

CLEARFIELD CITY COUNCIL
AGENDA AND SUMMARY REPORT
November 24, 2015 – POLICY SESSION

Meetings of the City Council of Clearfield City may be conducted via electronic means pursuant to Utah Code Ann. § 52-4-207 as amended. In such circumstances, contact will be established and maintained via electronic means and the meetings will be conducted pursuant to the Electronic Meetings Policy established by the City Council for electronic meetings.

Clearfield Public Works Facility
497 South Main
Clearfield, Utah

6:00 P.M. WORK SESSION

Discussion on the Public Works & Parks Facilities Improvement Project
Discussion on Amendments to the Good Landlord Program

(Any items not fully addressed prior to the Policy Session will be addressed in a Work Session immediately following the Policy Session)

City Council Chambers
55 South State Street
Third Floor
Clearfield, Utah

7:00 P.M. POLICY SESSION

CALL TO ORDER:

Mayor Shepherd

OPENING CEREMONY:

Councilmember LeBaron

APPROVAL OF MINUTES:

October 27, 2015 – Work Session

November 10, 2015 – Policy Session

PRESENTATION:

1. **PRESENTATION ON THE CHILDREN'S ADAPTIVE PHYSICAL EDUCATION SOCIETY (CAPES)**

BACKGROUND: Madalin Rooker from the Children's Adaptive Physical Education Society (CAPES!) will be making a presentation about the program. CAPES! is an organization on Weber State University's campus for children who have developmental disabilities and their parents. Through the program, these children have access to teachers and volunteers who emphasize the individual abilities of each child. The program works to help each child become more independent and provides parents of the children access to support groups and stress management facilities.

SCHEDULED ITEMS:

2. **CITIZEN COMMENTS**

3. CONSIDER APPROVAL OF THE APPOINTMENT OF BRADY JUGLER AS A REGULAR MEMBER OF THE PLANNING COMMISSION

BACKGROUND: There is currently a vacancy on the Planning Commission and Brady Jugler has been serving as an alternate member on the Planning Commission. Mayor Shepherd recommends appointing him as a regular member of the Planning Commission with a term expiring February 2020.

RECOMMENDATION: Approve and consent to the Mayor's appointment of Brady Jugler from an alternate member to a regular member of the Planning Commission with a term expiring February 2020.

4. CONSIDER APPROVAL OF ORDINANCE 2015-18 AMENDING TITLE 1, CHAPTER 7 – OFFICERS AND EMPLOYEES; REPEALING TITLE 1, CHAPTER 8, ARTICLE H – COMMUNITY DEVELOPMENT DEPARTMENT; AMENDING TITLE 5, CHAPTER 2 – GARBAGE AND REFUSE AND TITLE 9, CHAPTER 1 – WATER AND SEWER OF THE CLEARFIELD CITY CODE

BACKGROUND: Ordinance 2015-18 addresses minor adjustments to several sections of the Clearfield City Code. It removes the Community Development Director and adds Assistant City Manager to the Officers and Employees chapter, repeals the Community Development Department from the City Departments chapter, and adds refuse and recyclable materials to the Garbage and Refuse chapter. The ordinance also removes "authorized representative" and adds "registered agent" to the Water and Sewer chapter of the City Code.

RECOMMENDATION: Approve Ordinance 2015-18 amending Title 1, Chapter 7 – Officers and Employees; repealing Title 1, Chapter 8, Article H – Community Development Department; amending Title 5, Chapter 2 – Garbage and Refuse and Title 9, Chapter 1 – Water and Sewer of the Clearfield City Code and authorize the Mayor's signature to any necessary documents.

5. CONSIDER APPROVAL OF THE UPDATED WATER CONSERVATION PLAN FOR CLEARFIELD CITY

BACKGROUND: The Utah Water Conservation Plan Act (73-10-32, UCA) requires each water conservancy district and public water system with more than 500 connections to submit a Water Conservation Plan to the State Division of Water Resources and to review and update the plan every five years. The City staff has reviewed the current approved City Water Conservation Plan and has updated the plan to reflect the current per capita water usage for the City and the management practices that the City uses to promote and encourage water conservation within Clearfield City. It is required that the revised Water Conservation Plan be presented to the City Council for approval.

RECOMMENDATION: Approve and adopt the Updated Water Conservation Plan and authorize the Mayor's signature to any necessary documents.

COMMUNICATION ITEMS:

Mayor's Report
City Councils' Reports
City Manager's Report
Staffs' Reports

*****COUNCIL MEETING ADJOURN*****

Dated this 19th day of November, 2015.

/s/Nancy R. Dean, City Recorder

The City of Clearfield, in accordance with the 'Americans with Disabilities Act' provides accommodations and auxiliary communicative aids and services for all those citizens needing assistance. Persons requesting these accommodations for City sponsored public meetings, service programs or events should call Nancy Dean at 525-2714, giving her 48-hour notice.

CLEARFIELD CITY COUNCIL MEETING MINUTES
6:30 P.M. WORK SESSION
October 27, 2015

PRESIDING:	Mark Shepherd	Mayor
PRESENT:	Keri Benson	Councilmember
	Kent Bush	Councilmember
	Ron Jones	Councilmember
	Mike LeBaron	Councilmember
	Bruce Young	Councilmember
STAFF PRESENT:	Adam Lenhard	City Manager
	JJ Allen	Assistant City Manager
	Jacob Fordham	Acting City Attorney
	Scott Hodge	Public Works Director
	Kelly Bennett	Police Lieutenant
	Curtis Dickson	Community Services Deputy Dir.
	Rich Knapp	Administrative Services Director
	Summer Palmer	Human Resource Manager
	Nancy Dean	City Recorder
	Kim Read	Deputy City Recorder

VISITORS: Stuart Williams, Kathryn Murray, Vern Phipps

Mayor Shepherd called the meeting to order at 6:30 p.m.

DISCUSSION ON AMENDING 2015/2016 FISCAL YEAR BUDGET

Rich Knapp, Administrative Services Director, shared a visual illustration proposing amendments to the allocation formula specific to the payment of the Sales Tax Revenue Bonds which would alleviate the burden of the from the General Fund. He explained it was always the intention for the CDRA to pay a large portion of the debt payment. He proposed it was appropriate for the Enterprise Fund to assist with the payment because some of the funding was used for infrastructure projects.

Mr. Knapp also reviewed other proposed amendments to the budget and shared an illustration which reflected those proposed amendments. He asked if there were any questions from the Council and there were none.

DISCUSSION ON THE COMPENSATION PLAN RFP

Adam Lenhard, City Manager, shared a visual presentation specific to an Employee Compensation Plan. He reviewed the history illustrating previous years' compensation increases for City employees.

Ron Jones arrived at 6:40 p.m.

Mr. Lenhard mentioned the difficulty in retaining Public Safety employees and what the City had done relative to compensation in attempting to retain those employees. He reviewed statistics regarding employee turnover specific to full time employees.

He shared the project objectives regarding the employee compensation study and identified the timeline specific to completion of the study. He mentioned the Council would have the opportunity to review the completed study prior to any implementation of suggestions.

Councilmember Bush moved to adjourn the work session and reconvene in a CDRA work session at 6:48 p.m., seconded by Councilmember Benson. The motion carried upon the following vote: Voting AYE – Councilmembers Benson, Bush, Jones, LeBaron and Young. Voting NO – None.

The minutes for the CDRA are in a separate location

DRAFT

CLEARFIELD CITY COUNCIL MEETING MINUTES
7:00 P.M. POLICY SESSION
November 10, 2015

PRESIDING:	Mark Shepherd	Mayor
PRESENT:	Keri Benson	Councilmember
	Kent Bush	Councilmember
	Ron Jones	Councilmember
	Mike LeBaron	Councilmember
	Bruce Young	Councilmember
STAFF PRESENT:	Adam Lenhard	City Manager
	JJ Allen	Assistant City Manager
	Stuart Williams	City Attorney
	Jacob Fordham	Assistant City Attorney
	Scott Hodge	Public Works Director
	Mark Baird	Water Superintendent
	Greg Krusi	Police Chief
	Spencer Brimley	Development Services Manager
	Eric Howes	Community Services Director
	Curtis Dickson	Community Services Deputy Dir.
	Rich Knapp	Administrative Services Director
	Nancy Dean	City Recorder
	Kim Read	Deputy City Recorder

VISITORS: Vern Phipps, Damon Pearson, Jennifer Pearson, Nike Peterson, Nicholas Clark – UDOT, Bob Bercher, Kristi Bush

Mayor Shepherd called the meeting to order at 7:00 p.m.

Mayor Shepherd informed the citizens present that if they would like to comment during Citizen Comments there were forms to fill out by the door.

Councilmember Jones conducted the Opening Ceremony.

APPROVAL OF THE MINUTES FROM THE OCTOBER 13, 2015 WORK SESSION AND THE OCTOBER 27, 2015 POLICY SESSION

Councilmember LeBaron moved to approve the minutes from the October 13, 2015 work session and the October 27, 2015 policy session as written, seconded by Councilmember Jones. The motion carried upon the following vote: Voting AYE – Councilmembers Benson, Bush, Jones, LeBaron and Young. Voting NO – None.

CITIZEN COMMENTS

There were no citizen comments.

APPROVAL OF A REQUEST TO WAIVE LAND USE APPLICATION FEES FOR SYRACUSE CITY RELATIVE TO THE DEVELOPMENT OF A TRAILHEAD AT APPROXIMATELY 1400 WEST 700 SOUTH

JJ Allen, Assistant City Manager explained Syracuse City had acquired a one acre parcel of abandoned rail right-of-way in Clearfield, at approximately 1400 West 700 South. The property was adjacent to a new single-family subdivision in Syracuse, which included the installation of a trail in the adjacent powerline corridor. Syracuse proposed to develop a trailhead on the property, which would be beneficial for residents of both cities, and had requested that the Clearfield City Council authorize a waiver of the respective land use application fees required by the Consolidated Fee Schedule. He emphasized hard costs, if any, would be passed onto Syracuse City.

Councilmember Young moved to approve a waiver of land use application fees for Syracuse City relative to the development of a trailhead at approximately 1400 West 700 South and authorize staff to charge to the applicant only those hard costs incurred with the applications (e.g. engineering fees, advertising, etc.), seconded by Councilmember LeBaron. The motion carried upon the following vote: Voting AYE – Councilmembers Benson, Bush, Jones, LeBaron and Young. Voting NO – None.

CANVASS THE RESULTS OF THE MUNICIPAL GENERAL ELECTION HELD ON NOVEMBER 3, 2015

State Law required the governing body verify the results of the General Election, which was held on Tuesday, November 3, 2015. Nancy Dean, City Recorder, distributed a packet to the Council which including results from the 2015 General Election provided by the Davis County Elections Official and reviewed the results with the Council.

Clearfield City Council

	Total	
Number of Precincts	15	
Precincts Reporting	15	100.0%
Times Counted	2822/7917	35.6%
<u>Total Votes</u>	<u>6307</u>	
Kent Bush	1908	30.25%
Nike Peterson	1553	24.62%
Vern R. Phipps	1546	24.51%
Ron Jones	1300	20.61%

Ms. Dean further requested the Council approve the canvass results to be reported to the Lieutenant Governor’s Office with Notices of Election to go to Kent Bush, Nike Peterson and Vern R. Phipps.

Mayor Shepherd inquired about the discrepancy in the number of the registered voters accounted for on the report as compared to previous elections. Ms. Dean explained the difference in the number was related to the number of active registered voters versus inactive registered voters. She continued after a specific number of years not voting the County classified a registered voter as inactive and started to go through a prescribed process to locate them or remove them from the registered voter rolls. She stated inactive registered voters were not included in the total number of registered voters for the canvass report.

Councilmember Bush inquired if the county's Election Office would update the list of those who had actually voted in the election. Ms. Dean responded she believed the list would be updated but would verify that with the County. She mentioned the County might be waiting until all entities had completed the canvass process, some were not scheduled to do that until Tuesday, November 17, 2015.

Councilmember LeBaron moved to verify the official General Election results and authorize the City Recorder to report those results to the Lieutenant Governor's office, seconded by Councilmember Young. The motion carried upon the following vote: Voting AYE – Councilmembers Benson, Bush, Jones, LeBaron and Young. Voting NO – None.

COMMUNICATION ITEMS

Mayor Shepherd

1. Congratulated candidates Kent Bush, Nike Peterson and Vern Phipps for a successful campaign.
2. Stated he had participated with students from the elementary schools for Lunch with the Mayor on Wednesday, November 4, 2015.
3. Informed the Council that the Fourth of July planning committee meetings were already taking place and announced the committee was still looking for one more band.
4. Reported the Wasatch Integrated Waste Board met during past week and announced it had explored an opportunity to convert steam produced at the facility to electricity and announced it had been determined it was currently not financially feasible. He stated steam would continue being sold to HAFB.
5. Announced Wasatch Elementary had instituted a leadership program and informed the Council he had been invited to share a presentation on goal setting with participants on Friday, November 6, 2015.
6. Announced Change of Command ceremonies took place on Saturday, November 7, 2015 for the 419th Fighter wing and the Maintenance Squadron command. He noted those changes took place on Sunday, November 8, 2015.
7. Reminded the Council of the American Legion Veterans Day celebration and ceremony scheduled Wednesday, November 11, 2015, which would begin promptly at 11:11 a.m.
8. Stated he would be out of town the remainder of the week following the Veterans Day ceremony.

Councilmember Benson –expressed congratulations to the newly elected councilmembers and stated she was looking forward to working with them.

Councilmember Bush

1. Stated he had attended a training and planning workshop for the Community Services Department on Thursday, October 29, 2015 presented by Eric Howes, Community Services Director, and Curtis Dickson, Community Services Deputy Director. He mentioned the information was beneficial and believed the department was doing an excellent job at attempting to meet the needs of the City's residents.

2. Informed the Council that he started employment with Clearfield City on November 12, 1985 and commented it was good to still be affiliated with the City 30 years later.

Councilmember Jones – expressed appreciation to his fellow candidates who ran for City Council. He mentioned even though his campaign came up short he believed the City would be in good hands with the new Council.

Councilmember LeBaron – expressed congratulations to the new councilmembers.

Councilmember Young – nothing to report.

Adam Lenhard, City Manager – nothing to report.

STAFFS' REPORTS

Nancy Dean, City Recorder – Reviewed the Council's calendar:

- No meeting was scheduled for Tuesday, November 17, 2015.
 - Policy session on Tuesday, November 24, 2015
 - Meetings for Tuesday, December 1, 2015 and December 8, 2015
 - Possible Special Session for Tuesday, December 15, 2015
2. Employee Christmas Party announcement had been sent via email. She mentioned there was a fee to be paid as well as a menu selection.
3. Complimented the candidates on their campaigns during the election season. She expressed appreciation to the candidates for the honorable nature of the current election process.

Councilmember Jones moved to adjourn the regular session and reconvene in a work session at 7:23 p.m., seconded by Councilmember Bush. The motion carried upon the following vote: Voting AYE – Councilmembers Benson, Bush, Jones, LeBaron and Young. Voting NO – None.

CLEARFIELD CITY ORDINANCE 2015-18

AN ORDINANCE AMENDING TITLE 1, TITLE 5 AND TITLE 9 OF THE CLEARFIELD CITY CODE

PREAMBLE: This Ordinance amends Title 1 – Administration of the Clearfield City Code by amending Chapter 7, Section 3, Paragraph E and Chapter 8, Article H; Title 5 – Public Health and Safety, Chapter 2, Section 1; and Title 9 – Water and Sewer, Chapter 1, Section 5, Paragraph A.

BE IT ORDAINED BY THE CLEARFIELD CITY COUNCIL:

Section 1. Enactment:

Title 1, Chapter 7, Section 3, Paragraph E, of the Clearfield City Code is hereby amended to read as follows:

1-7-3: APPOINTIVE OFFICERS:

E. Appointed Officers: The offices of police chief, administrative services director, community services director, assistant city manager, public works director and city attorney shall be appointed by the city manager, with the advice and consent of the city council.

Title 1, Chapter 8, Article H, of the Clearfield City Code is hereby repealed.

Title 5, Chapter 2, Section 1 of the Clearfield City Code is hereby amended to read as follows:

5-2-1: SERVICES PROVIDED BY CITY:

The city will provide directly or by agreement with a contractor for the collection and disposition of garbage, refuse, and recyclable materials (the “garbage collection system”) in accordance with regulations hereinafter specified or established by ordinance or resolution of the city council.

Title 9, Chapter 1, Section 5, Paragraph A, of the Clearfield City Code is hereby amended to read as follows:

9-1-5: APPLICATION FOR SERVICE:

A. Required: The owner of real property to which these services are to be connected or such owner's registered agent (as set forth in UCA Title 61, Chapter 2f, as amended), must submit a written application for such services agreeing to pay for all utility services furnished to the property, whether occupied by the owner or by a tenant or other occupant.

Section 2. Repealer: Any provision or ordinances that are in conflict with this ordinance are hereby repealed.

Section 3. Effective Date: These amendments shall become effective immediately upon passage and posting.

Passed and adopted by the Clearfield City Council this 24th day of November, 2015.

CLEARFIELD CITY CORPORATION

Mark R. Shepherd, Mayor

ATTEST:

Nancy R. Dean, City Recorder

VOTE OF THE COUNCIL

AYE:

NAY:

Water Conservation Plan



November 10, 2015

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Introduction

This water conservation plan has been developed in response to the rapid growth along the Wasatch Front. Rapid growth affects the future cost and availability of our water supplies. This plan contains a basic summary of the current water systems that serve the community and recommendations on water conservation. This water conservation plan will be reviewed by the Utah State Board of Water Resources. Compliance with these recommendations may help insure adequate water supplies for future needs.

Why Water Conservation?

According to a study by the U.S. Geological Survey, Utah is the second highest water user in the United States as well as the second driest state in the nation. Nationwide, the average residential water use is 183 gallons per person per day. The average water consumption for residential homes in Utah is between 293 and 303 gallons per person per day, with the number of gallons per capita per day increasing during drought years. Over 60% of our total residential water consumption is used for outdoor irrigation. Our high water consumption has been attributed to our large residential lots and widespread use of automated sprinkler systems. I

As Utah's population grows, the demand for water increases. This places a strong burden on our underground water resources and requires expensive infrastructure to import water from other watersheds within the State. Transporting water from other regions consumes energy for pumps and requires expensive treatment processes. Using more water than we need also has an effect on the environment and the natural stream from which we take the water. For these reasons, and many more, our water resources should be conserved through efficient and intelligent use.

Description of the City

Clearfield City is located in Davis County, Utah. Clearfield City currently provides retail water service to residential, commercial, recreational and industrial entities within the City's boundaries. The current population served by our water system is approximately 27,200 people. The City contains about 8 square miles.

Back in the early 1930's, Clearfield received water from the Kays Creek System. A pipeline was installed from the base of the Wasatch Mountains to Clearfield for the purpose of culinary use and irrigation. In the 1940's, two wells were drilled at the Navy Supply Depot, now known as the Freeport Center. Several other wells have been drilled since that time, including two shallow wells (approximately 100 feet deep) that have been abandoned due to low production. In the 1960's the 700 South well was drilled and in the late 1980's the Hill Field well was drilled. In addition to the well production, the Weber Basin Water Conservancy District has been serving water to Clearfield City since the late 1950's.

According to City-Data.com, Clearfield's population has increased 17.3% since 2000. Population growth in Clearfield will likely increase slightly or remain at the same level in the next decade.

Currently, there are 6462 water connections in the following categories:

Residential	5886 connections
Commercial	576 connections (including 248 industrial connections)

Recreation and open space are very important to the community in Clearfield. The City has about 100 acres of park space and this number will probably remain about the same over the next 10 years. Schools comprise another 73 acres, which contributes many playgrounds and open fields with grass. The total area within Clearfield City boundaries is 4,979 acres. The average lot size in Clearfield City is $\frac{1}{4}$ acre. Today the City has very little undeveloped farmland.

Over the past 10 years Clearfield City obtains approximately 88% of its water from the Weber Basin Water Conservancy District. Most of the water from the District comes from the Weber River. The water is treated and delivered to Clearfield City for year round use. During high water use periods in the summer, Clearfield uses City owned wells to augment the water supply from the District. A small percentage of the City uses private secondary water systems for outdoor irrigation.

The industries in the Freeport Center are based upon manufacturing and generally rely on water only for cooling operations. Outdoor irrigation does not comprise a significant amount of the water consumption in the Freeport Center.

Existing Resources

In 2014 Clearfield City purchased 5039.95 acre feet of water from Weber Basin Water Conservancy District (83.5% of the water supply). The remaining 16.5% of the water supply was obtained from the City's wells. The City consumed a total of 6034.43 acre-feet of water in 2014.

The City mainly uses its underground aquifers during the peak summer months to prevent an unnecessary decrease in the level of the groundwater. The District also charges less for water when the City uses a constant amount each month. If the city were to buy 100% of the water from the District during hot summer months, it would be required to pay a higher price for water so that the District could expand its facilities to meet a larger demand. The excess capacity of the District's facilities would remain unused during low demand times.

In addition to cost, there are many advantages to obtain water from the Weber Basin Water Conservancy District. One of the major concerns is the decreasing level of the water table of the East Shore Aquifer System. The East Shore Aquifer System is the underground water that Clearfield obtains from its wells. Year round pumping can lower the water table to levels that would affect the amount of water that is produced from each well. In some cases, a few years of excessive pumping can take decades to replenish naturally.

Another reason why the City purchases water from the District is that the long-term contract with the District is necessary to ensure that the City has a reliable water source in the future. If the City waited until the underground water resources were depleted to obtain a

contract with the District, the cost for water from the District would be much higher than it is today.

In the future, additional water will primarily come from the District. The City will continue to pump between 1,200 and 1,600 acre-feet annually. The following table shows the culinary water wells used in Clearfield City.

TABLE 1. WATER SOURCE AVERAGE YEARLY USAGE OVER 5 YEARS
(Jan 2010 – December 2014)

<u>Source</u>	<u>5 Year Average</u>	<u>Capacity of Source</u>
Weber Basin WCD	5,276 acre-feet	N/A
Reservoir Well	433 acre-feet	1,600 GPM
Freeport Well (South)	299 acre-feet	1,150 GPM
Freeport Well (North)	168 acre-feet	1,350 GPM
Hill Field Well	352 acre-feet	3,500 GPM

System Constraints

Clearfield City has sufficient water rights to meet the needs of the City. Although the City has the capacity to produce more water from its wells, the City is constrained by the properties of the groundwater. In the last 50 years the ground water levels in the East Shore area of the Great Salt Lake have declined as much as 50 feet. Over 5,900 wells have been constructed in the East Shore area. A majority of the discharge is from about 200 wells that supply municipalities and industrial users.

Our groundwater is a precious resource that should be carefully managed. The City believes that it is important to purchase most of its water from the District and only use the well during the peak summer months and during emergencies.

Approximately 10% of the connections in Clearfield use private secondary water systems. Private irrigation companies manage most of these systems. The water for these systems is diverted from the Davis-Weber Canal.

Although the use of a secondary water system does not necessarily reduce the total volume of water that is consumed, it does have the advantage of reducing the cost of treatment and transmission. The use of a City-wide secondary irrigation system in Clearfield is constrained by the capital cost of installing the transmission/distribution system. The City may consider the development of a secondary water system in the future through the use of grants and special state/federal funding.

Present Water Use

Clearfield City used 6,034 acre-feet of water in 2014. The average lot size in Clearfield City is ¼ acre. The following table shows the water use in Clearfield City:

TABLE 2. 2014 RESIDENTIAL AND COMMERCIAL WATER USE DATA

<u>Type of Water Use</u>	<u>Quantity of Water Gallons per Connection per Day</u>
Average Indoor Usage (Dec. – Feb.)	437
Average Outdoor Use in July	863
Average Annual Water Use	833

Clearfield residents consumed 833 gallons per connection per day in 2014. The average per person per day consumption in Clearfield is 198 gallons. This number was calculated by using the City's total annual usage, dividing by 365 and dividing by the population. Since some commercial users with very little landscaping may not use a lot of water, this number may be less than the actual usage. This is less than the estimated state average of 240 gpcd (gallons per capita per day) for residential users. It is also less than the average per person per day usage from 2010. In 2010 the average per person per day usage was 257 gallons-A difference of 23%.

The Freeport Center hosts about 260 large industrial water users. Most of the industrial users only rely on water for cooling operations. There is very little outdoor irrigation at the Freeport Center, so the water consumption does not have a large seasonal peak.

A small percentage of our water is lost due to leaks in the system. Many pipelines were installed as early as the 1940's. Many lines have been replaced in recent years. The Public Works Department has a schedule to repair old pipes to reduce water loss and improve fire protection. Through careful analysis of the water consumption in Clearfield, no significant abuses or overuse of the water exists. However, the City still strives to implement water conservation measures to stretch the use of our water resources. These measures will be discussed in further detail later in this report.

Clearfield City has installed a computerized central irrigation control system to more efficiently utilize and monitor water used for irrigation purposes. This central irrigation control system is connected to a remote weather station with sensors for rain, wind, and temperature. These sensors are designed to restrict watering during storm events where more than ¼ inch of precipitation is measured or excessive winds would cause water to be wasted.

Water used by Clearfield City for irrigation purposes was estimated at 49,564,000 gallons in 2014 and 47,072,000 gallons in 2015. Seventy percent (70%) of that total usage number was monitored by the central irrigation control system and the remaining thirty percent (30%) was estimated.

Future Water Needs

The City of Clearfield will most likely not require any additional acre-ft of water to meet the residential demand for indoor and outdoor irrigation. The City does not anticipate that there will be any significant growth in the number of residential lots in the city. The undeveloped agricultural land that existed 10 years ago has, for the most part been developed into 1/4 acre residential lots. The City is very near its ultimate population, and the demand for water will probably change very little over the next decade.

The water demand at the Freeport Center should remain constant, unless more food processing facilities or other industrial facility that uses a high volume of un-circulated water are introduced to the City.

The water demand for City property, commercial development and recreational facilities should also not increase in the future. The city is not planning any major park development. As indicated previously, the Parks Division has installed a more efficient watering system which is controlled by a computer to minimize waste while watering the parks.

Clearfield City currently requires commercial developers to provide 10% of irrigated green space per project. Commercial development and redevelopment may increase the demand for water as older building sites are redeveloped with new landscaping features.

Current Water Conservation Measures and Programs

Clearfield City currently has many informal programs to reduce water consumption and address water supply shortages:

- The City issues a monthly email newsletter that is used for public education.
- Eliminate watering on City property during the hottest hours of the day.
- Use of high-tech watering system in the City parks.
- Reduce or eliminate watering of City property during severe drought periods.
- In the fall of 1998 all residential users had their meters changed to a remote read system. These meters and remote read system can detect some leaks. The water department works proactively with residents to detect and correct leaks. The system has been kept upgraded to stay with the new technology available to assist in this.

Problems, Opportunities and Goals

Clearfield City's average water consumption per connection for the past 5 years is 1.01 acre-feet per connection per year. This conservative number may be a combination of smaller lot sizes and efficient water use. Our per-connection usage is below the state average. Our water rates are competitive with the surrounding communities.

The City has prioritized several areas that generate opportunities to enhance water conservation within the City. The City has a goal to reduce water consumption in the next five years by 10% by the following measures:

1) Encourage Xeriscaping/Public Education

The efficient use of phreatophytes (water loving plants) near buildings with a lot of shade and the use of heat tolerant plants in sunny areas will reduce water consumption. The City plans to provide information on the use of soil probes to improve water distribution in the soil and maximize the depth of roots on plants through less frequent watering cycles with greater volumes and more even distribution.

Public Education is the most preferred method of addressing water conservation in the City. The City can include material on water conservation with billing statements or in the Clearfield City bi-monthly newsletter. The City intends to save more than 300 acre-ft/year of water by the year 2030 through the use of an active public education and xeriscaping program.

The City encourages residents to visit the conservation garden at Weber Basin Water Conservancy District's North Davis Treatment facility for landscaping ideas that may be utilized to conserve water.

2) Plumbing Fixture Replacement

The City requires all new construction and remodeling projects to install 1.5 gal flush toilets and low-flow faucets. The City will encourage residents to install low flow fixtures through newsletters and flyers that are issued with each water bill.

Replacing an older 5 gallon toilet with a 1.5 gallon low flow toilet costs approximately \$170. The toilet replacement could save a homeowner over \$30 per year, depending on the water consumption in relation to the overage rate and the base rate. Over a long period of time, there is a net positive economic incentive for each homeowner to replace old fixtures. If 25% of the residential households participated in the fixture replacement program, the City could save approximately 100 acre-feet of water per year.

3) Meter Replacement and Pipeline Replacement Program

The City currently has a meter and pipeline replacement program. Improving the metering capabilities of the City will improve the accuracy of the data that is evaluated each year. Since meters almost always slow down over time and allow more water to pass than is recorded, the cost to replace meters can be offset by more accurate water measurements. The current meter replacement effort coupled with an active pipeline replacement program will decrease the loss of water to the ground. The reason for replacing pipes is to improve firefighting capabilities, reduce friction loss, increase flow, improve water quality and reduce the amount of water that has to be pumped, treated and distributed through the system, even though losing the water to the ground will ultimately recharge the groundwater resources. Reducing leaks reduces energy and maintenance costs and improves the performance of a water system. The pipeline replacement program could reduce water losses by as much as 10% per year. The City estimates that less than 5% of the water was lost in 2014. This is down from the 15% water loss that we estimated in

2010. Implementing all water conservation measures may save the City more than 850 acre-feet per year by the year 2030 compared to the 2010 water usage.

4) Continue to optimize the capabilities of the irrigation central control system.

The existing central control system is currently only being utilized in seventy percent (70%) of our parks and grounds areas. The system also has the capability, when connected to flow meters at each location, to monitor water usage with increased precision and to notify water managers when flow is detected when the system is not programmed to run. Additionally, when an electric master valve is included on an irrigation system mainline, the system can remotely close the master valve in these situations reducing the amount of water wasted when lateral lines are broken or valves stick in the open position. To improve our ability to conserve water in our irrigation systems Clearfield City has established the following goals:

- Install flow meters to all existing and future irrigation systems as feasible.
- Add compatible controllers to the thirty percent (30%) of parks and grounds areas that are currently not connected to the central control system.
- Install electric master valves to all existing and future irrigation systems as feasible.

Monitoring the Progress of Water Conservation

The City will evaluate all water usage each year and determine the progress that has been made to reach the goal of reducing water consumption by 10% in 5 years. Each year the public works department will evaluate the number of pipeline replacements and provide an estimate of the water savings to the City. The City will also evaluate the public education programs and determine how successful each recommendation has been.

Appendix A

	2010	2011	2012	2013	2014
Hill Air Force					
Base Well					
		Gallons X 1000			
January		0	0	0	0
February		6100	0	0	0
March		2689	0	0	0
April		2115	0	0	0
May		9231	0	1210	0
June		10416	74678	30325	0
July		10354	58145	27078	28512
August		14226	47362	29048	41184
Sept		10657	81456	18212	9504
Oct	6000	0	42104	1073	0
Nov	8000	0	0	0	0
Dec	6000	0	0	0	0
total	20000	65788	303745	106946	79200
total acre feet	61.38	201.90	932.16	328.21	243.06
Res. Well					
		Gallons X 1000			
January		0	0	0	0
February		0	0	0	0
March		0	0	0	0
April		0	0	0	0
May		0	0	20246	0
June		0	53280	63573	50607
July		10692	74451	55178	56335
August		19245	81754	43671	48486
Sept		8553	51840	60	24279
Oct		4276	35251	0	3339
Nov		581	0	0	0
Dec		0	0	0	0
total		43347	296576	182728	183046
total acre feet	0.00	133.03	910.16	560.77	561.75
Freeport South					
		Gallons X 1000			
January		32538	0	0	0
February		3366	0	0	0
March	6791	4422	0	0	0
April	25938	11484	3168	924	0
May	44880	29106	14718	0	0
June	41184	15774	33132	594	0
July	47190	30228	10692	0	0
August	29502	36498	1584	858	0
Sept	0**	31812	8250	0	0

Oct	1312	5412	0	0	0
Nov	15180	0	0	0	0
Dec	16434*	0	0	0	0
total	211977	200640	71544	2376	0
total acre feet	650.53	615.74	219.56	7.29	0.00

Freeport North

Gallons X 1000

January		0	0	0	0
February		0	0	0	1
March		0	0	0	2
April		4320	0	1561	13091
May		12240	0	7546	2
June	78	4740	0	24312	14872
July	79	1560	882	39006	20025
August	18	0	37654	37782	13130
Sept		0	25723	14501	677
Oct		0	0	401	3
Nov		0	0	0	0
Dec		0	0	0	0
total	175	22860	64259	125109	61803
total acre feet	0.54	70.15	197.20	383.95	189.67

Weber Basin

Gallons X 1000

January	72814	60903		96729	90516
February	70003	92814	84927	90036	85977
March	127135	69336	80775	85629	91288
April	661118	47366	88998	115277	115131
May	95168	92543	187227	186353	177077
June	197489	136769	134688	173758	229528
July	282345	158687	204315	163993	155626
August	334158	165392	189310	164285	137828
Sept	237878	243414	126800	138449	155715
Oct	158389	107944	104095	109681	213774
Nov	90821	77478	83954	102612	111806
Dec		79124	94960	82534	78007
total	2327318	1331770	1380049	1509336	1642273
total acre feet	7142.28	4337.90	4235.21	4631.98	5039.95

- estimate
- Res Well out of service
- Hill Well out of service
- Multiple Wells out of service

Appendix B – Rate Structure

Base Rate	\$11.70
Overage block 1 - up to 10,000	\$0.89 per 1000 gallons
Overage block 2 – 10,001 to 40000	\$1.04 per 1000 gallons
Overage block 3 – 40,001 to 60000	\$1.19 per 1000 gallons
Overage block 4 – 60,001 to 80000	\$1.36 per 1000 gallons
Overage block 5 – 80,001 and above	\$1.51 per 1000 gallons