%	12	44.02
P431	2267.75	100%	2265.6	100%	2262.55	100%	16	5
P433	2267.75	100%	2265.6	100%	2262.55	100%	16	5
P435	989.94	99%	992.31	100%	996.46	100%	16	2449.53
P437	989.94	99%	992.32	100%	996.46	100%	10	135.75
P443	1398.48	51%	1800.28	66%	2733.31	100%	16	1
P445	1515.5	56%	1836.62	67%	2730.42	100%	16	170.24
P45	38.31	40%	68.64	72%	95.27	100%	12	599.98
P459	2267.75	100%	2265.6	100%	2262.55	100%	16	97.91
P497	92.56	69%	99.44	75%	133.19	100%	10	320.5
P51	36.73	35%	74.8	71%	105.2	100%	12	534.13
P53	28.07	32%	66.47	75%	88.85	100%	12	260.66
P55	0.72	1%	55.75	82%	67.72	100%	12	281.7
P613	92.56	69%	99.44	75%	133.19	100%	10	278.51
P615	92.56	81%	99.34	87%	114.69	100%	10	384.23
P63	189.12	57%	216.44	65%	331.99	100%	10	65.98
P65	48.56	29%	96.97	57%	170.17	100%	12	369.2
P659	1387.11	151%	967.65	106%	915.94	100%	16	321.57
P67	2.98	100%	2.98	100%	2.98	100%	12	250.72
P779	161.32	24%	445.38	66%	678.96	100%	10	431.57
P781	95.31	43%	25.38	12%	219.33	100%	10	353.15
P789	137.83	44%	188.16	61%	310.11	100%	12	516.74
P819	117.98	74%	109.5	69%	158.87	100%	10	371.68
P821	336.78	94%	260.86	73%	356.47	100%	12	750.94
P823	126.49	63%	70.6	35%	199.78	100%	12	390.21
P825	336.78	84%	260.86	65%	402.78	100%	12	468.8
P87	16.76	20%	48.94	58%	84.19	100%	12	474.58
P879	0	0%	0	0%	83.2	100%	10	1736.48
P97	6.3	5%	72.22	60%	119.6	100%	12	103.18
P99	22.94	18%	72.62	58%	125.55	100%	12	148.25
WELL4PUM	1320.29	100%	1320.41	100%	1320.45	100%	10	1
		50%		62%		100%		

## 2013 Peak Hour Flows

ID	From Node	To Node	Length (ft)	Diameter (")	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	HL/1000 (ft)	Status
1001	1003	1508	1,172.00	8	140	-46.86	0.3	0.06	0.05	Open
1002	1004	1507	902	6	140	-9.36	0.11	0.01	0.01	Open
1003	1005	1001	368	6	140	-62.82	0.71	0.14	0.38	Open
1004	1006	1007	221	4	140	34.38	0.88	0.2	0.91	Open
1005	1008	J268	2,928.17	16	140	-1,396.74	2.23	2.96	1.01	Open
1006	1010	913	2,924.00	6	140	102.98	1.17	2.81	0.96	Open
1007	1011	1012	375	6	140	-19.83	0.23	0.02	0.05	Open
1008	1011	1013	54	6	140	0	0	0	0	Open
1009	1014	1005	58	12	140	-827.44	2.35	0.09	1.56	Open
1010	1014	1015	181	4	140	0	0	0	0	Open
1011	1005	1004	276	12	140	-770.36	2.19	0.38	1.36	Open
1012	1003	1004	382	12	140	793.78	2.25	0.55	1.44	Open
1013	1003	1016	795	8	140	272.72	1.74	1.14	1.44	Open
1014	1003	1006	355	16	136	-1,027.06	1.64	0.21	0.6	Open
1015	1006	1008	660	16	136	-1,071.78	1.71	0.43	0.65	Open
1017	1008	1010	6	16	136	102.98	0.16	0	0.08	Open
1018	935	947	238	6	140	0	0	0	0	Open
1019	1012	1019	78	6	140	-68.92	0.78	0.04	0.46	Open
102	101	J102	226	10	140	-77.87	0.32	0.01	0.05	Open
1020	1019	1020	43	6	140	0	0	0	0	Open
1021	1019	1016	551	6	140	-68.92	0.78	0.25	0.46	Open
1022	1016	1021	272	8	140	196.14	1.25	0.21	0.78	Open
1023	1024	1021	641	8	140	-126.31	0.81	0.22	0.35	Open
1024	1023	1021	354	6	140	-53.21	0.6	0.1	0.28	Open
1025	1024	944	870	6	140	35.34	0.4	0.12	0.13	Open
1026	1022	1026	402	6	140	-26.95	0.31	0.03	0.08	Open
1027	1022	1025	288	6	140	-26.26	0.3	0.02	0.08	Open
1028	1025	1023	418	6	140	-26.26	0.3	0.03	0.08	Open
1029	1026	1023	271	6	140	-26.95	0.31	0.02	0.08	Open
103	105	J146	23.57	6	140	0	0	0	0	Open
105	208	102	639	10	140	-77.87	0.32	0.03	0.05	Open
106	102	101	242	10	140	-77.87	0.32	0.01	0.05	Open
107	78	80	273.03	8	140	47.65	0.3	0.02	0.06	Open
109	80	82	255.75	8	140	34.86	0.22	0.01	0.03	Open
11	10	423	241.75	12	140	-398.4	1.13	0.1	0.4	Open
1102	1102	1103	102.54	6	140	13.8	0.16	0	0.02	Open
1104	1101	1104	162.84	6	140	0	0	0	0	Open
111	84	78	599.23	8	140	-27.73	0.18	0.01	0.02	Open
113	86	80	618.64	8	140	-8.91	0.06	0	0	Open
115	88	82	652.13	8	140	6.32	0.04	0	0	Open
117	90	72	673.88	8	140	20.01	0.13	0.01	0.01	Open
119	84	86	272.08	8	140	24.75	0.16	0	0.02	Open
1201	1201	1202	953.6	6	140	442.41	5.02	13.62	14.28	Open
1202	1203	1204	636	6	140	133.22	1.51	0.98	1.55	Open
1203	1201	1204	299	6	140	-229.68	2.61	1.27	4.24	Open
1204	1204	1205	273	6	140	-102.6	1.16	0.26	0.95	Open
1205	1206	1201	666	6	140	220.81	2.51	2.63	3.94	Open
1206	1206	1203	299	8	140	253.24	1.62	0.37	1.25	Open
1207	1207	1203	276	8	140	-112.92	0.72	0.08	0.28	Open
1208	1205	1207	617	6	140	-107.92	1.22	0.65	1.05	Open

121	86	88	259.6	8	140	28.5	0.18	0.01	0.02	Open
123	88	90	254.46	8	140	15.96	0.1	0	0.01	Open
125	303	92	158.12	8	140	181.49	1.16	0.11	0.68	Open
127	92	94	404.94	8	140	77.99	0.5	0.06	0.14	Open
129	94	96	254.94	8	140	44.02	0.28	0.01	0.05	Open
13	12	10	458.61	12	140	-163.73	0.46	0.04	0.08	Open
1301	1301	1302	657	6	140	-74.59	0.85	0.35	0.53	Open
1302	1301	1303	228	8	140	237.97	1.52	0.25	1.11	Open
1303	1702	1222	1,651.93	8	140	-76.04	0.49	0.22	0.13	Open
1304	1307	1303	674	6	140	97.56	1.11	0.58	0.87	Open
1306	1306	1330	62	6	140	-14.55	0.17	0	0.03	Open
1307	1309	1310	50	6	140	0	0	0	0	Open
1308	1311	1312	50	6	140	0	0	0	0	Open
1309	1309	1311	16	6	140	-14.56	0.17	0	0.03	Open
131	96	98	597.62	8	140	33.68	0.21	0.02	0.03	Open
1310	1314	1315	270	6	140	-60.19	0.68	0.1	0.35	Open
1311	1315	1316	301	6	140	-69.98	0.79	0.14	0.47	Open
1312	1316	1317	260	6	140	-48.14	0.55	0.06	0.23	Open
1313	1317	1318	261	6	140	-37.42	0.42	0.04	0.15	Open
1314	1318	1319	202	6	140	-38.5	0.44	0.03	0.15	Open
1315	1318	1320	270	6	140	-5.54	0.06	0	0	Open
1316	1317	1416	667	6	140	-16.12	0.18	0.02	0.03	Open
1317	1320	1321	58	6	140	0	0	0	0	Open
1318	1320	1418	459	6	140	-9.58	0.11	0.01	0.01	Open
1319	1303	1304	303	8	140	331.09	2.11	0.62	2.06	Open
1320	1206	1304	121	8	140	-481.79	3.08	0.5	4.12	Open
1323	1308	1322	196	6	140	92.34	1.05	0.15	0.78	Open
1324	1304	1322	95	6	140	-150.94	1.71	0.19	1.95	Open
1326	1308	1305	393	6	140	-160.78	1.82	0.86	2.19	Open
1327	1322	1328	89	6	140	-63.6	0.72	0.04	0.4	Open
1328	1328	1329	196	6	140	-63.6	0.72	0.08	0.39	Open
1329	1329	1308	106	6	140	-63.6	0.72	0.04	0.4	Open
133	98	830	178.09	8	140	63.88	0.41	0.02	0.1	Open
1330	20	1311	466.51	6	140	34.74	0.39	0.06	0.13	Open
1331	1325	1326	402.79	12	140	-158.56	0.45	0.03	0.07	Open
1333	1327	1306	98	8	140	-226.93	1.45	0.1	1.02	Open
1334	1330	1400	558	6	140	-14.55	0.17	0.01	0.03	Open
135	92	100	193.05	8	140	93.99	0.6	0.04	0.2	Open
137	108	829	886.61	8	140	16.17	0.1	0.01	0.01	Open
139	108	831	132.46	8	140	39.73	0.25	0.01	0.04	Open
1401	1402	1403	448	8	140	238.98	1.53	0.5	1.12	Open
1402	1403	1404	173	8	140	122.66	0.78	0.06	0.32	Open
1403	1404	1405	103	8	140	2.02	0.01	0	0	Open
1404	1404	1406	173	8	140	120.64	0.77	0.06	0.32	Open
1405	1401	1407	91	6	140	0	0	0	0	Open
1406	1401	1408	457	8	140	158.83	1.01	0.24	0.53	Open
1407	1406	1409	427	6	140	75.81	0.86	0.23	0.54	Open
1408	1406	1408	375	8	140	40.31	0.26	0.02	0.04	Open
1409	1403	1410	277	6	140	113.18	1.28	0.32	1.14	Open
141	110	112	802.97	8	140	37.58	0.24	0.03	0.04	Open
1410	1409	1410	444	6	140	-23.27	0.26	0.03	0.06	Open
1411	1411	1408	108	8	140	-196.08	1.25	0.08	0.78	Open

1412	1411	1313	1,330.00	6	140	0	0	0	0 Open
1413	1411	1412	547	8	140	192.6	1.23	0.41	0.75 Open
1414	1402	1913	506	10	140	-204.63	0.84	0.14	0.28 Open
1415	1410	1413	316	6	140	84.91	0.96	0.21	0.67 Open
1417	1415	1444	255	6	140	-3.89	0.04	0	0 Open
1418	1316	1417	857	6	140	-28.39	0.32	0.08	0.09 Open
1419	1314	1415	727	6	140	-34.8	0.39	0.09	0.13 Open
1420	1419	1415	320	6	140	40.43	0.46	0.05	0.17 Open
1421	1416	1418	264	6	140	-29.08	0.33	0.02	0.09 Open
1422	1418	1420	198	6	140	-46.48	0.53	0.04	0.22 Open
1423	1417	1443	236	6	140	-9.9	0.11	0	0.01 Open
1424	1409	1421	260	6	140	94.24	1.07	0.21	0.81 Open
1425	1412	1421	299	6	140	-47.26	0.54	0.07	0.23 Open
1426	316	1422	447.5	8	140	98.76	0.63	0.1	0.22 Open
1427	1422	1423	263	6	140	-49.38	0.56	0.06	0.25 Open
1428	1422	1424	149	8	140	144.18	0.92	0.07	0.44 Open
1429	1423	1425	107	6	140	-38.92	0.44	0.02	0.16 Open
143	112	108	262.75	8	140	55.9	0.36	0.02	0.08 Open
1430	1425	1426	167	6	140	0	0	0	0 Open
1431	1425	1440	253	6	140	-41.74	0.47	0.05	0.18 Open
1432	1423	1437	321	6	140	-12.56	0.14	0.01	0.02 Open
1433	1421	1429	128	6	140	46.98	0.53	0.03	0.23 Open
1434	1429	1413	449	6	140	-34.02	0.39	0.06	0.12 Open
1435	1429	1427	261	6	140	77.79	0.88	0.15	0.57 Open
1436	1413	1430	1,241.00	6	140	38.7	0.44	0.19	0.16 Open
1437	1431	1417	339	6	140	26.64	0.3	0.03	0.08 Open
1438	1428	1432	60	6	140	0	0	0	0 Open
1439	1424	1431	172	8	140	157.34	1	0.09	0.52 Open
1440	1424 J184		449.96	4	140	-13.16	0.34	0.07	0.15 Open
1441 J182	J184		14.07	6	140	33.35	0.38	0	0.14 Open
1442	1419	354	271.5	8	140	-127.8	0.82	0.1	0.35 Open
1443	1414	1434	168	8	140	27.92	0.18	0	0.02 Open
1444	1434	1435	266	8	140	-4.91	0.03	0	0 Open
1445	1435	1436	135	6	140	-4.91	0.06	0	0 Open
1446	903	1441	219	6	140	13.04	0.15	0	0.02 Open
1448	1428	1438	300	6	140	-24.83	0.28	0.02	0.07 Open
1449	1437	1428	154	6	140	-12.56	0.14	0	0.02 Open
145	112	114	264.38	8	140	-25.98	0.17	0	0.02 Open
1450	1438	1439	581	6	140	-24.83	0.28	0.05	0.07 Open
1451	1439	1427	243	6	140	-24.83	0.28	0.02	0.07 Open
1452	1440	1427	172	6	140	-41.74	0.47	0.03	0.18 Open
1453	1441	1442	105	6	140	13.04	0.15	0	0.02 Open
1454	1442	1430	321	6	140	13.04	0.15	0.01	0.02 Open
1455	1443	1416	243	6	140	-9.9	0.11	0	0.01 Open
1456	1444	1315	778	6	140	-3.89	0.04	0	0 Open
147	114	116	525.56	8	140	4.97	0.03	0	0 Open
149	94	118	378.2	8	140	33.96	0.22	0.01	0.03 Open
15	1802	14	1,571.50	10	140	218.57	0.89	0.5	0.32 Open
1502	1414 J508		987	8	140	-66.55	0.42	0.1	0.11 Open
1503	1504	1503	299	6	140	67.43	0.77	0.13	0.44 Open
1504	1503	1505	178	8	140	0.88	0.01	0	0 Open
1505	1436	1506	306	6	140	-57.18	0.65	0.1	0.32 Open

1506	1506	1504	378	6	140	-77.67	0.88	0.21	0.57 Open
1507	1506	1507	314	6	140	17.18	0.19	0.01	0.04 Open
1508	1504	1508	201	6	140	-148.16	1.68	0.38	1.89 Open
1509	1501	1509	99	8	140	-198.66	1.27	0.08	0.79 Open
151	118	116	273.03	8	140	38.04	0.24	0.01	0.04 Open
1510	1509	1510	140	8	140	-221.98	1.42	0.14	0.98 Open
1511	J282	1002	511	6	140	0	0	0	0 Open
1512	1508	1501	200	8	140	-198.66	1.27	0.16	0.8 Open
1513	1507	1511	98	6	140	0	0	0	0 Open
153	116	98	265.13	8	140	35.35	0.23	0.01	0.03 Open
155	110	100	332.35	8	140	-42.74	0.27	0.02	0.05 Open
157	100	120	452.41	8	140	51.25	0.33	0.03	0.06 Open
159	120	114	277.88	8	140	38.29	0.24	0.01	0.04 Open
1601	1701	1601	894	10	140	241.8	0.99	0.35	0.39 Open
1602	1602	1601	35	6	140	0	0	0	0 Open
1604	1604	1603	946.17	8	140	-241.79	1.54	1.09	1.15 Open
1605	1603	J406	731.28	10	140	-241.79	0.99	0.28	0.39 Open
1606	1604	J478	3,359.10	8	140	86.69	0.55	0.58	0.17 Open
161	120	122	230.06	8	140	8.92	0.06	0	0 Open
163	124	122	124.52	8	140	-4.84	0.03	0	0 Open
165	122	118	297.79	8	140	4.08	0.03	0	0 Open
167	126	76	264.55	8	140	-105.67	0.67	0.07	0.25 Open
169	128	74	263.5	8	140	-90.95	0.58	0.05	0.19 Open
17	14	1326	236.51	12	140	158.56	0.45	0.02	0.07 Open
1701	30	J456	1,091.33	10	140	-647.33	2.64	2.62	2.4 Open
1702	1703	1701	55	6	140	-179.2	2.03	0.15	2.68 Open
1704	1704	1705	963.61	8	140	-149.51	0.95	0.45	0.47 Open
171	126	128	774.01	8	140	-8.37	0.05	0	0 Open
173	130	128	319.75	8	140	-76.92	0.49	0.04	0.14 Open
175	132	130	341.06	8	140	-72.96	0.47	0.04	0.12 Open
177	148	132	260.26	8	140	-109.26	0.7	0.07	0.26 Open
179	72	136	245.11	8	140	-30.6	0.2	0.01	0.03 Open
1801	1702	1801	1,001.00	10	140	-610.93	2.5	2.16	2.16 Open
1803	1802	1803	11	10	140	-218.57	0.89	0	0.31 Open
1804	1803	1804	5	6	140	57.22	0.65	0	0.29 Open
1805	1805	1801	25	10	140	918.61	3.75	0.11	4.59 Open
1806	156	1805	860.01	12	140	918.61	2.61	1.62	1.89 Open
1807	1807	1804	8	6	140	0	0	0	0 Open
1808	1804	1324	1,237.00	6	140	57.22	0.65	0.4	0.32 Open
1809	1801	1803	78	10	140	307.68	1.26	0.05	0.61 Open
181	136	134	253.5	8	140	-19.64	0.13	0	0.01 Open
1810	1806	1808	20	12	140	-923.45	2.62	0.04	1.9 Open
183	154	J218	287.35	8	140	-55.88	0.36	0.02	0.08 Open
185	138	140	518.41	8	140	-62.1	0.4	0.05	0.09 Open
187	140	126	267.75	8	140	-106.38	0.68	0.07	0.25 Open
189	140	132	411.59	8	140	40.97	0.26	0.02	0.04 Open
19	1324	16	334.25	6	140	55.68	0.63	0.1	0.31 Open
1901	1901	1902	525	16	140	1,168.07	1.86	0.38	0.73 Open
1902	1901	1919	252	16	140	-1,446.48	2.31	0.27	1.08 Open
1903	1904	1918	564	12	140	923.45	2.62	1.08	1.91 Open
1904	1906	1907	71	10	140	-4.2	0.02	0	0 Open
1905	1907	1905	304	10	140	-4.2	0.02	0	0 Open

1906	1905	1908	327	10	140	259.43	1.06	0.14	0.44 Open
1907	1902	1909	460	8	140	207.18	1.32	0.4	0.86 Open
1908	1902	1910	147	12	140	944.35	2.68	0.29	1.99 Open
1909	1910	1904	87	12	140	944.35	2.68	0.17	1.99 Open
191	90	142	262.44	8	140	-10.91	0.07	0	0 Open
1910	1904	1911	32	12	140	20.9	0.06	0	0 Open
1911	1908	1912	36	6	140	0	0	0	0 Open
1912	1908	1913	185	10	140	240.71	0.98	0.07	0.39 Open
1913	1909	1914	46	6	140	0	0	0	0 Open
1914	1401	1909	395	8	140	-175.13	1.12	0.25	0.63 Open
1915	1913	1915	684	6	140	0	0	0	0 Open
1916	1916	1917	184	8	140	0	0	0	0 Open
1917	1917	1907	416	10	140	0	0	0	0 Open
1918	1905	1901	613	10	140	-263.64	1.08	0.28	0.45 Open
1919	1918	1808	1,074.00	12	140	923.45	2.62	2.05	1.91 Open
193	142	136	672.78	8	140	10.96	0.07	0	0 Open
195	134	144	293.09	8	140	-25.3	0.16	0.01	0.02 Open
197	144	146	258.91	8	140	-34.69	0.22	0.01	0.03 Open
199	146	148	270.67	8	140	-40.3	0.26	0.01	0.04 Open
201	201	202	111	6	140	0	0	0	0 Open
202	203	204	14	6	140	0	0	0	0 Open
204	207	203	113	10	140	-53.73	0.22	0	0.03 Open
205	208	209	17	6	140	0	0	0	0 Open
206	211	202	253	6	140	24.56	0.28	0.02	0.07 Open
207	207	202	394	6	140	59.6	0.68	0.14	0.35 Open
208	202	212	353	6	140	31.28	0.35	0.04	0.11 Open
209	213	222	231	6	140	31.28	0.35	0.02	0.11 Open
21	16	14	13.73	6	140	55.68	0.63	0	0.32 Open
210	215	212	97	6	140	0	0	0	0 Open
211	212	213	204	6	140	31.28	0.35	0.02	0.11 Open
212	216	213	99	6	140	0	0	0	0 Open
213	217	211	58	6	140	0	0	0	0 Open
214	207	219	359	10	140	-5.87	0.02	0	0 Open
215	211	214	483	6	140	-24.56	0.28	0.03	0.07 Open
216	219	220	10	6	140	0	0	0	0 Open
217	218	214	119	6	140	89.43	1.01	0.09	0.74 Open
218	203	205	541	10	140	-53.73	0.22	0.01	0.02 Open
219	205	210	459	10	140	-73.03	0.3	0.02	0.04 Open
220	210	208	464	10	140	-73.03	0.3	0.02	0.04 Open
221	219	218	359	10	140	-5.87	0.02	0	0 Open
223	222	214	326	6	140	-64.86	0.74	0.13	0.41 Open
225	142	150	272.67	8	140	-26.55	0.17	0.01	0.02 Open
227	150	152	294.57	8	140	-32.82	0.21	0.01	0.03 Open
229	152	154	265.97	8	140	-42.07	0.27	0.01	0.04 Open
23	14	18	19.25	10	140	115.7	0.47	0	0.1 Open
231	154	148	912.39	8	140	4.85	0.03	0	0 Open
233	152	146	902.12	8	140	0.92	0.01	0	0 Open
235	150	144	915.38	8	140	-2.29	0.01	0	0 Open
237	1806	156	255.01	12	140	923.45	2.62	0.49	1.91 Open
239	158	156	432.38	8	140	-4.84	0.03	0	0 Open
243	301	162	509.87	10	140	4.44	0.02	0	0 Open
245	160 J486		443.25	10	140	113.46	0.46	0.04	0.09 Open



247	801	164	115.25	10	140	0	0	0	0 Open
251	1702	168	93.19	10	140	508.49	2.08	0.14	1.54 Open
253	170	1704	93.91	10	140	508.49	2.08	0.14	1.53 Open
257	1202	174	2	6	140	0	0	0	0 Open
259	176	172	2	6	140	-212.03	2.41	0.01	3.66 Open
261	250	301	1,502.55	12	140	136.05	0.39	0.08	0.05 Open
265	420	178	371.52	10	140	355.56	1.45	0.29	0.79 Open
267	944	946	89	6	140	35.34	0.4	0.01	0.13 Open
269	1402	180	666.19	8	140	-34.35	0.22	0.02	0.03 Open
27	18	20	14.05	6	140	34.74	0.39	0	0.14 Open
271	182	1414	461.47	8	140	-38.63	0.25	0.02	0.04 Open
273	184	182	364.14	8	140	-38.63	0.25	0.01	0.04 Open
275	184	186	573.86	8	140	38.63	0.25	0.02	0.04 Open
277	186	180	493.03	8	140	34.35	0.22	0.02	0.03 Open
279	50	188	153	8	140	215.67	1.38	0.14	0.93 Open
281	188	190	421.56	12	140	-23.5	0.07	0	0 Open
283	190	192	1,939.78	6	140	-23.98	0.27	0.13	0.06 Open
285	194	196	320.75	6	140	6.91	0.08	0	0.01 Open
287	196	192	185.1	8	140	14.05	0.09	0	0.01 Open
289	198	196	422.04	6	140	7.15	0.08	0	0.01 Open
29	18	22	20.01	10	140	80.96	0.33	0	0.05 Open
291	200	198	100	8	140	-6.91	0.04	0	0 Open
293	192	224	313.5	6	140	-9.92	0.11	0	0.01 Open
295	198	226	315.01	6	140	-14.05	0.16	0.01	0.02 Open
297	226	224	603.75	6	140	9.92	0.11	0.01	0.01 Open
299	226	1703	1,186.12	6	140	-23.98	0.27	0.08	0.06 Open
301	817 J368		1,261.75	6	140	-127.64	1.45	1.8	1.43 Open
302	302	303	175.00	8	140	181.49	1.16	0.12	0.68 Open
304	252	414	369.47	8	140	6.7	0.04	0	0 Open
306	304	305	347	6	140	47.72	0.54	0.08	0.23 Open
307	305	302	562	6	140	23.9	0.27	0.04	0.06 Open
31	1325	24	20.51	12	140	158.56	0.45	0	0.07 Open
33	1701	26	370.51	10	140	-420.99	1.72	0.4	1.08 Open
331	272	248	860.42	8	140	-0.98	0.01	0	0 Open
333	178	250	792.54	12	140	355.56	1.01	0.26	0.33 Open
335	252 J164		310.08	8	140	47.72	0.3	0.02	0.06 Open
337	250	252	843.3	8	140	219.51	1.4	0.81	0.96 Open
35	26	28	186.16	8	140	-42.51	0.27	0.01	0.04 Open
37	26	30	555.25	10	140	-378.48	1.55	0.49	0.89 Open
375	256 J482		598.25	10	140	-131.6	0.54	0.08	0.13 Open
377	925	258	403.83	6	140	-10.79	0.12	0.01	0.01 Open
379	920	260	338.29	6	140	-48.89	0.55	0.08	0.24 Open
383	264 J168		282.54	8	140	8.68	0.06	0	0 Open
385	12	266	268.56	12	140	137.73	0.39	0.02	0.06 Open
387	266 J494		587.79	12	140	137.73	0.39	0.03	0.06 Open
389	417	268	46.25	12	140	-226.51	0.64	0.01	0.14 Open
39	30	32	219.52	8	140	268.85	1.72	0.31	1.4 Open
391	270	264	46.77	12	140	137.73	0.39	0	0.05 Open
395	246	272	392.95	8	140	13.03	0.08	0	0 Open
397	712	274	361.94	8	140	44.88	0.29	0.02	0.05 Open
399	274	276	335.14	8	140	37.7	0.24	0.01	0.04 Open
401	401	402	458	6	140	7.47	0.08	0	0.01 Open

402	939	J172	8.14	8	140	14.68	0.09	0	0	0	Open
403	J188	J190	798.07	4	140	4.41	0.11	0.02	0.02	0.02	Open
404	402	405	136	4	140	0	0	0	0	0	Open
405	402	406	651	6	140	-3.35	0.04	0	0	0	Open
406	407	427	223	6	140	-4.02	0.05	0	0	0	Open
407	408	945	480	12	140	-333.51	0.95	0.14	0.29	0.29	Open
408	408	410	8	4	140	-64.89	1.66	0.02	2.99	2.99	Open
409	410	411	202.51	4	140	-21.4	0.55	0.08	0.38	0.38	Open
41	32	28	583.8	8	140	118.06	0.75	0.18	0.3	0.3	Open
410	412	410	90	4	140	43.49	1.11	0.13	1.4	1.4	Open
412	401	407	282	6	140	11.02	0.13	0	0.02	0.02	Open
413	407	409	562	6	140	3.42	0.04	0	0	0	Open
414	J190	J166	6.91	6	140	27.13	0.31	0	0.07	0.07	Open
415	J190	421	3.94	4	140	-22.72	0.58	0	0.5	0.5	Open
417	409	416	143	6	140	0	0	0	0	0	Open
418	403	415	6	4	140	22.72	0.58	0	0.41	0.41	Open
419	417	264	334.71	10	140	-129.05	0.53	0.04	0.12	0.12	Open
421	268	422	350.75	12	140	-226.51	0.64	0.05	0.14	0.14	Open
422	418	420	294	10	140	355.56	1.45	0.23	0.79	0.79	Open
423	415	421	10	4	140	22.72	0.58	0	0.39	0.39	Open
424	409	426	481	6	140	-5.46	0.06	0	0	0	Open
425	419	10	328.25	12	140	-234.67	0.67	0.05	0.15	0.15	Open
426	417	418	83	10	140	355.56	1.45	0.07	0.79	0.79	Open
427	422	419	356	12	140	-226.51	0.64	0.05	0.14	0.14	Open
428	423	424	916	12	140	-398.4	1.13	0.37	0.4	0.4	Open
429	424	425	355	12	140	-398.4	1.13	0.14	0.4	0.4	Open
43	32	34	211.76	8	140	138.43	0.88	0.09	0.41	0.41	Open
430	425	408	461	12	140	-398.4	1.13	0.19	0.4	0.4	Open
431	426	406	234	6	140	-5.46	0.06	0	0	0	Open
432	427	428	385	6	140	-4.02	0.05	0	0	0	Open
433	428	406	236	6	140	-4.02	0.05	0	0	0	Open
435	276	246	272.98	8	140	37.7	0.24	0.01	0.04	0.04	Open
437	246	278	335.29	8	140	17.24	0.11	0	0.01	0.01	Open
439	278	280	274.02	8	140	11.1	0.07	0	0	0	Open
441	280	282	265.68	8	140	4.68	0.03	0	0	0	Open
443	272	284	656.02	8	140	9.66	0.06	0	0	0	Open
445	284	280	369.8	8	140	-0.84	0.01	0	0	0	Open
451	176	288	321.81	8	140	212.03	1.35	0.29	0.9	0.9	Open
453	288	290	690	8	140	206.71	1.32	0.59	0.86	0.86	Open
455	290	292	280.75	8	140	206.71	1.32	0.24	0.86	0.86	Open
457	292	42	133.41	8	140	-3.94	0.03	0	0	0	Open
459	294	296	204.84	8	140	-78.56	0.5	0.03	0.14	0.14	Open
461	296	292	528.51	8	140	-197.66	1.26	0.42	0.79	0.79	Open
463	298	308	261.52	8	140	109	0.7	0.07	0.26	0.26	Open
465	296	298	285.74	8	140	119.1	0.76	0.09	0.31	0.31	Open
467	298	300	179.06	8	140	2.18	0.01	0	0	0	Open
469	308	286	192.04	8	140	103.02	0.66	0.05	0.24	0.24	Open
47	38	40	274	8	140	217.22	1.39	0.26	0.94	0.94	Open
471	308	310	176.53	8	140	2.82	0.02	0	0	0	Open
479	1412	316	173.5	8	140	222.1	1.42	0.17	0.98	0.98	Open
481	316	318	601.64	8	140	123.34	0.79	0.2	0.33	0.33	Open
483	1420	318	124.54	8	140	-46.48	0.3	0.01	0.05	0.05	Open

485	318	320	805.5	8	140	31.1	0.2	0.02	0.03	Open
487	1319	320	125.55	8	140	-38.5	0.25	0	0.04	Open
489	322	324	1,143.50	8	140	9.45	0.06	0	0	Open
49	40	36	176.87	8	140	210.28	1.34	0.16	0.89	Open
491	324	326	255.16	8	140	2.27	0.01	0	0	Open
493	326	320	257.33	8	140	13.7	0.09	0	0.01	Open
495	322	328	243.75	8	140	-16.63	0.11	0	0.01	Open
497	328	330	240.77	8	140	-20.51	0.13	0	0.01	Open
499	330	318	251.5	8	140	-41.72	0.27	0.01	0.04	Open
501	501	1024	375	8	140	-87.01	0.56	0.06	0.17	Open
5011U	7008 WELLS		1	10	150	0	0	0	0	Open
502	502	501	309	8	140	-35.12	0.22	0.01	0.03	Open
503	501	412	1,036.00	8	140	50.75	0.32	0.07	0.06	Open
504	411	502	1,013.79	6	140	-31.08	0.35	0.11	0.1	Open
505	330	326	887.28	8	140	17.81	0.11	0.01	0.01	Open
507	252	302	341.94	8	140	157.6	1.01	0.18	0.52	Open
509	332 J520		1,018.53	10	140	-117.98	0.48	0.1	0.1	Open
51	42	44	302.05	8	140	-3.94	0.03	0	0	Open
511	338	336	296.02	8	140	-112.67	0.72	0.08	0.28	Open
513	807	336	167.23	8	140	112.67	0.72	0.05	0.28	Open
515	334	338	170.24	8	140	-2.98	0.02	0	0	Open
517	340	818	244.99	10	140	550.79	2.25	0.44	1.78	Open
519	340	338	350.61	8	140	-109.69	0.7	0.09	0.26	Open
521	342	332	554.84	8	140	-25.42	0.16	0.01	0.02	Open
53	44	38	276.26	8	140	222.06	1.42	0.27	0.98	Open
531	350 J396		700.62	10	140	-92.56	0.38	0.05	0.07	Open
539	902	904	7.07	8	130	71.6	0.46	0	0.14	Open
541	354	1431	271.5	8	140	-127.8	0.82	0.1	0.35	Open
545	914	356	252.25	12	140	416.31	1.18	0.11	0.44	Open
547	356	909	6.34	8	130	-16.37	0.1	0	0	Open
55	46	48	201.5	8	140	-2.58	0.02	0	0	Open
57	48	44	277.5	8	140	231.67	1.48	0.29	1.06	Open
59	188	48	236.26	8	140	239.17	1.53	0.27	1.12	Open
603 J146		605	697.1	10	140	-106.93	0.44	0.06	0.09	Open
60303D	500S	160	1	8	150	0	0	0	0	Open
60303U	162 500S		1	8	150	0	0	0	0	Open
60305D	1900S8	176	1	2	150	0	0	0	0	Open
60305U	174 1900S8		1	2	150	0	0	0	0	Open
60307D	1900S2	172	1	8	150	431.91	2.76	0	2.93	Open
60307U	1202 1900S2		1	8	150	431.91	2.76	0	2.93	Open
604	605 J100		1,159.03	10	140	-106.93	0.44	0.1	0.09	Open
605	604	601	128.00	10	140	-117.98	0.48	0.01	0.1	Open
60810D	1500S	166	1	10	150	0	0	0	0	Open
60810U	164 1500S		1	10	150	0	0	0	0	Open
60844D	ARGILE	836	1	6	150	72.08	0.82	0	0.49	Open
60844U	835 ARGILE		1	6	150	72.09	0.82	0	0.49	Open
61	52	40	198.25	8	140	-2.58	0.02	0	0	Open
63	54	38	196.75	8	140	-2.26	0.01	0	0	Open
65	172	56	249.34	8	140	139.49	0.89	0.1	0.42	Open
67	56	58	267.15	8	140	116.04	0.74	0.08	0.29	Open
69	58	60	288.25	8	140	131.05	0.84	0.11	0.37	Open
705	703	705	223	6	140	8.32	0.09	0	0.01	Open

706	704	714	559	8	140	10.1	0.06	0	0 Open
707	714	706	264	8	140	10.1	0.06	0	0 Open
708	837	709	801	8	140	31.5	0.2	0.02	0.03 Open
70812U	810 WELL3		1	99	150	0	0	0	0 Open
709	838	713	937	8	140	33.55	0.21	0.03	0.03 Open
71	60	50	282.81	8	140	153.32	0.98	0.14	0.49 Open
710	709	708	123	8	140	3.48	0.02	0	0 Open
711	709	710	160	8	140	28.02	0.18	0	0.02 Open
712	710	711	383.51	8	140	4.28	0.03	0	0 Open
713	710	713	298	8	140	20.6	0.13	0	0.01 Open
714	713	712	252	8	140	44.88	0.29	0.01	0.05 Open
73	62	50	1,003.00	8	140	72.11	0.46	0.12	0.12 Open
75	60	64	989.75	8	140	-33.01	0.21	0.03	0.03 Open
77	64	62	280.5	8	140	84.13	0.54	0.05	0.16 Open
79	62	66	225.51	8	140	4.36	0.03	0	0 Open
801	801	802	283	8	140	131.22	0.84	0.1	0.37 Open
802	803	802	190	6	140	0	0	0	0 Open
803	804	805	610	6	140	54.14	0.61	0.18	0.29 Open
804	805	1301	340	8	140	167.09	1.07	0.2	0.58 Open
805	802	805	277	8	140	123.3	0.79	0.09	0.33 Open
808	807	808	152	6	140	-130.67	1.48	0.23	1.49 Open
809	808	1314	265	6	140	-84.65	0.96	0.18	0.67 Open
81	58	68	1,014.50	8	140	-22.75	0.15	0.01	0.01 Open
811	801	809	263.00	10	140	-131.22	0.54	0.03	0.12 Open
813	811	812	73	6	140	0	0	0	0 Open
814	806	813	745	6	140	-17.43	0.2	0.03	0.04 Open
815	813	814	486	8	140	10.08	0.06	0	0 Open
816	813	815	416	6	140	-38.89	0.44	0.07	0.16 Open
817	344	820	661.51	10	140	-612.47	2.5	1.43	2.17 Open
818	815	816	458	8	140	68.15	0.43	0.05	0.11 Open
819	815	817	403	6	140	-116.4	1.32	0.49	1.2 Open
820	811	818	518	10	140	-592.45	2.42	1.06	2.04 Open
821	817	834	369	6	140	10.02	0.11	0	0.01 Open
822	809	806	236	10	140	-136.62	0.56	0.03	0.13 Open
823	820	821	249	10	140	-523.57	2.14	0.4	1.62 Open
824	821	811	60	10	140	-592.45	2.42	0.12	2.03 Open
825	820	823	443	8	140	-127.56	0.81	0.16	0.35 Open
826	821	822	406	6	140	62.27	0.71	0.15	0.38 Open
827	823	822	245	6	140	-62.84	0.71	0.09	0.38 Open
828	823	824	344	8	140	-67.86	0.43	0.04	0.11 Open
829	824	825	292	8	140	-76.34	0.49	0.04	0.14 Open
83	56 J158		1,024.31	8	140	16.76	0.11	0.01	0.01 Open
830	822	826	230.00	6	140	-8.57	0.1	0	0.01 Open
831	826	827	239	6	140	-8.57	0.1	0	0.01 Open
832	827	831	163	6	140	-31.17	0.35	0.02	0.1 Open
833	825	827	979	6	140	-13.4	0.15	0.02	0.02 Open
834	825	828	270	8	140	-72.62	0.46	0.03	0.12 Open
835	828	829	121	6	140	-16.17	0.18	0	0.03 Open
836	828	830	92	8	140	-63.88	0.41	0.01	0.1 Open
837	832	837	120	8	140	-3.96	0.03	0	0 Open
838	814	833	134	8	140	4.04	0.03	0	0 Open
839	816	835	165	8	140	66.05	0.42	0.02	0.1 Open

840	835	814	165	8	140	-6.04	0.04	0	0 Open
841	837	836	165	8	140	-35.46	0.23	0.01	0.03 Open
842	836	838	165	8	140	36.61	0.23	0.01	0.03 Open
843	834	819	180	6	140	5.9	0.07	0	0.01 Open
85	68 J158		266.43	8	140	-96.43	0.62	0.06	0.21 Open
87	68	64	286.78	8	140	121.91	0.78	0.09	0.32 Open
89	82	72	268.54	8	140	35.2	0.22	0.01	0.03 Open
901	901	808	977	6	140	54.02	0.61	0.28	0.29 Open
902	901	1419	252	8	140	-84.07	0.54	0.04	0.16 Open
903 J184		902	1,177.08	4	140	20.18	0.52	0.4	0.34 Open
904	1001	1436	845.00	6	140	-42.43	0.48	0.16	0.19 Open
905	901 J180		650.53	8	140	21.41	0.14	0.01	0.01 Open
906	907	952	313.24	6	140	25.48	0.29	0.02	0.07 Open
907	903	908	127	6	140	0	0	0	0 Open
908	909	906	85	6	140	-15.22	0.17	0	0.03 Open
91	72 J158		282.3	8	140	79.67	0.51	0.04	0.15 Open
910	818	911	402	6	140	-51.11	0.58	0.11	0.26 Open
911	912	340	583.05	10	140	451.28	1.84	0.72	1.23 Open
912	909	905	229	6	140	-70.5	0.8	0.11	0.48 Open
913	905	913	23	12	140	-111.38	0.32	0	0.04 Open
914	913	914	7	6	140	-8.4	0.1	0	0 Open
915	911	955	202	6	140	5.08	0.06	0	0 Open
916	916	956	506.22	6	140	81.13	0.92	0.31	0.62 Open
917	917	918	346	6	140	-32.6	0.37	0.04	0.11 Open
918	918	919	515	6	140	20.8	0.24	0.03	0.05 Open
919	912	920	452	8	140	66.12	0.42	0.05	0.1 Open
920	902	921	603	4	140	14.29	0.36	0.11	0.18 Open
921	912	904	11	12	140	-524.58	1.49	0.01	0.67 Open
922	902 J178		10.54	6	140	-69.35	0.79	0	0.46 Open
923	904	922	18	8	140	0.88	0.01	0	0 Open
924	356	904	499.75	12	140	432.68	1.23	0.23	0.47 Open
926	260	924	425.79	6	140	-58.33	0.66	0.14	0.33 Open
927	920	925	311	8	140	110.09	0.7	0.08	0.27 Open
928	258	926	597.39	6	140	-20.55	0.23	0.03	0.05 Open
929	925	916	327.5	8	140	117.74	0.75	0.1	0.3 Open
93	74	28	269.43	8	140	-71.43	0.46	0.03	0.12 Open
930	921	927	313	4	140	14.29	0.36	0.06	0.18 Open
932	927	929	404	4	140	14.05	0.36	0.07	0.17 Open
933	918	926	293	6	140	-53.4	0.61	0.08	0.28 Open
934	926	957	163	6	140	-79.51	0.9	0.1	0.59 Open
935	930	924	387	6	140	2.26	0.03	0	0 Open
936	914	924	442	6	140	63.65	0.72	0.17	0.39 Open
937	914	931	278	12	140	-488.36	1.39	0.16	0.59 Open
938	932	933	376	12	140	-223.32	0.63	0.05	0.14 Open
939	933	1011	362	6	140	-19.83	0.23	0.02	0.05 Open
940	931	930	470	6	140	87.91	1	0.34	0.72 Open
941	931	907	153.12	12	140	-581.19	1.65	0.12	0.81 Open
942	934	907	510.4	12	140	618.61	1.75	0.46	0.91 Open
943	933	934	423	12	140	-205.67	0.58	0.05	0.12 Open
944	934	1014	255	12	140	-825.5	2.34	0.4	1.55 Open
946	935	932	205	12	140	-272.41	0.77	0.04	0.2 Open
947	932	1012	350	6	140	-49.09	0.56	0.09	0.24 Open

948	919	960	142	6	140	16.92	0.19	0	0.03	Open
949	937	916	233.53	8	140	-17.65	0.11	0	0.01	Open
95	76	34	267	8	140	-138.43	0.88	0.11	0.41	Open
950	929 J174		5.93	6	140	-12.21	0.14	0	0	Open
951 J186		929	9.07	4	140	-26.26	0.67	0	0.54	Open
952	937 J186		5.4	4	140	-19.26	0.49	0	0.36	Open
953	937 J176		6.73	8	140	32.87	0.21	0	0	Open
954	939 J188		6.43	4	140	18.19	0.46	0	0.3	Open
955 J186		941	336.96	4	140	6.99	0.18	0.02	0.05	Open
956	941 J170		9.83	6	140	11.42	0.13	0	0	Open
957	941 J188		15.01	4	140	-13.78	0.35	0	0.16	Open
958	917	936	667	6	140	2.39	0.03	0	0	Open
959	406	942	264	6	140	-27.27	0.31	0.02	0.08	Open
961	945	943	277	12	140	-308.91	0.88	0.07	0.25	Open
962	943	1022	494	6	140	-53.21	0.6	0.14	0.28	Open
963	945	946	112	6	140	-35.34	0.4	0.01	0.13	Open
964	1434	948	992	6	140	32.83	0.37	0.11	0.12	Open
965	943	935	524	12	140	-255.7	0.73	0.09	0.18	Open
966	947	1018	280	6	140	0	0	0	0	Open
967	948	1001	361	6	140	32.83	0.37	0.04	0.11	Open
968	905	949	775	6	140	22.88	0.26	0.05	0.06	Open
969	949	950	165	6	140	22.88	0.26	0.01	0.06	Open
97	76	74	773.64	8	140	26.06	0.17	0.01	0.02	Open
970	950	951	154	6	140	22.88	0.26	0.01	0.06	Open
971	951	906	707	6	140	22.88	0.26	0.04	0.06	Open
972	952	961	146	6	140	25.48	0.29	0.01	0.07	Open
973	961	903	277	6	140	25.48	0.29	0.02	0.07	Open
974	955	915	397	6	140	5.08	0.06	0	0	Open
975	956	911	820	6	140	81.13	0.92	0.51	0.62	Open
976	942	953	182	6	140	-24.97	0.28	0.01	0.07	Open
977	957	930	296	6	140	-79.51	0.9	0.18	0.59	Open
980	960	936	287	6	140	16.92	0.19	0.01	0.03	Open
981	953	954	279	6	140	-24.97	0.28	0.02	0.07	Open
982	954	917	167	6	140	-24.97	0.28	0.01	0.07	Open
99	172	78	254.25	8	140	80.38	0.51	0.04	0.15	Open
P101	J56	J58	421.45	8	140	-8.5	0.05	0	0	Open
P103	J58	J60	125.36	8	140	-19.63	0.13	0	0.01	Open
P105	J58	J62	588.61	8	140	5.48	0.03	0	0	Open
P107	J56	J62	433.3	12	140	-14.45	0.04	0	0	Open
P109	J62	J64	229.85	12	140	-18.25	0.05	0	0	Open
P11	J22	J20	519.17	8	100	-7.6	0.05	0	0	Open
P111	J86	J90	275.61	8	140	15.43	0.1	0	0.01	Open
P113	J90	J92	246.39	8	140	15.42	0.1	0	0.01	Open
P115	J90	J94	555.81	8	140	-4.43	0.03	0	0	Open
P117	J94	J50	624.21	8	140	-8.39	0.05	0	0	Open
P119	J50	J48	136.84	8	140	1.3	0.01	0	0	Open
P121	J96	J74	187.89	8	140	14.88	0.09	0	0.01	Open
P123		242 J96	306.37	8	140	32.19	0.21	0.01	0.03	Open
P125	J98		284 207.43	8	140	-3.56	0.02	0	0	Open
P127		166 704	111.75	10	140	0	0	0	0	Open
P129		704 703	404	10	140	-11.24	0.05	0	0	Open
P13	J28	J16	400.79	8	100	-1.54	0.01	0	0	Open

P131	703	707	491.03	12	140	-27.56	0.08	0	0 Open
P133	707	312	138	12	140	-28.04	0.08	0	0 Open
P135	312	248	493.25	12	140	-28.04	0.08	0	0 Open
P137	248	286	246.52	12	140	37.02	0.11	0	0 Open
P139	286	701	323.24	12	140	126.48	0.36	0.02	0.05 Open
P141	701 J528		645.5	12	140	126.48	0.36	0.03	0.05 Open
P143	36	602	164.5	12	140	336.76	0.96	0.05	0.29 Open
P145	602 J532		1,279.55	12	140	336.76	0.96	0.38	0.29 Open
P147	601	242	600.00	8	140	29.52	0.19	0.01	0.02 Open
P149	242	254	673.11	8	140	-3.47	0.02	0	0 Open
P15	1101 J10		494.54	12	140	115.78	0.33	0.02	0.04 Open
P151	254 J210		584.25	8	140	-3.47	0.02	0	0 Open
P153	238 J292		737.99	8	140	-24.8	0.16	0.01	0.02 Open
P155	1101	234	283.94	8	140	-141.31	0.9	0.12	0.42 Open
P157	234	1102	663.02	8	140	-141.31	0.9	0.28	0.42 Open
P159	1102	1604	274.93	8	140	-155.11	0.99	0.14	0.51 Open
P161	J100	J332	927.91	10	140	-92.56	0.38	0.06	0.07 Open
P163	J102	J146	96.88	10	140	-77.87	0.32	0	0.05 Open
P169	148	1920	353.41	8	140	73.81	0.47	0.05	0.13 Open
P171	1920 J108		417.43	8	140	62.35	0.4	0.04	0.09 Open
P173	J108	68	637.67	8	140	54.69	0.35	0.05	0.07 Open
P177	J114	J116	104.1	8	140	78.56	0.5	0.02	0.15 Open
P179	J116	248	628.67	8	140	78.56	0.5	0.09	0.14 Open
P189	J122	J148	722.63	12	140	-113.46	0.32	0.03	0.04 Open
P19	J10	J36	228.94	12	140	64.28	0.18	0	0.01 Open
P191	J120	J148	666.61	12	140	113.46	0.32	0.03	0.04 Open
P193	J120	J100	63.48	16	140	14.38	0.02	0	0 Open
P197	J124	J68	665.27	12	140	60.13	0.17	0.01	0.01 Open
P199	J120	J126	927.72	12	140	-127.84	0.36	0.05	0.05 Open
P201	J126	J128	692.73	12	140	-127.84	0.36	0.03	0.05 Open
P203	J128	J544	1,031.39	12	140	-127.84	0.36	0.05	0.05 Open
P205	J130	J124	120.02	12	140	-128.98	0.37	0.01	0.05 Open
P207	J132	J134	1,816.37	12	140	-113.46	0.32	0.07	0.04 Open
P209	J134	106	1,797.91	12	140	-113.46	0.32	0.07	0.04 Open
P21	J36	J12	507.99	12	140	47	0.13	0	0.01 Open
P211	106 J122		132.03	12	140	-113.46	0.32	0.01	0.04 Open
P213	160 J132		49.02	12	140	-113.46	0.32	0	0.04 Open
P225	824 J150		194.14	8	140	8.48	0.05	0	0 Open
P227	J22	J152	271.59	8	100	19.33	0.12	0.01	0.02 Open
P229	J24	J152	511.14	8	100	13.2	0.08	0	0.01 Open
P23	J32	J38	26.68	8	140	-3.72	0.02	0	0 Open
P231	J152	J154	309.71	8	140	30.27	0.19	0.01	0.03 Open
P233	J154	J156	92.36	8	140	30.27	0.19	0	0.02 Open
P235	J156	1605	464.64	8	140	30.27	0.19	0.01	0.03 Open
P237	294 J160		57.4	8	140	78.56	0.5	0.01	0.14 Open
P239	J160	J162	232.46	8	140	78.56	0.5	0.03	0.14 Open
P241	J162	J114	178.53	8	140	78.56	0.5	0.03	0.14 Open
P243	J164	304	190.19	6	140	47.72	0.54	0.04	0.23 Open
P245	J166	401	259.15	6	140	27.13	0.31	0.02	0.08 Open
P247	J168	403	8.14	8	140	8.04	0.05	0	0 Open
P251	J170	942	965.24	6	140	11.42	0.13	0.02	0.02 Open
P253	J172	J496	803.87	8	140	14.68	0.09	0.01	0.01 Open

P257	J174	936	328.29	6	140	-12.21	0.14	0.01	0.02	Open
P259	J176	939	345.27	8	140	32.87	0.21	0.01	0.03	Open
P263	J178	909	494.46	6	140	-69.35	0.79	0.23	0.46	Open
P265	J180	904	14.47	8	140	21.41	0.14	0	0	Open
P269	J182	1430	1,101.94	6	140	-37.55	0.43	0.16	0.15	Open
P273	1008	1510	1,504.12	12	140	221.98	0.63	0.21	0.14	Open
P285	J194	1704	34.04	10	140	-647.33	2.64	0.08	2.41	Open
P287	2600S	J196	34.32	10	140	647.33	2.64	0.08	2.39	Open
P289	J194	2600S	35.39	10	140	647.33	2.64	0.08	2.4	Open
P29	J38	J36	298.34	8	140	-10.98	0.07	0	0	Open
P291		168 J198	1	10	140	508.49	2.08	0	1.46	Open
P293	J198	170	1	10	140	508.49	2.08	0	1.46	Open
P307		1705 J204	211.51	12	100	-150.89	0.43	0.03	0.12	Open
P309		1705 J206	660.53	8	100	1.38	0.01	0	0	Open
P31	J40	J44	126.72	4	140	0	0	0	0	Open
P311	J46	J284	990.78	8	140	9.87	0.06	0	0	Open
P313	J208	J60	248.55	8	140	19.63	0.13	0	0.01	Open
P315	J210	238	327.46	8	140	-24.8	0.16	0.01	0.02	Open
P317	J210	J552	330.1	8	140	21.34	0.14	0	0.01	Open
P325	J218	138	205	8	140	-55.88	0.36	0.02	0.08	Open
P327	J204	CHARTER	197.92	12	140	0	0	0	0	Open
P329	CHARTER	J218	257.04	12	140	0	0	0	0	Open
P33	J44	J42	118.46	4	140	0	0	0	0	Open
P331		1327 J220	624.54	8	140	226.93	1.45	0.64	1.02	Open
P333	J220	J226	333.27	8	140	226.93	1.45	0.34	1.02	Open
P335	J222	J224	462.93	12	140	48.93	0.14	0	0.01	Open
P337	J224	J204	427.47	12	140	150.89	0.43	0.03	0.07	Open
P339	J226	J222	646.68	8	140	124.97	0.8	0.22	0.34	Open
P341	J224	J226	959.21	8	140	-101.96	0.65	0.22	0.23	Open
P343	J228	J22	304	8	140	14.23	0.09	0	0.01	Open
P345	J228	J230	244.37	8	140	-11.31	0.07	0	0	Open
P347	J230	J232	319.46	8	140	-7	0.04	0	0	Open
P349	J232	J234	229.27	8	140	-11.31	0.07	0	0	Open
P35	J44	J38	238.56	8	140	-7.26	0.05	0	0	Open
P351	J234	J236	194.57	8	140	-7.69	0.05	0	0	Open
P353	J236	J238	198.04	8	140	-5.9	0.04	0	0	Open
P355	J238	J34	318.52	8	140	-12.87	0.08	0	0	Open
P357	J230	J232	783.82	8	140	-4.31	0.03	0	0	Open
P359	J236	J238	725.93	8	140	-2.93	0.02	0	0	Open
P361	J234	J14	406.33	8	140	-8.62	0.05	0	0	Open
P363	J78	J244	150.45	12	100	-7.53	0.02	0	0	Open
P365	J244	J242	225.93	8	140	-11.57	0.07	0	0	Open
P367	J244	J246	486.16	8	140	2.18	0.01	0	0	Open
P369	J248	J208	342.12	8	140	9.76	0.06	0	0	Open
P37	J12	J26	274.38	8	100	-12.98	0.08	0	0.01	Open
P371	J242	J248	233.05	8	140	-11.57	0.07	0	0	Open
P375	J250	J252	253.76	12	140	6.27	0.02	0	0	Open
P377	J252	J254	159.73	12	140	1.14	0	0	0	Open
P379	J92	J250	441.22	8	140	13.64	0.09	0	0.01	Open
P381	J250	J256	335.5	8	140	4.47	0.03	0	0	Open
P383	J256	J258	218.78	8	140	3.43	0.02	0	0	Open
P385	J258	J252	313.09	8	140	-5.13	0.03	0	0	Open



P387	J260	J536	500.72	8	140	-0.48	0	0	0	Open
P389	WELL3	J262	996.46	10	140	0	0	0	0	Open
P39	J26	J46	125.95	8	100	9.87	0.06	0	0	Open
P393	J262	J280	120.32	16	140	0	0	0	0	Open
P395	WELL4P	J264	69.54	12	140	0	0	0	0	Open
P399		806 344	592.19	16	140	-612.47	0.98	0.13	0.22	Open
P405		1306 1305	714.29	16	140	-53.98	0.09	0	0	Open
P407		1305 1307	249.38	16	140	-224.04	0.36	0.01	0.03	Open
P409		1307 1302	235.98	16	140	-324.35	0.52	0.02	0.07	Open
P41	J10	J26	100	8	140	41.66	0.27	0	0.04	Open
P411		1302 804	275.16	16	140	-403.46	0.64	0.03	0.1	Open
P413		804 806	611.54	16	140	-471.96	0.75	0.08	0.14	Open
P415	J274	J402	1,583.54	16	140	158.39	0.25	0.03	0.02	Open
P419	J270	1919	3,295.09	16	140	1,515.50	2.42	3.87	1.18	Open
P423	J272	J274	714.32	36	140	-0.16	0	0	0	Open
P425	J274	24	25.7	16	140	-158.56	0.25	0	0.02	Open
P43	J34	J12	282.13	8	140	-15.13	0.1	0	0.01	Open
P431	J278	J266	5	16	140	-0.16	0	0	0	Open
P433	J266	J272	5	16	140	-0.16	0	0	0	Open
P435	J280	J264	2,449.53	16	140	0	0	0	0	Open
P437	WELL5	J280	135.75	10	150	0	0	0	0	Open
P443	T5000	J268	528.29	16	140	1,396.74	2.23	0.53	1.01	Open
P445	T5002	J270	170.24	16	140	1,515.50	2.42	0.2	1.18	Open
P45	J12	J14	599.98	12	140	38.31	0.11	0	0.01	Open
P459	J278	J264	97.91	16	140	0.16	0	0	0	Open
P461		1509 J282	364.3	6	140	0	0	0	0	Open
P463		200 194	422	8	140	6.91	0.04	0	0	Open
P465	J284	J290	278.18	8	140	9.87	0.06	0	0	Open
P469	J290	J208	598.09	8	140	9.87	0.06	0	0	Open
P47	J26	J30	591.41	8	140	16.15	0.1	0	0.01	Open
P471	J292	1101	180.49	8	140	-24.8	0.16	0	0.02	Open
P49	J30	J14	257.11	8	140	12.59	0.08	0	0.01	Open
P497	J332	J378	320.5	10	140	-92.56	0.38	0.02	0.06	Open
P51	J14	J16	534.13	12	140	36.73	0.1	0	0	Open
P53	J16	J20	260.66	12	140	28.07	0.08	0	0	Open
P55	J20	J18	281.7	12	140	0.72	0	0	0	Open
P559	J366	256	73.08	6	140	-127.64	1.45	0.1	1.43	Open
P561	J368	J366	321.21	6	140	-127.64	1.45	0.46	1.43	Open
P57	J16	J228	680.79	8	140	5.74	0.04	0	0	Open
P59	J20	J24	283.73	8	140	16.34	0.1	0	0.01	Open
P613	J378	350	278.51	10	140	-92.56	0.38	0.02	0.07	Open
P615	J396	332	384.23	10	140	-92.56	0.38	0.02	0.06	Open
P63		601 J124	65.98	10	140	189.11	0.77	0.02	0.24	Open
P65	J68	J66	369.2	12	140	48.56	0.14	0	0.01	Open
P657	J400	1309	114.46	6	140	-14.55	0.17	0	0.03	Open
P659	J402	1306	321.57	16	140	158.39	0.25	0.01	0.02	Open
P67	J66	J84	250.72	12	140	2.98	0.01	0	0	Open
P671	J406	1601	327.81	10	140	-241.79	0.99	0.13	0.39	Open
P69	J68	J70	267.03	8	140	8.27	0.05	0	0	Open
P71	J70	J72	444.74	8	140	-6.41	0.04	0	0	Open
P73	J72	J96	342.49	8	140	-13.27	0.08	0	0.01	Open
P735	J456	J458	268.23	10	140	-647.33	2.64	0.64	2.4	Open

P737	J458	J196	372.21	10	140	-647.33	2.64	0.89	2.4 Open
P75	J74	J76	395.44	8	140	8.5	0.05	0	0 Open
P751	J466	J468	154.95	8	140	11.05	0.07	0	0 Open
P753	J468	J470	328.14	8	140	11.05	0.07	0	0 Open
P755	J470	1605	1,225.42	8	140	-26.97	0.17	0.02	0.02 Open
P757	J472	J466	1,151.49	8	140	11.05	0.07	0	0 Open
P759	J478	J472	256.09	8	140	86.69	0.55	0.04	0.17 Open
P77	J76	J78	125.19	8	140	-7.53	0.05	0	0 Open
P779	J482	301	431.57	10	140	-131.6	0.54	0.05	0.13 Open
P781	J486	218	353.15	10	140	95.3	0.39	0.02	0.07 Open
P789	J494	270	516.74	12	140	137.73	0.39	0.03	0.06 Open
P79	J76	J82	287.08	8	140	10.37	0.07	0	0 Open
P795	J496	403	675.26	8	140	14.68	0.09	0	0.01 Open
P807	J508	J510	381.96	8	140	-66.55	0.42	0.04	0.11 Open
P809	J510	1503	341.19	8	140	-66.55	0.42	0.04	0.1 Open
P81	J82	J80	151.58	8	140	3.88	0.02	0	0 Open
P819	J520	604	371.68	10	140	-117.98	0.48	0.04	0.1 Open
P821	J524	601	750.94	12	140	336.76	0.96	0.22	0.29 Open
P823	J528	36	390.21	12	140	126.48	0.36	0.02	0.05 Open
P825	J532	J524	468.8	12	140	336.76	0.96	0.14	0.29 Open
P83	J82	J70	250.39	8	140	-9.28	0.06	0	0 Open
P849	J536	J538	218.07	8	140	-1.7	0.01	0	0 Open
P85	J82	J64	442.07	8	140	13.03	0.08	0	0.01 Open
P851	J538	J258	139.57	8	140	-3	0.02	0	0 Open
P853	J544	J546	135.43	8	140	-127.84	0.82	0.05	0.35 Open
P855	J546	J130	359.27	8	140	-127.84	0.82	0.13	0.35 Open
P87	J64	J66	474.58	12	140	-16.76	0.05	0	0 Open
P873	J552	J248	365.89	8	140	21.34	0.14	0	0.01 Open
P89	J66	J86	247.1	8	140	24.7	0.16	0	0.02 Open
P91	J86	J88	586.41	8	140	3.29	0.02	0	0 Open
P93	J88	J50	588.02	8	140	-2.11	0.01	0	0 Open
P95	J50	J54	341.35	8	140	-16.64	0.11	0	0.01 Open
P97	J54	J52	103.18	12	140	6.3	0.02	0	0 Open
P99	J54	J56	148.25	12	140	-22.94	0.07	0	0 Open
WELL4PUN	WELL4	WELL4P	1	10	150	0	0	0	0 Open

## **APPENDIX D – WATER RIGHTS DATA**

**Table 3.1 - Woods Cross City Water Rights Summary**

Revision Date: May 13, 2014

WR#	Description	Flow (cfs)	Flow(gpm)	Volume (AF)	Priority Date	Perfected?	Proof Due	Point of Diversion
31-3971	Well #3	2	897.6	1447.93	10/29/1969	Y		N 1200 ft W 500 ft from SE cor, Sec 26, T 2N, R 1W, SLBM
31-2091	Well #2	0.5	224.4	361.98	5/5/1960	Y		N 1215 ft E 260 ft from S4 cor, Sec 25, T 2N, R 1W, SLBM
31-4569	Well #4 and #5	5.66	2540.2	4097.65	2/15/1979	N	9/30/2023	Many
31-5209	Well #4 and #5	4.34	1947.8	3142.02	2/15/1979	N	9/30/2023	Many
31-2398	Well #1	0.668	299.8	483.61	6/13/1934	Y		N 1325 ft E 820 ft from SW cor, Sec 30, T 2N, R 1E, SLBM
31-3849	Well #1	0.25	112.2	180.99	10/19/1966	Y		
31-2084	Well #1	0.303	136.0	219.36	12/17/1953	Y		
31-2059	Well #1, #2, #3, #4, #5	0.4604	206.6	333.31	00/00/1905	N	5/31/2019	N 1040 ft W 420 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2068	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	N	5/31/2019	N 1210 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2069	Well #1, #2, #3, #4, #5	0.3524	158.2	255.13	00/00/1896	N	5/31/2019	N 1190 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2070	Well #1, #2, #3, #4, #5	0.103	46.2	74.57	00/00/1900	N	5/31/2019	N 980 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2071	Well #1, #2, #3, #4, #5	0.1801	80.8	130.39	00/00/1896	N	5/31/2019	N 950 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2145	Well #1, #2, #3, #4, #5	0.2857	128.2	206.84	00/00/1886	N	5/31/2019	N 500 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2147	Well #1, #2, #3, #4, #5	0.3524	158.2	255.13	00/00/1896	N	5/31/2019	N 790 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2148	Well #1, #2, #3, #4, #5	0.1249	56.1	90.42	00/00/1896	N	5/31/2019	N 815 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2149	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	N	5/31/2019	N 880 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
31-2150	Well #1, #2, #3, #4, #5	0.1572	70.6	113.81	00/00/1896	N	5/31/2019	N 835 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, SLBM
<b>TOTAL</b>		<b>16.0515</b>	<b>7203.9</b>	<b>11620.76</b>				

STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-3971(A39649)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2013 Page 1

WATER RIGHT: 31-3971 APPLICATION/CLAIM NO.: A39649 CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City (Public Water Supplier)
ADDR: Woods Cross UT 84087

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? Yes COUNTY TAX ID#:
FILED: 10/29/1969(PRIORITY: 10/29/1969|PUB BEGAN: 12/18/1969|PUB ENDED:
ProtestEnd: |PROTESTED: (No |HEARNG HLD: |SE ACTION: (Approved|ActionDate:03/02/1970|PROOF DUE:
EXTENSION: |ELEC/PROOF:(Election|ELEC/PROOF:08/12/1976|CERT/WOC: 08/28/1989|LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: ( )

PD BOOK: ( 31- |MAP: (33db |PUB DATE:

Type of Right: Application to Appropriate Source of Info: Water User's Claim Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 2.0 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1200 ft W 500 ft from SE cor, Sec 26, T 2N, R 1W, S18M
DIAMETER OF WELL: 18 ins. DEPTH: 394 to Ft. YEAR DRILLED: 1970 WELL LOG? Yes WELL ID#: 3336

USES OF WATER RIGHT\*\*\*\*\* RLU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):
31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC),
2398 (UGMC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: 1447.95996

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2091(A31917)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

WATER RIGHT: 31-2091 APPLICATION/CLAIM NO.: A31917 CERT. NO.: 8439

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City (Public Water Supplier)
ADDR: 1555 South 800 West
Woods Cross UT 84087

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 05/05/1960 PRIORITY: 05/05/1960 PUR BEGAN: 09/02/1960 PUR ENDED: (NEWSPAPER: Davis County Clipper
PROTEST END: (PROTESTED: (No- ) HEARING HLD: (SE ACTION: [Approved] (Action Date: 03/01/1961) PROOF DUE:
EXTENSION: (ELEC/PROOF: ( ) ELEC/PROOF: (CERT/WUC: 02/10/1965) LAP, ETC: (LAPS LETTER:
RUSH LETTER: (RENOVATE: 03/05/2004) RECON REQ: (TYPE: ( )

PD BOOK: | 31-2 | MAP: | 133da | PUB DATE:

Type of Right: Application to Appropriate Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.5 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1215 Ft E 260 Ft from S4 cor, Sec 25, T 2N, R 1W, S18M
DIAMETER OF WELL: 8 ins. DEPTH: 252 to ft. YEAR DRILLED: 1953 WELL LOG? Yes WELL ID#: 3334

USRS OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402, Water Rights Appurtenant to the following use(s):
31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)
2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31
Acres Feet Contributed by this Right for this Use: 362.0

OTHER COMMENTS\*\*\*\*\*

A review of the water right certificate issued in 1963 demonstrates the Town of Woods Cross had appropriated and perfected this right for 0.5 cfs for municipal uses under this water right. Additionally, the Water User's Claim prepared in conjunction with the adjudication mentioned that this historic use established the basis and limit of this right. An evaluation of this established and perfected Beneficial Use would quantify the right at (0.5 \*724) = 362 acre-feet.

\*\*\*\*\*END OF DATA\*\*\*\*\*

STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-4569(A52671)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

WATER RIGHT: 31-4569 APPLICATION/CLAIM NO.: A52671 EPRF. NO.:

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City (Public Water Supplier)
ADDR: 1555 South 800 West
Woods Cross UT 84087

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? No COUNTY TAX ID#:
FILED: 02/15/1979|PRIORITY: 02/15/1979|POB BEGAN: 04/05/1979|POB ENDED: NEWSPAPER: Davis County Clipper
PROTEST END: |PROTESTED: (No) |HEARING HLD: |SE ACTION: (Approved)|ActionDate:09/06/1979|PROOF DUE: 09/30/2023
EXTENSION: |ELEC/PROOF: |ELEC/PROOF: |CERT/WUC: |LAP, ETC: |LAPS LETTER:
RUSH LETTR: |RENOVATE: 03/18/2004|RECON REQ: |TYPE: | |50YR DATE: 09/06/2029

PD BOOK: ( 31- ) |MAP: | |POB DATE:

Type of Right: Application to Appropriate Source of Info: Application to Appropriate Status: Approved

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 5.66 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: In Woods Cross

POINTS OF DIVERSION -- UNDERGROUND:

- (1) N 620 ft E 630 ft from SW cor, Sec 25, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
(2) N 2750 ft E 1250 ft from SW cor, Sec 25, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 360 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
(3) N 384 ft W 886 ft from SE cor, Sec 26, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
Comment: PLS changed - well replacement application 31-3209
(4) S 560 ft W 1060 ft from NE cor, Sec 35, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
(5) S 1825 ft W 1060 ft from NE cor, Sec 35, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#: 29430
(6) S 1200 ft E 1900 ft from NW cor, Sec 36, T 2N, R 1W, S18M
DIAMETER OF WELL: 12 ins, DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):
31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)
2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this Use: 4097.72669

OTHER COMMENTS\*\*\*\*\*

The City owns one of the sites noted and will acquire others as needed.

SEGREGATION HISTORY\*\*\*\*\*

This Right was Segregated from , with Appl#: , Approval Date: / / under which Proof is to be submitted.

This Right as originally filed:

FLOW IN CFS	QUANTITY IN * ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*	MUNICIPAL	MINING	POWER	OTHER
10.0								

The following Water Rights have been Segregated from 31-4569:

1) WRNUM: 31-5209 4.34  
 APPL#: 452671a  
 NAME: Woods Cross City  
 FILED: 01/20/2000 STATUS: APP  
 APPR: 09/08/2000

CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*	MUNICIPAL	MINING	POWER	OTHER
31-4569 currently has: 5.66								
						ERROR		

APPLICATIONS FOR EXTENSIONS OF TIME WITHIN WHICH TO SUBMIT PROOF\*\*\*\*\*

FILED: 07/22/1998|PUB BEGAN: 08/11/1998|PUB ENDED: |NEWSPAPER: Davis County Clipper  
 ProtestEnd:09/07/1998|PROTESTED: (No )|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:11/17/1998|PROOF DUE: 08/31/2003

FILED: 09/29/2003|PUB BEGAN: 09/23/2003|PUB ENDED: 09/30/2003|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/20/2003|PROTESTED: (No )|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/01/2003|PROOF DUE: 09/30/2008

FILED: 09/11/2008|PUB BEGAN: 09/23/2008|PUB ENDED: 09/30/2008|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/20/2008|PROTESTED: ( )|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/09/2008|PROOF DUE: 09/30/2013

FILED: 08/27/2013|PUB BEGAN: 09/26/2013|PUB ENDED: 10/03/2013|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/23/2013|PROTESTED: (No )|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/31/2013|PROOF DUE: 09/30/2023

\*\*\*\*\*  
 \*\*\*\*\*END OF DATA\*\*\*\*\*  
 \*\*\*\*\*



# STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-5209(A52671a)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-5209** APPLICATION/CLAIM NO.: A52671a CERT. NO.:

**OWNERSHIP**

NAME: Woods Cross City (Public Water Supplier)  
 ADDR: 1555 South 800 West  
 Woods Cross UT 84087

**DATES, ETC.**

LAND OWNED BY APPLICANT?	COUNTY TAX ID#:		
FILED: 02/15/1979	PRIORITY: 02/15/1979	PUB BEGAN:	PUB ENDED:
PROTESTED: [No]	HEARING HLD:	SE ACTION: [Approved]	NEWSPAPER:
EXTENSION: [ELEC/PROOF:]	ELEC/PROOF:	CERT/WUC:	ACTION DATE: 09/06/1979
RUSH LETTER: [RENOVATE: 07/09/2008]	RECON REQ:	TYPE: [ ]	PROOF DUE: 09/30/2023
			LAPS, ETC: [ ]
			LAPS LETTER: [ ]
			150YR DATE: 09/06/2029

PD BOOK: | 31- | |MAP: | |PUB DATE:

Type of Right: Application to Appropriate Source of Info: Application to Segregate Status: Approved

**LOCATION OF WATER RIGHT**

FLOW: 4.34 cfs OR 3142.07312 acre-feet

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: In Woods Cross

**POINTS OF DIVERSION -- UNDERGROUND:**

- (1) N 620 ft E 630 ft from SW cor, Sec 25, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
- (2) N 2750 ft E 1250 ft from SW cor, Sec 25, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 360 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
- (3) N 384 ft W 886 ft from SE cor, Sec 26, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 16 ins. DEPTH: 385 to ft. YEAR DRILLED: WELL LOG? No WELL ID#: 432065  
 Comment: Old POD N320 W750 SE Sec 26 T2N-R1W SLBM
- (4) S 560 ft W 1060 ft from NE cor, Sec 35, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
- (5) S 1825 ft W 1060 ft from NE cor, Sec 35, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:
- (6) S 1200 ft E 1900 ft from NW cor, Sec 36, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#:

**POINT OF DIVERSION -- UNDERGROUND (ABANDONED):**

- (1) N 320 ft W 750 ft From SE cor, Sec 26, T 2N, R 1W, SLBM  
 DIAMETER OF WELL: 12 ins. DEPTH: 300 to 600 ft. YEAR DRILLED: WELL LOG? No WELL ID#: 432066  
 Comment: Old POD N 320 W 750 SE Sec 26, T2N-R1W SLBM

USES OF WATER RIGHT \*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC),  
 2395 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31  
 Acre Feet Contributed by this Right for this Use: 3142.07312

SEGREGATION HISTORY\*\*\*\*\*

This Right was Segregated From 31-4569, with App# : A52671, Approval Date: 09/06/1979 under which Proof is to be submitted.

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-Feet	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELOS)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER

4.34

APPLICATIONS FOR EXTENSIONS OF TIME WITHIN WHICH TO SUBMIT PROOF\*\*\*\*\*

FILED: 07/22/1998|PUB BEGAN: 08/11/1998|PUB ENDED: |NEWSPAPER: Davis County Clipper  
 ProtestEnd:09/07/1998|PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:11/17/1998|PROOF DUE: 09/31/2003

FILED: 08/29/2003|PUB BEGAN: 09/23/2003|PUB ENDED: 09/30/2003|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/20/2003|PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/01/2003|PROOF DUE: 09/30/2008

FILED: 09/11/2008|PUB BEGAN: 09/23/2008|PUB ENDED: 09/30/2008|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/20/2008|PROTESTED: | |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/09/2008|PROOF DUE: 09/30/2013

FILED: 08/27/2013|PUB BEGAN: 09/26/2013|PUB ENDED: 10/03/2013|NEWSPAPER: Davis County Clipper  
 ProtestEnd:10/23/2013|PROTESTED: [No] |HEARNG HLD: |SE ACTION: [Approved]|ActionDate:12/31/2013|PROOF DUE: 09/30/2023

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2398(U8145,1139**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2398** APPLICATION/CLAIM NO.: U8145,11390 CERT. NO.:

-----  
 OWNERSHIP\*-----  
 -----

NAME: Woods Cross City (Public Water Supplier)  
 ADDR: Woods Cross UT 84087

-----  
 DATES, ETC.\*-----  
 -----

LAND OWNED BY APPLICANT?	COUNTY TAX ID#:				
FILED: 03/18/1936(PRIORITY: 06/13/1934)	PUB BEGAN:	PUB ENDED:	(NEWSPAPER:		
ProtestEnd: (PROTESTED: (No	(HEARNG HLD:	SE ACTION: (	(ActionDate:	(PROOF DUE:	
EXTENSION: (ELEC/PROOF: (	(ELEC/PROOF:	CERT/WUC: 02/10/1965	LAP, ETC:	LAPS LETTER:	
RUSH LETTR: (RENOVATE:	(RECOM REQ:	TYPE: (	)		

PD BOOK: ( 31-1 (IMAP: (34cb (PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status:

-----  
 LOCATION OF WATER RIGHT\*-----  
 -----

FLOW: 0.668 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1325 ft E 820 ft from SW cor, Sec 30, T 2N, R 1E, S18M  
 DIAMETER OF WELL: 12 ins. DEPTH: 542 to ft. YEAR DRILLED: WELL LOG? No WELL ID#: 3333

-----  
 USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)  
 -----

SUPPLEMENTAL GROUP NO, 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (IND), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31  
 Acre Feet Contributed by this Right for this Use: 484.0

-----  
 OTHER COMMENTS\*-----  
 -----

A review of the underground water claim filed in 1935 shows the Town of Woods Cross claims a right to 300 gpm for municipal uses under this water right. Additionally, the Water User's Claim prepared in conjunction with the adjudication mentioned that this historic use established the basis and limit of this right. An evaluation of this established and perfected beneficial use would quantify the right at (300 / 468.8 \* 724 ) = 484 acre-feet.

\*\*\*\*\*END OF DATA\*\*\*\*\*

STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-3849(A37962)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

WATER RIGHT: 31-3849 APPLICATION/CLAIM NO.: A37962 CERT. NO.:

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City (Public Water Supplier)
ADDR: Woods Cross UT 84087

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 10/19/1966 PRIORITY: 10/19/1966 PUB BEGAN: 11/18/1966 PUB ENDED: (NEWSPAPER: Davis County Clipper
PROTESTED: [No] HEARNC HLD: [SE ACTION: [Approved] ActionDate: 02/23/1967] PROOF DUE:
EXTENSION: [ELEC/PROOF:] [ELEC/PROOF:] [CERT/WUC: 07/15/1971] LAP, ETC: [LAP LETTER:
RUSH LETTR: [RENOVATE:] [RECON REQ:] [TYPE: ]

PD BOOK: | 31- | MAP: | | PUB DATE:

Type of Right: Application to Appropriate Source of Info: Water User's Claim Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.25 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1325 ft E 820 ft from SW cor, Sec 30, T 2N, R 1E, S18M
DIAMETER OF WELL: 12 ins. DEPTH: 542 to ft. YEAR DRILLED: WELL LOG? No WELL ID#: 3333

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):
31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)
2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WB), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31
Acre Feet Contributed by this Right for this User: 180.995

OTHER COMMENTS\*\*\*\*\*

Same well as Water User's Claim 31-2398.

\*\*\*\*\*END OF DATA\*\*\*\*\*

STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2084(A24942)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

WATER RIGHT: 31-2084 APPLICATION/CLAIM NO.: A24942 CERT. NO.: 5458

CHANGES: a5052 Water User's Claim

OWNERSHIP

NAME: Woods Cross City (Public Water Supplier)
ADDR: Woods Cross UT 84087

DATES, ETC.

LAND OWNED BY APPLICANT? COUNTY TAX ID#:
FILED: 06/02/1953 PRIORITY: 12/17/1953 PUB BEGAN: 08/28/1953 PUB ENDED:
ProtestEnd: PROTESTED: [No] HEARING HLD: USE ACTION: [Approved] ActionDate: 11/10/1954 PROOF DUE:
EXTENSION: ELEC/PROOF: [Election] ELEC/PROOF: 07/04/1969 CERT/WUC: 07/12/1971 LAP, ETC: LAPS LETTER:
RUSH LETTR: RENOVATE: RECON REQ: TYPE: { }

PD HOUR: 31- MAP: PUB DATE:

Type of Right: Application to Appropriate Source of Info: Water User's Claim Status: Water User's Claim

LOCATION OF WATER RIGHT

FLOW: 0.303 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION:

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1325 ft E 820 ft from SW cor, Sec 30, T 2N, R 1E, S18M
DIAMETER OF WELL: 12 ins, DEPTH: 542 to It. YEAR DRILLED: WELL LOG? No WELL ID#: 3333

USES OF WATER RIGHT \*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1-Family
(The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):
31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)
2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

MUNICIPAL: Woods Cross PERIOD OF USE: 01/01 TO 12/31
Acres Feet Contributed by this Right for this Use: 30.55

OTHER COMMENTS

A review of the water right certificate issued in 1958 demonstrates the Town of Woods Cross had appropriated and perfected this right for 27 families and 0.6 acres of irrigation under this water right. Additionally, the Water User's Claim prepared in conjunction with the adjudication mentioned that these historic uses established the limit of this right. An evaluation of this established and perfected beneficial use would quantify the right at (27 \* 0.45) + (4.6 \* 4) = 30.55 acre-feet.

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2059(U9305)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2059** APPLICATION/CLAIM NO.: U9305 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 acres, 141 elu's supp/w other rights

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936 PRIORITY: / /1928 PUB BEGAN: |PUB ENDED: |NEWSPAPER:  
 ProtesLead: |PROTESTED: |No |HEARING HLD: |SEE ACTION: | |ActionDate: |PROOF DUE:  
 EXTENSION: |ELEC/PROOF: | |ELEC/PROOF: |CERT/WUC: 05/09/1965 |MAP, ETC: |MAPS LETTER#:  
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: | |  
 PD BOOK: | 31-3 |MAP: |33cd |PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.1604 cfs

SOURCE: Underground Water Drain (well)

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:  
 (1) N 1040 ft W 420 ft from E4 cor, Sec 34, T 2N, R 1W, S15M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: as per PD book

POINT OF DRAIN:  
 (1) N 1040 ft W 420 ft from E4 cor, Sec 34, T 2N, R 1W, S15M  
 Comment: as per Underground Water Claim

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):  
 (1) N 1040 ft W 420 ft from E4 cor, Sec 34, T 2N, R 1W, S15M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#: 35120

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

This group represents the supplemental portion owned by Valentine-Merrell, LC

IRRIGATION: Beneficial Use Amt: 13.67 acres of the Group Total of 59.043  
 STOCKWATER: Beneficial Use Amt: 0.0 ELUs of the Group Total of 141.

###PLACE OF USE:	*--- NORTH WEST QUARTER ---*				*--- NORTH EAST QUARTER ---*				*--- SOUTH WEST QUARTER ---*				*--- SOUTH EAST QUARTER ---*				Section Totals
	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	
Sec 34 T 2N R 1W S15M	* 2.1900				* 3.3200	2.5000	22.5300	22.5700	* 22.2500				* *				* 75.3600
GROUP ACRAGE TOTAL:																75.3600	

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4369 (APP), 4600 (WB), 5209 (APP)

Even though the change to municipal use under 31-2059 has not been certificated, it is included in this group for administrative and distribution purposes.

MUNICIPAL: Woods Cross  
 Acre Feet Contributed by this Right for this Use: 54.68

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*				NORTH-EAST*				SOUTH-WEST*				SOUTH-EAST*					
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE		
Sec 34 T 2N R 1W S1B1	*	:	X:	:	*	X:	X:	X:	X*	*	:	X:	:	*	:	:	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally Filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
0.496		17.4460						

The following Water Rights have been Segregated from 31-2059:

( 1) WRNUM: 31-5243 0.03558 3.7760  
 APPL: U9305  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS: WUC  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
31-2059 currently has:	0.46042		13.6700			ERROR			
MUNICIPAL in RIGHT but NOT SEGMASTER									

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER:           |REQUEST TO:                   |LAST USED: 13/ / 0|PRIOR FROM:                   |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper                   |PROTEST END:01/28/2008  
 PROTESTED: [No    ]|HEARING HLD:                   |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

# STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2068(U9312)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2068** APPLICATION/CLAIM NO.: 09312 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

**OWNERSHIP**

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
       Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 elu's supp/w other rights

**DATES, ETC.**

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936(PRIORITY: / 71896)PUB BEGAN: (PUB ENDED: (NEWSPAPER:  
 ProtestEnd: (PROTESTED: [No (HEARING HLD: (SR ACTION: (ActionDate: (PROOF DUE:  
 EXTENSION: (ELEC/PROOF: (ELEC/PROOF: (CERT/WUC: 05/09/1965(LAP, ETC: (LAPS LETTER:  
 RUSH LETTR: (RENOVATE: (RECON REQ: (TYPE: )  
 PB BOOK: | 31-3 (MAP: (33cd (PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

**LOCATION OF WATER RIGHT**

FLOW: 0.1572 cfs  
 SOURCE: Underground Water Well  
 COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:  
 (1) N 1210 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: historic well has been abandoned

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):  
 (1) N 1210 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: 2 ins. DEPTH: to ft. YEAR DRILLED: 1896 WELL LOG? No WELL ID#: 35118

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059(WUC), 2068(WUC), 2069(WUC), 2070(WUC), 2071(WUC), 2145(WUC), 2147(WUC), 2148(WUC), 2149(WUC), 2150(WUC)

IRRIGATION: Beneficial Use Amt: 3.694 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 13.0000 EDUs of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

##PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER				Section Totals
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 34 T 2N R 1W S1B1M	2.1900				3.3200	2.5000	22.5300	22.5700		22.2500							75.3600
GROUP ACREAGE TOTAL:																75.3600	

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059(WUC), 2068(WUC), 2069(WUC), 2070(WUC), 2071(WUC), 2084(WUC), 2091(WUC), 2145(WUC), 2147(WUC), 2148(WUC), 2149(WUC), 2150(WUC)  
 2398(UGWC), 3849(WUC), 3971(WUC), 4569(APP), 4600(WD), 5209(APP)

Even though the change to municipal use under 31-2068 has not been certificated, it is included in this group for administrative and distribution purposes.



WRNUM 31-2068 continued\*\*\* (WARNING: Water Rights makes NO claims as to the accuracy of this da

MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 15.14

PLACE OF USE 16: STOCKWATERING\*\*\*\*\*

	NORTH-WEST= NW NE SW SE	NORTH-EAST= NW NE SW SE	SOUTH-WEST= NW NE SW SE	SOUTH-EAST= NW NE SW SE
Sec 34 T 2N R 1W S16M	* : X: : *	* X: X: X: X*	* : X: : *	* : : : *

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MINING ACRE-FEET	POWER ACRE-FEET	OTHER ACRE-FEET (*)	
0.167		4.7150	17.0000					

The following Water Rights have been Segregated from 31-2068:

( 1) WRNUM: 31-5244 0.00977 1.0210 4.0000  
 APPL#: U9312  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS: WUC  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MINING ACRE-FEET	POWER ACRE-FEET	OTHER ACRE-FEET (*)
31-2068 currently has:	0.15723		3.6940	13.0000				ERROR

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER: (REQUEST TO: (LAST USED: 13/ / 0) PRIOR FROM: (PRIOR TO:  
 FILED: 12/10/2007) PUB BEGAN: 01/01/2008) (PUB ENDED: 01/08/2008) (NEWSPAPER: Davis County Clipper (PROTEST END: 01/28/2008  
 PROTESTED: [No ] (HEARNG HLD: (SE ACTION: [Approved] (ActionDate: 02/13/2008) (PROOF DUE: 02/28/2013) (PROOF SUB:

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

# STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2069(U9310)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2069** APPLICATION/CLAIM NO.: U9310 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 elu's supp/w other rights

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936|PRIORITY: 7 /1896|PUB BEGAN: |PUB ENDED: |NEWSPAPER:  
 ProtestEnd: |PROTESTED: (No- |HEARNG HLD: |ISE ACTION: | |ActionDate: |PROOF DUE:  
 EXTENSION: |ELEC/PROOF: | |ELEC/PROOF: |CERT/WUC: 05/09/1965|LAP. ETC: |TAPS LETTER:  
 RUSH LETTR: |RENOVATE: |RECON REQ: |TYPE: | )  
 PD BOOK: [ 01-3 | |MAP: 133cd | |PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.3524 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:

(1) N 1190 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: 1/2 ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: historic well has been abandoned

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):

(1) N 1190 ft W 380 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: 3 ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#: 35119

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 8.159 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 32.0000 EDUs of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE:	*-----NORTH WEST QUARTER-----*				*-----NORTH EAST QUARTER-----*				*-----SOUTH WEST QUARTER-----*				*-----SOUTH EAST QUARTER-----*				Section
	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	
Sec 34 T 2N R 1W S18M *		2.1900				3.3200	2.5000	22.5300	22.5700*		22.2500						75.3600
	GROUP ACREAGE TOTAL: 75.3600																

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2069 has not been certificated, it is included in this group for administrative and distribution purposes.

WRNUM 31-2069 continued\*\*\* (WARNING: Water Rights makes NO claims as to the accuracy of this da

MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 33.532

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*				NORTH-EAST*				SOUTH-WEST*				SOUTH-EAST*					
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE		
Sec 34 T 2N R 1W S1B1	*	:	X:	:	*	X:	X:	X:	X*	*	:	X:	:	*	:	:	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES							
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER	
0.374		10.4140	41.0000						

The following Water Rights have been Segregated from 31-2069:

1 1) WRNUM: 31-5245 0.0216 2.2550 9.0000  
 APPL#: U9310  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS:  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
31-2069 currently has:	0.3524		8.1590	32.0000		ERROR			

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER:            |REQUEST TO:            |LAST USED: 13/ / 0|PRIOR FROM:            |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper            |PROTEST END:01/28/2008  
 PROTESTED: (No     )|HEARNG HLD:            |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*END OF DATA\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2070(U19665)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2070** APPLICATION/CLAIM NO.: U19665 CERT. NO.:

CHANGES: a33833 Withdrawn, a19404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 3555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 39.043 ac, 141 slu's supp/w other rights

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 ETLED: 03/26/1940 PRIORITY: / 1900 PUB BEGAN: PUB ENDED: NEWSPAPER:  
 ProtestEd: |PROTESTED: |No | |HEARNG HLD: |SE ACTION: | |ActIonDate: |PROOF DUE:  
 EXTENSION: |ELEC/PROOF: | |ELEC/PROOF: |CERT/WUC: 05/09/1965 |LAP, ETC: |LAPS LETTER:  
 RUSH LETTR: |RENOVATE: |RRCON REQ: |TYPE: | 1

PD BOOK: [ 31-3 ] |MAP: (33ca ) |PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.103 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:

(1) N 980 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: historic well has been abandoned

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):

(1) N 980 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1  
 DIAMETER OF WELL: 2 ins. DEPTH: to ft. YEAR DRILLED: 1900 WELL LOG? No WELL ID#: 35121

USES OF WATER RIGHT\*\*\*\*\* ELU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 3.06 acres	of the Group Total of 59.043	PERIOD OF USE: 04/01 TO 10/31
STOCKWATER: Beneficial Use Amt: 0.0 EDUs	of the Group Total of 141.	PERIOD OF USE: 01/01 TO 12/31
*****		
#PLACE OF USE:	* NORTH WEST QUARTER * NORTH EAST QUARTER * SOUTH WEST QUARTER * SOUTH EAST QUARTER * Section	
	* NW   NE   SW   SE * NW   NE   SW   SE * NW   NE   SW   SE * NW   NE   SW   SE * Totals	
Sec 34 T 2N R 1W S1B1	* 2.1900       3.3200 2.5000 22.5300 22.5700 * 22.2500       * 75.3600	GROUP ACREAGE TOTAL: 75.3600

SUPPLEMENTAL GROUP NO. 30392. Water Rights Appurtenant to the following use(s):  
 31-2070 (WUC), 2071 (WUC)

DOMESTIC: Beneficial Use Amt: 1.0000 EDU of the Group Total of 1.00 PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC),  
 2398 (MGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2070 has not been certificated, it is included in this group for administrative and distribution purposes.

MUNICIPAL: Woods Cross  
 Acre Feet Contributed by this Right for this Use: 12.69

PLACE OF USE for STOCKWATERING\*\*\*\*\*

Sec 31 T 2N R 1W S1B	NORTH-WEST=	NORTH-EAST=	SOUTH-WEST=	SOUTH-EAST=
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
	* : X: : *	* X: X: X: X*	* : X: : *	* : : : *

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES				
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING POWER OTHER ACRE-FEET
0.111		3.9060		1.0000		

The following Water Rights have been Segregated from 31-2070:

1) WRNUM: 31-5246 0.00797 0.8460  
 APPL#: 019663  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS: WUC  
 APPR:

CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING POWER OTHER ACRE-FEET

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER: |REQUEST TO: |LAST USED: 13/ / 0|PRIOR FROM: |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper |PROTEST END:01/28/2008  
 PROTESTED: [No ]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*E N D O F B A T A\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2071(U9308)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2071** APPLICATION/CLAIM No.: U9308 CERY. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 eiu's supp/w other rights

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936 PRIORITY: / /1896 PUB BEGAN: PUB ENDED: NEWSPAPER:  
 ProtestEnd: PROTESTED: (No) HEARING HLD: SE ACTION: ActionDate: PROOF DUE:  
 EXTENSION: ELEC/PROOF: ELEC/PROOF: CERT/WUC: 05/09/1965 LAP, ETC: LAPS LETTER:  
 RUSH LETTR: RENOVATE: RECON REQ: TYPE: )

FD BOOK: ( 31-3 ) MAP: [33cd] ) PUB DATE:

Type of Right: Underground Water Claim Source of Infor: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.1601 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:

(1) N 950 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: Historic well could not be found to be abandoned

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):

(1) N 950 ft W 170 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: 2 ins. DEPTH: to ft. YEAR DRILLED: 1896 WELL LOG? No WELL ID#: 35122

USES OF WATER RIGHT\*\*\*\*\* EIU -- Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU -- Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 3.694 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31

STOCKWATER: Beneficial Use Amt: 23.0000 EIUs of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

#	APPL. OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER				Section
		NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec. 34	T 2N R 1W S18M	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	75.3600
			2.1900			3.3200	2.5000	22.5300	22.5700		22.2500							GROUP ACREAGE TOTAL: 75.3600

SUPPLEMENTAL GROUP NO. 30392. Water Rights Appurtenant to the following use(s):  
 31-2070 (WUC), 2071 (WUC)

DOMESTIC: Beneficial Use Amt: 0.0 EDUs of the Group Total of 1.00 PERIOD OF USE: 01/01 TO 12/31

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2071 has not been certificated, it is included in this group for administrative and distribution purposes.

MUNICIPAL: Woods Cross  
 Acre Feet Contributed by this Right for this Use: 15.42

PLACE OF USE for STOCKWATERING\*

	NORTH-WEST*		NORTH-EAST*		SOUTH-WEST*		SOUTH-EAST*	
	NW	NE SW SE	NW	NE SW SE	NW	NE SW SE	NW	NE SW SE
Sec 34 T 2N R 1W SLRM	* : X: : *	* X: X: X: X*	* : X: : *	* : : : *	* : X: : *	* : : : *	* : : : *	* : : : *

SEGREGATION HISTORY\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES				
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING POWER OTHER ACRE-FEET
0.19		4.7150	29.0000			

The following Water Rights have been Segregated from 31-2071:

1) WRNUM: 31-5247 0.00985 1.0210 6.0000  
 APPL#: U9308  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS: WUC  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING POWER OTHER ACRE-FEET
31-2071 currently has:	0.18015		3.6940	23,0000		ERROR	

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*

EXT NUMBER:            |REQUEST TO:                    |LAST USED: 13/ / 0|PRIOR FROM:                    |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/09/2008|NEWSPAPER: Davis County Clipper                    |PROTEST END:01/28/2008  
 PROTESTED: (No        )|HEARNG HLD:                    |SEE ACTION: (Approved)|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2145(U14476)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2145** APPLICATION/CLAIM NO.: U14476 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 14) elp's supp/w other rights

DATES, ETC.

LAND OWNED BY APPLICANT:

FILED: 03/23/1936 PRIORITY: / 71886 PUB BEGAN: (PUB ENDED: (NEWSPAPER:  
 ProtestEnd: (PROTESTED: (No (HEARNG HLD: (SE ACTION: (ActionDate: (PROOF DUE:  
 EXTENSION: (ELEC/PROOF: (ELEC/PROOF: (CERT/WOC: 05/09/1965 (LAP, ETC: (LAPS LETTER:  
 RUSH LETTR: (RENOVATE: (RECON REQ: (TYPE: (

PD BOOK: | 31-3 (MAP: | 33cd (PUB DATE:

Type of Right: Underground Water Claim Source of Inf: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT

FLOW: 0.2857 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION — UNDERGROUND:

(1) N 500 Ft W 55 Ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: (Ins. DEPTH: to Ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: historic well could not be found & abandoned

POINT OF DIVERSION — UNDERGROUND (ABANDONED):

(1) N 500 Ft W 55 Ft from R4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: 3 Ins. DEPTH: 500 to Ft. YEAR DRILLED: 1886 WELL LOG? No WELL ID#: 35127

USES OF WATER RIGHT\*\*\*\*\* ELU — Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU — Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 8.159 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 5.0000 ELUS of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

PLACE OF USE:	* NORTH WEST QUARTER *				* NORTH EAST QUARTER *				* SOUTH WEST QUARTER *				* SOUTH EAST QUARTER *				Section Totals
	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	* NW	* NE	* SW	* SE	
Sec 34 T 2N R 1W S18M *		2.1900			3.3200	2.5000	22.5300	22.5700*		22.2500							75.3600
GROUP ACREAGE TOTAL: 75.3600																	

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2058 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (DCKC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2145 has not been certificated, it is included in this group for administrative and distribution purposes.



WRNUM 31-2145 continued\*\*\* (WARNING: Water Rights makes NO claims as to the accuracy of this da

MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 32.776

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*	NORTH-EAST*	SOUTH-WEST*	SOUTH-EAST*
	NW NE SW SE	NW NE SW SE	NW NE SW SE	NW NE SW SE
Sec 34 T 2N R 1W S1B1	* X: : *	* X: X: X: X*	* X: : *	* : : : *

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN * ACRE-FEET	W A T E R U S E S					
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*	MUNICIPAL	MINING	POWER
0.307		10.4140	6.0000				

The following Water Rights have been Segregated from 31-2145:

1) WRNUM: 31-5248 0.02129 2.2550 1.0000  
 APPL#: U14476  
 NAME: Utah Department of Transportation  
 FILED: 10/12/2007 STATUS:  
 APPR:

	CFS	ACRE FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*	MUNICIPAL	MINING	POWER	OTHER
31-2145 currently has:	0.28571		8.1590	5.0000		ERROR			

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER:      |REQUEST TO:                   |LAST USED: 13/ / 0|PRIOR FROM:                   |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper                   |PROTEST END:01/28/2008  
 PROTESTED: {No    }|HEARNG HLD:                   |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2147(U9306)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2147** APPLICATION/CLAIM NO.: U9306 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 elu's supp/w other rights

DATES, ETC.\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936 PRIORITY: / 1896 PUB BEGAN: | PUB ENDED: | NEWSPAPER:  
 Protest End: (PROTESTED) (NO) | HEARING HLD: | SE ACTION: | | Action Date: | PROOF USE:  
 EXTENSION: (ELEC/PROOF) | | ELEC/PROOF: | CERT/WUC: 05/09/1965 | AP, ETC: | LAPS LETTER:  
 RUSH LETTER: (RENOVATE) | RECON REQ: | TYPE: | |

PD BOOK: | 31-3 | MAP: (33cd) | PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.3524 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

POINT OF DIVERSION -- UNDERGROUND:  
 (1) N 790 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: Historic well has been abandoned

POINT OF DIVERSION -- UNDERGROUND (ABANDONED):  
 (1) N 790 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: 3 ins. DEPTH: to ft. YEAR DRILLED: 1896 WELL LOG? No WELL ID#: 35126

USES OF WATER RIGHT\*\*\*\*\* ELU Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* ERU Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 8.159 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 32.0000 ELUs. of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

#	PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER				Section	Totals
		NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE		
Sec 34 T 2N R 1W S1B1M	*	2.1900				3.3200	2.5000	22.5300	22.5700*		22.2500							75.3600	
GROUP ACREAGE TOTAL:																	75.3600		

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WB), 5209 (APP)

Even though the change to municipal use under 31-2147 has not been certificated, it is included in this group for administrative and distribution purposes.

WRNUM 31-2147 continued\*\*\* (WARNING: Water Rights makes NO claims as to the accuracy of this da

MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 33.532

PLACE OF USE for STOCKWATERING\*\*\*\*\*

Sec 34 T 2N R 1W SRM	NORTH-WEST*		NORTH-EAST*		SOUTH-WEST*		SOUTH-EAST*			
	NW	NE SW SE	NW	NE SW SE	NW	NE SW SE	NW	NE SW SE		
	*	X:	:	*	* X:	X: X: X:	*	X: :	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
0.374		10.4140	41.0000					

The following Water Rights have been Segregated from 31-2147:

( 1) WRNUM: 31-5249 0.0216 2.2550 9.0000  
 APPL#: U9306  
 NAME: Utah Department of Transportation  
 FILED: 10/15/2007 STATUS:  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	WATER USES			
						MUNICIPAL	MINING	POWER	OTHER
31-2147 currently has:	0.3524		8.1590	32.0000		ERROR			

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER: |REQUEST TO: (LAST USED: 13/ / D|PRIOR FROM: |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper |PROTEST END:01/28/2008  
 PROTESTED: (No )|HEARNG BLD: (SE ACTION: [Approved]|ActionDate:02/13/2009|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*E N D O F D A T A\*\*\*\*\*

# STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2148(U9309)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2010 Page 1

**WATER RIGHT: 31-2148** APPLICATION/CLAIM NO.: U9309 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

**OWNERSHIP**

NAME: Woods Cross City  
 ADDR: 1359 South 800 West  
       Woods Cross, UT 84087  
 REMARKS: 58.043 ac, 141 elu's supp/w other rights

**DATES, ETC.**

LAND OWNED BY APPLICANT?	COUNTY TAX ID#:				
FILED: 03/21/1936   PRIORITY: /   /1896   PUB BEGAN:		PUB ENDED:		NEWSPAPER:	
Protest End:	PROTESTED: (No	HEARING HLD:		SE ACTION:	Action Date:
EXTENSION:	ELEC/PROOF:	ELEC/PROOF:		CERT/WUC: 05/09/1965	LAPS, ETC:
RUSH LETTR:	RENOVATE:	RRCON REQ:		TYPE:	
PD BOOK:   J1-3	MAP:   130d	PUB DATE:			

Type of Right: Underground Water Claim      Source of Info: Proposed Determination      Status: Water User's Claim

**LOCATION OF WATER RIGHT**

FLOW: 0.1249 cfs

SOURCE: Underground Water Well

COUNTY: Davis      COMMON DESCRIPTION: Woods Cross Area

**POINT OF DIVERSION — UNDERGROUND:**

(1) N 815 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL:    ins, DEPTH:    to    ft, YEAR DRILLED:    WELL LOG? No    WELL ID#:  
 Comment:            historic well has been abandoned

**POINT OF DIVERSION — UNDERGROUND (ABANDONED):**

(1) N 815 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S18M  
 DIAMETER OF WELL: 3 ins, DEPTH:    to    ft, YEAR DRILLED: 1896 WELL LOG? No    WELL ID#: 35125

USES OF WATER RIGHT \*\*\*\*\* ELU — Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU — Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30364. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 3.06 acres	of the Group Total of 59.043	PERIOD OF USE: 04/01 TO 10/31
STOCKWATER: Beneficial Use Amt: 10.0000 ELUs	of the Group Total of 141.	PERIOD OF USE: 01/01 TO 12/31

###PLACE OF USE:	*-----NORTH WEST QUARTER-----*	*-----NORTH EAST QUARTER-----*	*-----SOUTH WEST QUARTER-----*	*-----SOUTH EAST QUARTER-----*	Section
	* NW   NE   SW   SE *	* NW   NE   SW   SE *	* NW   NE   SW   SE *	* NW   NE   SW   SE *	Totals
Sec 36-T 2N R 1W S18M *	2.1900	3.3200	2.5000	22.5300	22.5700*
				22.2500	*
					75.3600
					GROUP ACREAGE TOTAL: 75.3600

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 2396 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2148 has not been certificated, it is included in this group for administrative and distribution purposes.

WRNUM 31-2148 continued\*\*\* (WARNING: Water Rights makes NO claims as to the accuracy of this da

MUNICIPAL; Woods Cross

Acres Contributed by this Right for this Use: 12.52

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*				NORTH-EAST*				SOUTH-WEST*				SOUTH-EAST*						
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE			
Sec 34 T 2N R 1W S1B1M	*	:	X:	:	*	* X:	X:	X:	X*	*	:	X:	:	*	*	:	:	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
0.133		3.9060	12.0000					

The following Water Rights have been Segregated from 31-2148:

( 1) WRNUM: 31-5250 0.00805 0.8460 2.0000  
 APPL#: U9309  
 NAME: Utah Department of Transportation  
 FILED: 10/15/2007 STATUS:  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
31-2148 currently has:	0.12495		3.0600	10.0000					ERROR

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER: |REQUEST TO: |LAST USED: 13/ / 0|PRIOR FROM: |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper |PROTEST END:01/28/2008  
 PROTESTED: [No ]|HEARNG HLD: |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*END OF DATA\*\*\*\*\*

# STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2149(U9311)

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2014 Page 1

**WATER RIGHT: 31-2149** APPLICATION/CLAIM NO.: U9311 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

**OWNERSHIP**

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 elu's supp/w other rights

**DATES, ETC.**

LAND OWNED BY APPLICANT? COUNTY TAX ID#:  
 FILED: 03/21/1936 PRIORITY: / /1896 (PUB BEGAN: (PUB ENDED: (NEWSPAPER:  
 ProtestEnd: (PROTESTED: (No (HEARNG HLD: (SE ACTION: (ActionDate: (PROOF DUE:  
 EXTENSION: (ELEC/PROOF: (ELEC/PROOF: (CERT/WUC: 05/09/1965 (LAP, ETC: (LAPS LETTER:  
 RUSH LETTR: (RENOVATE: (RECON REQ: (TYPE: (

PD BOOK: ( 31-3 (MAP: (33cd (PUB DATE:

Type of Right: Underground Water Claim Source of Infor: Proposed Determination Status: Water User's Claim

**LOCATION OF WATER RIGHT**

FLOW: 0.1572 cfs

SOURCE: Underground Water Well

COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area

**POINT OF DIVERSION — UNDERGROUND:**

(1) N 880 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL TRF:  
 Comment: historic well has been abandoned

**POINT OF DIVERSION — UNDERGROUND (ABANDONED):**

(1) N 880 ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1M  
 DIAMETER OF WELL: 2 ins. DEPTH: to ft. YEAR DRILLED: 1896 WELL LOG? No WELL ID#: 35123

USES OF WATER RIGHT\*\*\*\*\* ELU — Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU — Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)

IRRIGATION: Beneficial Use Amt: 3.694 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 13,000 ELUs of the Group Total of 141. PERIOD OF USE: 01/01 TO 12/31

#PLACE OF USE:	NORTH WEST QUARTER				NORTH EAST QUARTER				SOUTH WEST QUARTER				SOUTH EAST QUARTER				Section Totals
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	
Sec 34 T 2N R 1W S1B1M	2.1900				3.3200	2.5000	22.5300	22.5700									75.3600
GROUP ACREAGE TOTAL:																75.3600	

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC),  
 2398 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WB), 5209 (APP)

Even though the change to municipal use under 31-2149 has not been certificated, it is included in this group for administrative and distribution purposes.

MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 15.14

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*				NORTH-EAST*				SOUTH-WEST*				SOUTH-EAST*					
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE		
Sec 34 T 2N R 1W SLDM	*	:	X:	:	*	X:	X:	X:	X*	*	:	X:	:	*	:	:	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally Filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES							
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER	
0.167		4.7150	17.0000						

The following Water Rights have been Segregated from 31-2149:

( 1) WRNUM: 31-5251 0.00977 1.0210 4.0000  
 APPL#: U9311  
 NAME: Utah Department of Transportation  
 FILED: 10/15/2007 STATUS:  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING	POWER	OTHER
31-2149 currently has:	0.15723		3.6940	13.0000		ERROR			

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER:            |REQUEST TO:            |LAST USED: 13/ / 0|PRIOR FROM:            |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper            |PROTEST END:01/28/2008  
 PROTESTED: [No        ]|HEARNG HLD:            |SE ACTION: (Approved)|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*END OF DATA\*\*\*\*\*

**STATE OF UTAH -- DIVISION OF WATER RIGHTS -- DATA PRINT OUT for 31-2150(U9307)**

(WARNING: Water Rights makes NO claims as to the accuracy of this data.) RUN DATE: 10/29/2011 Page 1

**WATER RIGHT: 31-2150** APPLICATION/CLAIM NO.: U9307 CERT. NO.:

CHANGES: a33833 Withdrawn, a39404 Approved

OWNERSHIP\*\*\*\*\*

NAME: Woods Cross City  
 ADDR: 1555 South 800 West  
 Woods Cross, UT 84087  
 REMARKS: 59.043 ac, 141 elu's supp/w other rights

DATES, ETC\*\*\*\*\*

LAND OWNED BY APPLICANT? COUNTY TAX ID#: FILED: 03/21/1936 PRIORITY: / /1896 PUB BEGAN: (PUB ENDED: (NEWSPAPER: PROTEST END: (PROTESTED: (NO. (HEARING HLD: (SE ACTION: (Action Date: (PROOF DUE: EXTENSION: (ELEC/PROOF: (ELEC/PROOF: (CERT/WUC: 05/09/1965 (MAP, ETC: (LAPS LETTER: RUSH LETTER: (RENOVATE: (RECON REQ: (TYPE: ( PD BOOK: ( 31-3 (MAP: (330d (PUB DATE:

Type of Right: Underground Water Claim Source of Info: Proposed Determination Status: Water User's Claim

LOCATION OF WATER RIGHT\*\*\*\*\*

FLOW: 0.1572 cfs  
 SOURCE: Underground Water Well  
 COUNTY: Davis COMMON DESCRIPTION: Woods Cross Area  
 POINT OF DIVERSION — UNDERGROUND:  
 (1) N 835 Ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1  
 DIAMETER OF WELL: ins. DEPTH: to ft. YEAR DRILLED: WELL LOG? No WELL ID#:  
 Comment: historic well has been abandoned  
 POINT OF DIVERSION — UNDERGROUND (ABANDONED):  
 (1) N 835 Ft W 55 ft from E4 cor, Sec 34, T 2N, R 1W, S1B1  
 DIAMETER OF WELL: 2 ins. DEPTH: to ft. YEAR DRILLED: 1896 WELL LOG? No WELL ID#: 35124

USES OF WATER RIGHT\*\*\*\*\* ELU — Equivalent Livestock Unit (cow, horse, etc.) \*\*\*\*\* EDU — Equivalent Domestic Unit or 1 Family  
 (The Beneficial Use Amount is the quantity of Use that this Water Right contributes to the Group Total.)

SUPPLEMENTAL GROUP NO. 30384. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 IRRIGATION: Beneficial Use Amt: 3.694 acres of the Group Total of 59.043 PERIOD OF USE: 04/01 TO 10/31  
 STOCKWATER: Beneficial Use Amt: 13.0000 ELUs of the Group Total of 14). PERIOD OF USE: 01/01 TO 12/31  
 PLACE OF USE: \* NORTH WEST QUARTER \* NORTH EAST QUARTER \* SOUTH WEST QUARTER \* SOUTH EAST QUARTER \* Section  
 \* NW | NE | SW | SE \* NW | NE | SW | SE \* NW | NE | SW | SE \* NW | NE | SW | SE \* Totals  
 Sec 34 T 2N R 1W S1B1 \* 2.1900 | 3.3200 | 2.5000 | 22.5300 | 22.5700 \* 22.2500 | \* 75.3600  
 GROUP ACREAGE TOTAL: 75.3600

SUPPLEMENTAL GROUP NO. 30402. Water Rights Appurtenant to the following use(s):  
 31-2059 (WUC), 2068 (WUC), 2069 (WUC), 2070 (WUC), 2071 (WUC), 2084 (WUC), 2091 (WUC), 2145 (WUC), 2147 (WUC), 2148 (WUC), 2149 (WUC), 2150 (WUC)  
 3198 (UGWC), 3849 (WUC), 3971 (WUC), 4569 (APP), 4600 (WD), 5209 (APP)

Even though the change to municipal use under 31-2150 has not been certificated, it is included in this group for administrative and distribution purposes.



MUNICIPAL: Woods Cross

Acres Contributed by this Right for this Use: 15.14

PLACE OF USE for STOCKWATERING\*\*\*\*\*

	NORTH-WEST*				NORTH-EAST*				SOUTH-WEST*				SOUTH-EAST*						
	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE	NW	NE	SW	SE			
Sec 34 T 2N R 1W S4BM	*	:	X:	:	*	X:	X:	X:	X*	*	:	X:	:	*	*	:	:	:	*

SEGREGATION HISTORY\*\*\*\*\*

This Right as originally filed:

FLOW IN CFS	QUANTITY IN ACRE-FEET	WATER USES						
		IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING ACRE FEET	POWER	OTHER (*)
0.167		4.7150	17.0000					

The following Water Rights have been Segregated from 31-2150:

{ 1) WRNUM: 31-5252 0.00977 1.0210 4.0000  
 APPL#: 09307  
 NAME: Utah Department of Transportation  
 FILED: 10/15/2007 STATUS:  
 APPR:

	CFS	ACRE-FEET	IRRIGATED ACREAGE	STOCK (ELUs)	DOMESTIC (FAMILIES) (*)	MUNICIPAL	MINING ACRE FEET	POWER	OTHER (*)
31-2150 currently has:	0.35723		3.6940	13.0000			ERROR		

MUNICIPAL in RIGHT but NOT SEGMASTER

APPLICATIONS FOR NONUSE OF WATER\*\*\*\*\*

EXT NUMBER:            |REQUEST TO:            |LAST USED: 13/ / 0/PRIOR FROM:            |PRIOR TO:  
 FILED: 12/10/2007|PUB BEGAN: 01/01/2008|PUB ENDED: 01/08/2008|NEWSPAPER: Davis County Clipper            |PROTEST END:01/28/2008  
 PROTESTED: |No            ||HEARING HLD:            |SE ACTION: [Approved]|ActionDate:02/13/2008|PROOF DUE: 02/28/2013|PROOF SUB:

\*\*\*\*\*END OF DATA\*\*\*\*\*