#### CITY OF LOGAN RESOLUTION 21-52

#### A RESOLUTION APPROVING THE CITY WATER CONSERVATION PLAN

WHEREAS, the City of Logan is required to periodically update its water conservation plan; and

**WHEREAS**, the State of Utah requires council approval of the plan prior to submission to the Division of Drinking Water;

NOW, THEREFORE, BE IT RESOLVED BY THE LOGAN MUNICIPAL COUNCIL, STATE OF UTAH that the City of Logan Water Conservation Plan is approved for submission to the Utah Division of Drinking Water.

PASSED BY THE LOGAN MUNICIPAL COUNCIL THIS \_\_\_\_\_ DAY OF December , 2021.

AYES: A. Anderson, M. Anderson, Jensendepen, Situmends

NAYS: Nove

ABSENT: Nove

Jeannie F. Simmonds, Vice Chair

ATTEST:

Teresa Harris, City Recorder





CITY OF LOGAN LOGAN, UTAH

Water Conservation Plan 2021

October 2021



### **EXECUTIVE SUMMARY**

The Utah Water Conservation Plan Act (73-10-32, UCA), requires water systems with more than 500 connections to prepare and implement a water conservation plan and update it every five years. This water conservation plan meets the requirement of this act.

In 2005, the City of Logan submitted a water conservation plan to address excessive water use. In 1992, average water use exceeded 400 gallons per capita daily (gpcd) throughout the City. Recognizing this problem, the City implemented several efforts to reduce this water use, primarily by searching for leaks in the system. By 2003, this number was decreased to about 350 gpcd. The Public Works Department has recognized water conservation to be very important, not only for environmental reasons, but for economic reasons. In 2003 and 2004, our summer peak demands nearly exceeded our ability to deliver water. As a result, very aggressive goals were set to prevent this from happening again.

As part of those efforts, the following programs were implemented:

- 1. Golf Course reservoir replacement project (2008)
- 2. DeWitt Pipeline replacement project to eliminate major leaks (2008)
- 3. Automation of water system controls to eliminate storage tank overflows (SCADA updated 2008)
- 4. Implementing aggressive leak detection and repair programs
- 5. Installing water meters on all services to eliminate estimating errors (2010)
- 6. Replacing old water meters to correct under measurements (Ongoing)
- 7. Implementing monthly meter reading using radio systems (2007)
- 8. Implementing pressure reducing valves to decrease pressures to service lines (2014)

As a result of these efforts, the City of Logan has reduced our total water use to 175 gpcd in 2020. This was further emphasized by the reduction of our summer peak demands from 36 million gallons per day (mgd) in 2003 to 24 mgd in 2020.

Additionally, the projects have increased our system capacity from 55.7 cfs (36 mgd) in 2004 to 69 cfs (44.6 mgd) in 2014. These improvements, combined with the reduced water demands, have significantly reduced stress on our system during the summer months.

While these improvements have been fantastic, the City of Logan needs to again refocus on the new priorities. First, while major improvements have been made, we are still losing 25 percent of the water we deliver in the system associated with leaks, main breaks, and other unaccounted for water. This causes significant costs in pumping and facility maintenance. In order to further address these issues, Logan City has identified the following additional goals.

#### Water Conservation Plan 2021



- 1. The further implementation of the pipe replacement plan developed in 2007 and the proposed update to the plan in 2012.
- 2. Completion of a water audit of the City's accounting system to identify any errors in the process. This will also allow us to try to identify possible illegal connections within the City.
- 3. The participation of the implementation of a vast multi-city pressurized secondary irrigation system.

These combined efforts are expected to continue to reduce our water losses and demands on the system and extend our water supply into the future.

### Logan City Water Conservation Plan Contact Information

Cameron Draney, P.E. – Water/Wastewater Division Manager cameron.draney@loganutah.org 435-716-9622

Paul Lindhardt, P.E. – Public Works Director paul.lindhardt@loganutah.org 435-716-9151



# **TABLE OF CONTENTS**

# Contents

Execut	ive Summary	2
Table o	of Contents	4
Invento	ory of Water Sources	7
A.	Water Rights	7
B.	Municipal Water Supply Facilities	9
C.	Secondary Water Supplies	0
Popula	tion Projections	1
Water 1	Demands1	4
A.	Unit Water Consumption	4
B.	Seasonal and Daily Peak Demands	6
C.	Water Demand Projections	7
D.	Water Reuse	9
Water S	Supply Concerns	.0
A.	Limited Ability to Supply Water	.0
B.	Unaccounted-for Water	:0
C.	Lack of Secondary Irrigation System	1:1
D.	Rate Structure	21
Water	Conservation Goals2	22
Water (	Conservation Practices Implemented Over the Last 15 Years	23
A.	Replacement of Leaking Golf Course Reservoir	23
B.	Replacement of the steel portions of the DeWitt Waterline and other waterlines e City	





C.	Full System Automation	3
D.	Universal Metering. 24	1
E.	Meter Replacement	1
F.	Pressure Reducing Valves	1
G.	Meter Measurement and Billing	1
Н.	Rate Structure	1
I.	Irrigation Resolution	5
Addit	ional Water Conservation Measures	5
A.	Leakage Detection	5
В.	Pipe Replacement Planning	5
C.	Internal Water and Accounting Audits	6
D.	Secondary Irrigation Policy	6
Imple	ementing and Updating the Water Conservation Plan	8
Appe	ndix A: Logan City Culinary Water Service Area	
List c	of Figures .	
	Figure 1, DeWitt Springs Water Rights vs. Logan River Flow, 2020	7
	Figure 2, DeWitt Springs Water Rights vs. DeWitt Springs Diversions, 2020	8
	Figure 3, Logan Historic and Projected Population, 1980-20501	0
	Figure 4, Logan Historic Number of Water Service Accounts	1
	Figure 5, Water Use by Type, 2016-20201	3
	Figure 6, Logan Water Supplied versus Billed, 1992-20201	4
	Figure 7, Logan Average Daily Water Use, 2006-202014	4
	Figure 8, Logan Daily Water Supply, 20201	5



# Water Conservation Plan 2021

	Figure 9, Logan Projected Peak Day Water Demands (mgd), 2020-2050 Without Additional Water Conservation
	Figure 10, Logan Projected Annual Water Demands (acre-foot), 2020-2050 Without Additional Water Conservation
List of	Tables
	Table 1, City of Logan Water Rights for Municipal Use6
	Table 2, City of Logan Municipal Water Production Facilities9
	Table 3, Logan Historic and Projected Population, 1960-205011
	Table 4, Number and Type of Culinary Water Service Connections12
	Table 5, Comparisons of Need for System Expansions
	Table 6. Current Multi-Tiered Culinary Water Rate Structure



#### Introduction

The City of Logan is experiencing growth that consistently exceeds population projections. Moreover, the city is the commercial and institutional hub of a growing metropolitan area with many outlying residential communities, and is home to Utah State University, one of the largest universities in the state.

This growth prompted the City to plan for the future by preparing a 20-year Culinary Water Master Plan which was completed in 2016. The Water Master Plan will continue to be periodically updated.

The City is currently undertaking important steps to improve water supply service. These interventions will reduce waste and unaccounted for water, and will also help to ensure the system against major loss of service in the future.

#### INVENTORY OF WATER SOURCES

# A. Water Rights

Water rights are the permission that the City has from the State of Utah, the owner of the water, to divert and beneficially use water. The City approved water rights listed for municipal use are listed in Table 1.

Table 1								
City of Logan Water Rights for Municipal Use								
Location Priority Flow Water Right No.								
DeWitt Spring	1 May 1860	10 cfs	25-3506					
DeWitt Spring <sup>1</sup> (Apr-Sep)	1 May 1900	4 cfs	25-5492					
DeWitt Spring <sup>2</sup> 17 Mar 1981 (Oct-Mar)		20 cfs	25-8258					
Combined Right <sup>3</sup>			Approved A28759 (Combines 25-3394, 25-3395, 25-3396, 25-3397, 25-4176, and 25-7704)					
DeWitt Spring (Apr-Sep) <sup>4</sup>	1865	10 cfs	Contract Exchange					
DeWitt Springs (April-Sep) <sup>4</sup>	1865	10 cfs	E1844					
Total Water Rights A	1vailable <sup>5</sup>	83 cfs	(54 mgd) (Division of Water Rights)					
		56 cfs	(36 mgd) (Division of Drinking Water)					
Total Available duri	ng entire Peak	79 cfs (51 mgd) (Division of Water Rights)						
Demand Season <sup>5</sup>		56 cfs (36 mgd) (Division of Drinking Water)						

<sup>&</sup>lt;sup>1</sup>This right is only operable when Logan River flow exceeds 270 cfs.

<sup>&</sup>lt;sup>2</sup>Late priority means this right from the Logan River can only be exercised outside of irrigation season or when river flows exceed 480 cfs.



<sup>3</sup>This right allows a varying amount of water from each well to be used as long as it does not exceed 49 cfs and allows the water to be pumped from the four existing wells and two proposed wells.

While it would appear that the City has considerable water rights for municipal use, the following key points must be considered.

1. All of the DeWitt Springs water rights are governed by the Kimball Decree which reduces the amounts the City can divert based on flow in the river. The City has made trade agreements with two canal companies to allow the city to remove an additional 20 cfs from the springs which makes up for the loss due to the Kimball Decree as shown in Figure 1.

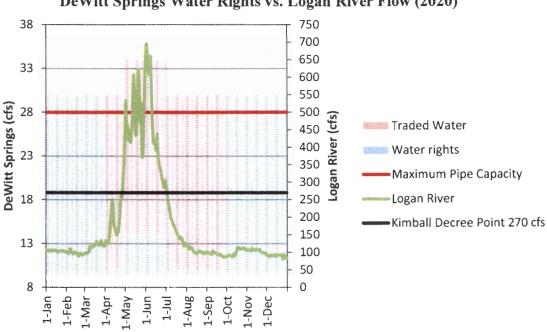


Figure 1
DeWitt Springs Water Rights vs. Logan River Flow (2020)

2. The actual flow available from DeWitt Springs is not usually controlled by water rights, but by the flows produced by the spring itself, hydraulic capacity of the pipeline (28 cfs), and actual water demands as shown in Figure 2.

<sup>&</sup>lt;sup>4</sup>This is an exchange of irrigation rights with canal companies allowing Logan City to take additional water from DeWitt Springs.

<sup>&</sup>lt;sup>5</sup>The Division of drinking water only considers the lowest flow of water from a spring during any given year as the available water.



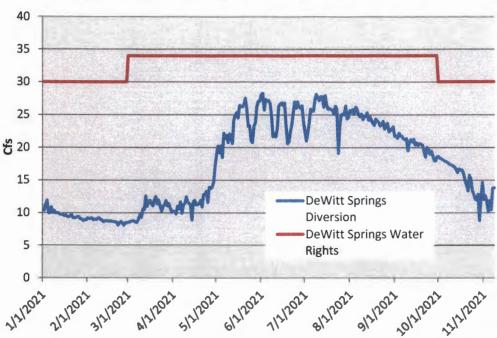


Figure 2
DeWitt Springs Water Rights vs. DeWitt Springs Diversions 2020

- 3. While Dewitt Springs is never allowed to come under the influence of surface water, it is still susceptible to other threats. In 1962 an avalanche knocked out the spring for an extended time. Additionally the waterline crosses the Logan Fault which experienced a magnitude 5.7 earthquake in 1962. As a result, a redundant supply is necessary.
- 4. Current capacity is limited to approximately 28 cfs in the DeWitt Pipeline in an old 24" concrete section that has not been replaced.
- 5. Division of Drinking Water rule R309-510-7(4) only allows us to use the "minimum" flow from DeWitt Springs, about 7 cfs, to determine our available water supply. As a result, we only have 46 cfs of available water with the remainder of our rights providing redundancy when water is available.

# B. Municipal Water Supply Facilities

System capacity is the amount of water the City can deliver to its customers and is independent of water rights. The City of Logan relies entirely on springs and wells to supply municipal water needs. The primary sources of water are the DeWitt Spring, two groundwater wells located near the USU campus, a well near the center of town, and a well on the south side of town. The City owns one additional well on the north side of town to supply irrigation water to some of the canal companies in exchange for additional



water diversion at DeWitt Springs. Table 2 summarizes the system capacity available to Logan City during the year.

Table 2 City of Logan Municipal Water Production Facilities					
Source	Summer	Winter			
Wells	39 cfs (25 mgd)	39 cfs (25 mgd)			
Springs <sup>1</sup>	15.5 cfs (10 mgd)	7 cfs (4.5 mgd)			
Total	54.5 cfs (35 mgd)	46 cfs (29.7 mgd)			

<sup>&</sup>lt;sup>1</sup>Flows from springs vary both seasonally and daily. While Logan City can pull up to 30 cfs hydraulically and by water exchanges from the springs, during a drought and serious water restrictions, historical peak flows have shown to be decreased. Over the drought since 2012, summer peak diversions have been reduce to 12 mgd, so a conservative estimate of 10 mgd was assumed.

# C. Secondary Water Supplies

There are 17 canal companies in the area. They supply secondary irrigation needs for several residences in Logan and the City cemetery, but their primary customers are agricultural users in rural areas of the county. The City does own additional water shares in many of these canals, but does not have a way to fully utilize these shares at present. Rather the City allows the canal companies to use our shares to offset shortages at their discretion in exchange for the use of the canals to carry storm runoff. In the future, the development of the Secondary Water Systems can further be used to offset demands on the culinary water system.

In the last few years, Logan City has been a participant in a multi city and multi irrigation company in an initiative to develop a regional pressurized secondary irrigation system. If successful, this will shift much of the demand on our culinary water system to the secondary irrigation system. Although this initiative has been successful so far, it still has much work to be done before it is a reality.



# POPULATION PROJECTIONS

The population in Logan increased by 6.5 percent during the period of 2010-2020. This corresponds to a 0.6% average annual rate of change (AARC) for the last 10 years. The growth rate has decelerated during the previous decade for the second consecutive decade. The historical mildly exponential growth from 1960 to 2000 and then two consecutive decades of moderately decreasing growth make it difficult to project future population growth.

Based upon growth in 2000-2020, projected growth in USU student population (over 19,500 on campus currently), and the fact that Logan population historically has increased faster than for Cache County as a whole, the City has identified a worst-case potential growth rate of 1.8% AARC.

To develop a most-likely growth rate scenario, City planning staff reviewed historic growth rates for 1960-2010 (2.1% AARC), zoning and future development, planned annexations, and the increase in enrollment at USU. The previous period of decreased growth for 2000-2020 (1.0% AARC) was also considered. The City is of the opinion that a growth rate of 1.0% AARC is more representative of the growth that can be anticipated over the next 40 years.

Figure 3 shows historic population to the year 2020, as well as the population increase in the last 10 years (0.6% AARC), City-defined worst-case scenario (1.8% AARC) and the City most-likely scenario (1.0%) for growth to the year 2040.

Figure 3 Logan Historic and Projected Population, 1980-2050 150,000 140,000 Historic 130,000 120,000 0.6% AARC 110,000 • 1..2% AARC 100,000 90,000 - - 1.8% AARC 80,000 70,000 60,000 50,000 40,000 30,000 20,000 10,000 1980 2020 2030 2040 2050 1990 2000 2010



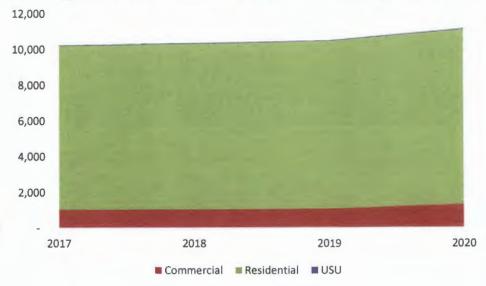
Log	gan Historic and	Table 3 Projected Pop	ulation, 1980-2040	
Year	Historic	0.6% AARC	1.2% AARC	1.8% AARC
1960	18,731			
1970	22,333			
1980	26,844			
1990	32,762			
2000	42,670			
2010	48,375			
2020	51,542	51,542	51,542	51,542
2030		54,719	58,072	61,608
2040		58,093	65,429	73,641
2050		61,674	73,719	88,023

 $<sup>^{1}</sup>$ Average 2.1% AARC over the period 1960-2000. From 2010 to 2020, the average AARC = 0.6% reflecting the economic recession. The expected continuing growth is between 0.6% and 1.8%.  $^{2}$ AARC = Average Annual Rate of Change.

This increase in population over next 40 years will result in additional pressure on City water resources.

Similarly, customer accounts have experienced a steady increase. Figure 4 below shows the trend in municipal water services during the period 2017 to 2020.

Figure 4
Logan Historic Number of Water Services, 2017-2020





# Water Conservation Plan 2021

This figure shows a 9% increase in the number of water services since 2017. This growth will continue as Logan continues to grow and develop over the next 50 years.

Table 4 Number and Type of Culinary Water Service Connections							
Commercial	1,022	1,031	1,047	1,320			
Residential	9,177	9,291	9,409	9,779			
USU	50	48	48	53			
Total	10,249	10,370	10,504	11,152			



#### WATER DEMANDS

As the commercial and institutional hub of Cache County, water demands in Logan include commercial facilities and institutions, such as Utah State University, that serve the entire county and state.

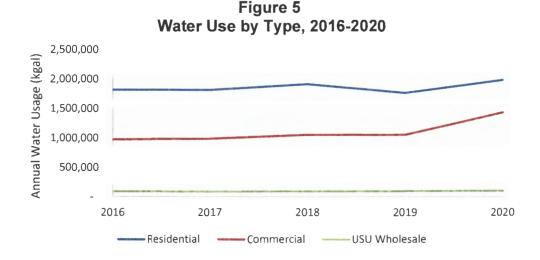
Therefore total per capita water consumption City-wide can be expected to be higher than in a bedroom community whose demands are largely residential with little commercial activities.

Moreover, planned developments on the west side of the City will include commercial and industrial parks, reinforcing Logan's role as the economic hub of a larger countywide community. This will be reflected in continued higher per capita water consumption than for a largely residential community.

# A. Unit Water Consumption

Water demands are composed of billed water consumption and unaccounted-for water. These are expressed in terms of per capita consumption in order to relate to State water conservation goals and better identify trends in consumption by category.

The City of Logan historically lists two categories for billed water consumption: residential consumption, and commercial consumption. Residential consumption includes apartments or multi-family dwellings that employ a master meter instead of individual meters. Commercial consumption includes industrial and institutional demands, City offices and facilities, and irrigation of parks from the culinary water system. Figure 5 provides the amount of water used by residential and commercial properties and USU wholesale.





Unaccounted-for water includes water consumed but not billed, fire flows, other unmetered municipal uses, and water lost to leakage in the water supply system. Unbilled water consumption can owe to under-registering customer meters, unmetered water such as hydrant flushing and construction water, and errors in water accounting and billing practices or software.

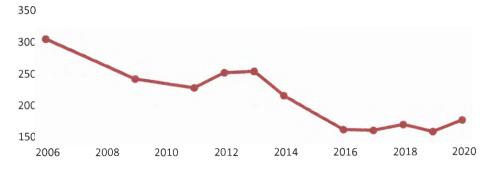
Figure 6 provides a summary of water use versus total water supplied since 1992. The graph shows the overall focus of the City to bring the water losses into more reasonable amounts. As the graph shows, aggressive efforts by the City have substantially reduced our per capita water use by focusing on the unaccounted-for water.

Logan Water Supplied versus Billed, 1992-2020 7,000,000,000 6,000,000,000 5,000,000,000 4,000,000,000 3,000,000,000 2,000,000,000 1,000,000,000 2015 2020 1990 1995 2000 2005 2010 Linear (Water Billed) ..... Linear (Water Delivered) Water Billed -Water Delivered

Figure 6

Figure 7
Logan Average Daily Water Use, 2006-2020

Logan City gpcd (2006-2020)



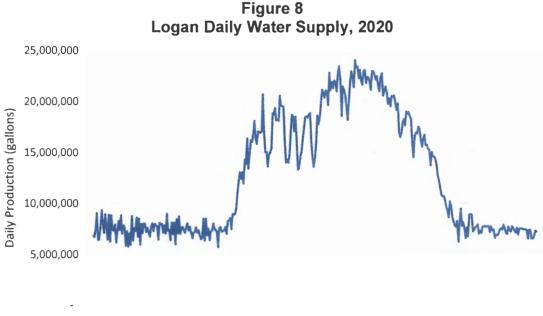


To put this into direct perspective, Figure 7 shows the gpcd for Logan City annually since 2008 reflecting the trend in average daily water use. Note that while there is significant fluctuation annually, the overall trend is down, particularly from 380 gpcd in the 1990's, to as low as 157 gpcd over the last three years, averaging 164 gpcd over the last five years. As shown in the above Figure 5, much of this water reduction has been from a significant reduction in unaccounted for water.

Unaccounted-for water used to comprise the single largest component of water consumption, averaging 42% of water supplied in 2000-2004. The average unaccounted-for water consumption now is at 26% for the last five years. Unaccounted-for water averaged over 180 gpcd during the 1990s, but since then has been reduced to 60 gpcd in the last 5 years. This has been the result of capital replacement projects, decreased system pressures, and improved management.

# B. Seasonal and Daily Peak Demands

The City installed a SCADA system several years ago and recently started updating this system, which now makes it possible to track water supplied to the network on a daily and even real-time basis. Figure 8 documents daily total water supplied for the calendar year 2020. While the daily peaks may fluctuate based on water system storage, weather, irrigation demands, etc., the pattern is consistent with previous years.



- 10715050 10315050 10315050 10315050 (10415050 10515050 10515050 10515050 10615050 10615050 10615050



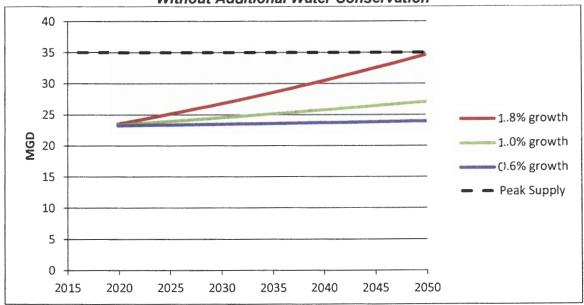
Maximum day demands are 1.93 times the annual average demand and the instantaneous peak demand factor is 3.0 (Based on Logan City 2016 Drinking Water Master Plan).

# C. Water Demand Projections

Figure 9 reflects the projected water demand increases assuming there is no further water conservation, and population projects as discussed in the Population Projection Section, assuming that per capita water use remains at 2018-2020 levels, and population projections discussed previously are representative of actual growth. As discussed previously in this report in Table 2, the maximum capacity in the system at present is about 35 mgd.

Figure 10 reflects the projected annual water demand projections in acre-feet compared to our water rights. For the purpose of the water rights analysis, DeWitt Springs has not been included due to concerns for source security and reliability in the future.









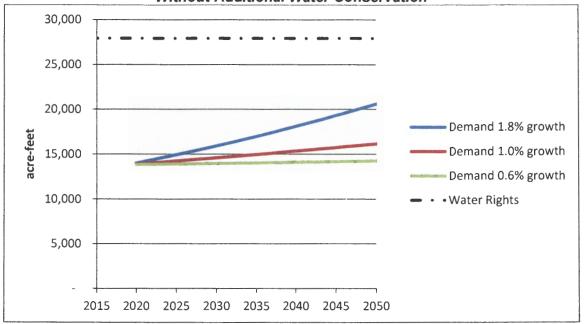


Table 5 summarizes the project water demands based on the three growth scenarios considered. This table helps in planning for system capacity expansion in both delivery capacity (mgd) and source capacity (acre-feet) if no further water conservation takes place.

Table 5. Comparisons of Need for System Expansions.

Growth	2050 Peak	Year	2050	Year Annual
Rate	Day	Demand	Annual	Demand
	Demand	Exceeds	Demand	Exceeds
	(mgd)	35 mgd	(Acre-	Reliable
		(system	feet)	Water Rights
		peak flow		(27,937 acre-
		rate)		feet)
0.6%	24	2050+1	14,266	2050+ <sup>2</sup>
1.0%	27	2050+1	16,133	2050+2
1.8%	35	2050	20,603	2050+2

<sup>&</sup>lt;sup>1</sup>Projections show that Logan City will reach build-out conditions with sufficient source productions to meet demand.

<sup>&</sup>lt;sup>2</sup>Projections show that Logan City will reach build-out conditions with sufficient water rights to meet demand.



#### D. Water Reuse

The City operates one of the largest lagoon treatment systems in the nation. During the summer months, 90% of this water is reused for agricultural irrigation by farmers drawing water from the effluent canal. The City also has a commitment for sending the remaining 10% of these flows downstream to maintain a treatment wetland system. Due to the water rights currently associated with the effluent from the treatment system, it is not currently feasible to consider Waste Water Reuse.

The City is currently in the process of replacing our lagoons with a mechanical treatment plant. However, the water rights associated with the irrigation downstream will still be in place, thus limiting our ability for waste water reuse within the City.



# WATER SUPPLY CONCERNS

The City is confronted by a number of challenges that will need to be addressed in order to meet future water supply obligations. The City is already now actively taking steps to correct deficiencies and prepare for the future. This section summarizes many of the key concerns.

# A. Limited Ability to Supply Water

Peak water demands in Logan approached the City's available water limits in the years 2003 to 2005. The restrictions on capacity owed to:

- Hydraulic restrictions in the pipeline in Logan Canyon. DeWitt Spring is the primary water supply source for the city, yet the pipeline was only able to convey 20 cfs. However, improvements in the pipeline have increased our capacity to 28-30 cfs. If additional water rights could be obtained in Logan Canyon, then additional capacity would need to be provided to convey these extra flows.
- Physical capacity restrictions at wells. Pumps at four of the wells convey only 80% of the available water right for the wells. The loss of any single well during the peak demand period will result in a significant reduction in water delivery capability.
- **High summer demands.** Residential and commercial irrigation of lawns and gardens contributes to high peak demands during the summer. This is still a concern to our ability to deliver peak demands in abnormally dry years.

#### B. Unaccounted-for Water

Unaccounted-for water is about 25% of the total water supplied. The main causes for the current water loss include:

- Leakage from the water distribution network. Some City pipes date from the late 1800s and are leaking. Also, newer ductile iron pipe on the west side of town is experiencing rapid deterioration from corrosive soil conditions.
- Water losses to water main breaks. Every time a water line breaks, it causes substantial water losses that are not accounted for in this analysis. Water crews actively pursue repairing leaks. However, there are probably a significant amount of leaks that we do not know about in the older parts of the City and on the Island area of the City where the leaks don't bubble to the surface.
- Operational Losses. Operational losses have significantly decreased with the implementation of an automated system. However, some losses remain, such as during fire hydrant flushing maintenance.



Reducing unaccounted-for water is important because (1) reducing lost water also reduces the use of the wells and reduces operational costs, and (2) reducing the lost water allows the City to meet peak demands more easily without significant additional capital expenditures.

# C. Lack of Secondary Irrigation System

Currently the City does not utilize any large-scale secondary irrigation. There is a strong initiative with good momentum to combine all the local irrigation companies to make a vast multi-city pressurized secondary irrigation system. If pushed through to completion, this system will benefit our culinary system by decreasing the summer peak demands corresponding to irrigation.

#### D. Rate Structure

A cost-of-service study was completed in 2018 and a plan to increase culinary water rates was adopted. An initial 35% increase for all culinary water accounts was brought into effect in 2018 with additional 3% increases yearly for the next four years. The existing two-tiered rate structure remains to encourage water conservation as seen in table 6.

Table 6, Current multi-tiered culinary water rate structure.

Flat Moi	nthly Rate	S					
Single Fa	mily Units	and	Duple	es	\$	25.08	
Multi Far	mily Units				\$	16.23	
Commerc	cial						
1"	1.5"	2"		4"	6"		8"
\$ 25.08	\$ 26.55	\$	37.62	\$ 114.33	\$	167.43	\$ 230.13
Consum	ption Rate	es					
Single Fa	mily Units	and	Duple	æs			
0-10,000	gal/montl	h			\$	1.55	kgal
10,000+	gal/monti	h			\$	2.51	kgal
Multi Far	mily Units						
0-10,000	gal/montl	h			\$	1.48	kgal
10,000+	gal/montl	h			\$	2.46	kgal
Commer	cial						
All gallor	s/month				\$	1.77	kgal



# WATER CONSERVATION GOALS

The State Division of Water Resources (DWRe) has established a goal to reduce per capita water demand from municipal water supply systems statewide by at least 25% before the year 2050. Specifically, DWRe would like to see per capita demand decline from the 1995 statewide level of 321 gpcd down to 240 gpcd or less before the year 2050. This per capita demand includes billed consumption as well as unaccounted-for water.

The City of Logan has met this goal as of 2009 and continues to meet this goal. However, It is important for the City to continue to meet this objective annually in order to avoid major shortfalls between water demands and available water rights and supplies.



# WATER CONSERVATION PRACTICES IMPLEMENTED OVER THE LAST 15 YEARS

The City has recognized the need to address water supply and conservation issues. Therefore the City implemented numerous water conservation efforts to reduce overall water consumption and loss as well as to reduce annual operating costs.

# A. Replacement of Leaking Golf Course Reservoir

The City of Logan decided to replace the Golf Course (GC) reservoirs 1 and 2, which had a total capacity of 3 MG. This reservoir, damaged by an earthquake in 1962, was believed to contribute substantially to water losses from the system, on the order of four (4) million gallons per day.

The four cells in the new 5.65 MG concrete reservoir, called GC 6, 7, 8, and 9, were constructed at the same site. The first cell was brought into service in August 2005, and the last cell of the original reservoir was retired from service at the same time. Comparing city-wide unaccounted-for water for the months of July and August, preliminary results indicate a significant reduction in water losses, most likely owing to replacing the original reservoir. Long term monitoring of the system confirmed the increased reduction in water loss.

# B. Replacement of the steel portions of the DeWitt Waterline and other waterlines in the City

Over the period from 2005 through 2008, the City of Logan replaced the steel portion of the DeWitt Pipeline up Logan Canyon. This line was historically losing on the order of about 2.3 mgd from leaks along the portion under US-89. With the reconstruction of this line, further hydraulic restrictions were removed from the system, allowing the City to more fully utilize their water rights.

Older water piping in the areas of 1000 West, 600 East, 1150 North, 200 East, and 100 East were replaced over the last 10 years. The City continues to identify and replace older infrastructure on a periodic basis as budgets allow.

# C. Full System Automation

With the completion of the DeWitt Waterline, a new automated flow control valve was installed. With this last control valve automated, the almost daily overflows from the system reservoirs have been almost completely eliminated. .



# D. Universal Metering

The City has implemented a program to introduce full metered consumption. Previously consumption by some customers was not metered, only estimated. As of December of 2010 all un-metered accounts have been furnished with meters. Where feasible, the City is also phasing out master meters in favor of individual meters, which will strengthen the principle of individual accountability and encourage water conservation. In other locations the master meters are being replaced by compound meters for better accuracy at low flow situations.

# E. Meter Replacement

The City found that some old meters were under-registering actual consumption by about 10%. The City has implemented a program since 2003 to replace meters. This program is funded as part of an annual replacement program. The City replaced all of the water meters completely and is now replacing high flow meters (commercial) on a regular basis.

# F. Pressure Reducing Valves

In 2014, the City installed and implemented pressure reducing stations throughout the city. A study was performed to determine the effects of pressure reductions to building fire suppression systems. Suppression systems adversely affected by pressure reductions were retrofitted to provide adequate fire coverage prior to implementation of pressure reducing stations. Pressure reducing valves were placed in strategic areas of the city reducing pressures and limiting the amount of wasted water due to higher leakage rates caused by high pressures. In the first year after placing the PRV's online, the City recognized a 17% reduction of water use and a 40% reduction in the number of water main breaks. Additionally, there has been a 32% reduction in power consumption from pumps supplying water to the City's wells.

# G. Meter Measurement and Billing

Formerly all meter reading was conducted on a bi-monthly basis. The City implemented radio metering and has gone to monthly meter reading for all customers. This allows more accurate billing records and less opportunity for unaccounted-for water.

#### H. Rate Structure

The City of Logan adopted new culinary water rates that increased the existing rates to catch up with unaccounted for inflation for the past decade. The City maintained the existing two tier rate structure, with the culinary rate increasing after 10k gallons of usage in a single billing period.



# I. Irrigation Resolution

In response to the high water demands of 2003 and 2004, the City established a lawn irrigation resolution, permanently restricting irrigation to between the hours of 6:00 p.m. and 10:00 a.m.



### ADDITIONAL WATER CONSERVATION MEASURES

In order to maintain the water conservation goal of 240 gpcd, it will be necessary to carry out more measures than have been performed to date. While the existing measures are being continued, additional measures are needed. The next paragraphs describe measures, which in the opinion of the City; will contribute most to achieving their objective.

#### A. Leakage Detection

The City routinely employs leak consultants to help confirm areas of suspected high leakage. In the past year the City has been looking into purchasing leak detection equipment to make leak detection more financially viable.

# B. Pipe Replacement Planning

While the City will resume annual leakage detection, the City is also taking steps to be more proactive in rehabilitating the water distribution network to reduce leakage. These steps include preparing a detailed registry of pipe failures, and implementation of a Pipe Replacement Plan. Currently, the City uses computer software to track waterline breaks and failures and will incorporate information gathered during the upcoming leakage detection program. This information provides the City a framework for anticipating and scheduling network pipe rehabilitation or replacement. By proactively maintaining the network, the City will be able to reduce water losses from leakage.

# C. Internal Water and Accounting Audits

As part of the water conservation program, the City will develop a better methodology for quantifying and tracking lost water in the system including both operational losses (flushing, testing, disinfecting new lines, tank overflows, construction water, etc.) and maintenance losses (line breaks, know leaks that are repaired, etc.). Additionally, the City will perform an internal audit of our billing and metering data to identify any additional errors in the system and to quantify any possible illegal connections or under registering meters.

The installation of radio read meters allows monthly collection of data and water use at each meter location. Monthly readings are compared to past readings and accounts that have drastic seasonal use increases are flagged for audit. The City investigates sites that are identified as having abnormal readings and the City verifies proper meter function and adequate City infrastructure. The City will arrange to meet with property owners to help them identify problems if it is found to be the responsibility of the owner.

# D. Secondary Irrigation Policy

Currently the City does not utilize any large-scale secondary irrigation. There is a strong initiative with good momentum to combine all the local irrigation companies to make a

### Water Conservation Plan 2021



vast multi-city pressurized secondary irrigation system. If pushed through to completion, this system will benefit our culinary system by decreasing the summer peak demands corresponding to irrigation.



# IMPLEMENTING AND UPDATING THE WATER CONSERVATION PLAN

The City has charged the Water and Wastewater Division Manager with direct responsibility for implementing the Water Conservation Plan. Additionally the Public Works Director has overall responsibility for the plan.

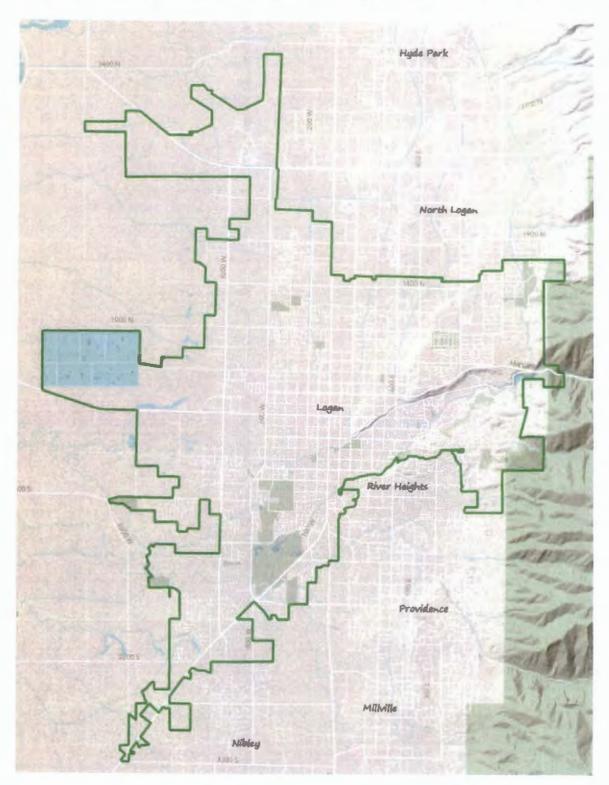
Staff from both Operations and Engineering have worked together to develop this Water Conservation Plan.

The Public Works Department coordinates major water conservation actions with the Water Advisory Board, which is composed of civic and local representatives. The Water Advisory Board provides local input concerning planned actions, and recommends approval or disapproval to the City Council.

This Water Conservation Plan will be updated to document achievements and identify additional actions needed, and will then be submitted to the Utah Division of Water Resources in December 2020, as required by the Utah Water Conservation Plan Act (73-10-32, UCA).



# Appendix A: Logan City Culinary Water Service Area





#### LOGAN MUNICIPAL COUNCIL AGENDA

December 7, 2021 290 North 100 West Logan, Utah

Notice is hereby given that the Logan Municipal Council will hold its regular meeting beginning at 5:30 p.m. on Tuesday, December 7, 2021, in the Logan Municipal Council Chambers located at 290 North 100 West, Logan, Utah 84321. Council meetings are televised live as a public service on Channel 17 and streamed on the City of Logan YouTube channel at: https://www.youtube.com/channel/UCFLPAOK5eawKS RDBU0stRO

#### 5:30 p.m.

#### **REGULAR MEETING AGENDA**

- 1. Call to Order Vice Chair Jeannie F. Simmonds
- 2. Opening Ceremony Veronica Smith, Cache Refugee & Immigrant Connection (CRIC)
- 3. Acceptance of Minutes; Approval of Agenda
- 4. 2021 regular meeting schedule, 1<sup>st</sup> & 3<sup>rd</sup> Tuesdays, 5:30 p.m.: Next meeting: January 4, 2022 \*\*Council Meeting on December 21, 2021 has been Cancelled\*\*
- 5. QUESTIONS AND COMMENTS FOR MAYOR AND COUNCIL: Any person wishing to comment on any item not otherwise on the agenda may address the City Council at this point by stepping to the microphone and giving his or her name and the City where you reside for the record. Comments should be limited to not more than three (3) minutes, unless additional time is authorized by the Council Chair. Citizen groups will be asked to appoint a spokesperson. This is the time and place for any person who wishes to comment on non-agenda items. Some items brought forward to the attention of the City Council will be turned over to staff to provide a response outside of the City Council meeting.

# ESTIMATED time of consideration

#### **6.** <u>MAYOR/STAFF REPORTS</u>:

A. Board Appointments (Parks & Recreation; Golf Course Advisory Boards) – Mayor Daines

#### 7. <u>COUNCIL BUSINESS</u>:

- A. FY2021 Financial Statement Presentation Richard Anderson, Finance Director and Steven Rowley
- B. Planning Commission Update Vice Chair Simmonds
- C. Council Chair and Vice Chair for 2022 Vice Chair Simmonds
- D. Winter Parking Councilmember Amy Anderson

#### **8.** <u>ACTION ITEMS</u>:

- **A.** Consideration of a proposed resolution approving the Water Conservation Plan Resolution 21-52 Cameron Draney, Water/Wastewater Manager
- **B.** Consideration of a proposed ordinance repealing Logan Municipal Code Chapter 8.36 "Prohibition of the Distribution of Disposable Plastic Bags" <u>Ordinance 21-23</u> <u>Issa Hamud, Environmental Director</u>
- C. Consideration of a proposed resolution supporting a Countywide Plastic Waste Management Program Resolution 21-55 – Issa Hamud, Environmental Director
- D. PUBLIC HEARING Budget Adjustment FY 2021-2022 appropriating: \$6,999 a grant the Police Department was awarded from the State of Utah, Justice Assistance Grant (JAG) funds to purchase police equipment; \$599,744 funds for an employee retention stipend; \$2,020,000 funds for land acquisition for Fire Station70 relocation; \$3,300,000 water & sewer reserves for the Logan City/North Logan City sewer trunk line extension Resolution 21-57 Richard Anderson, Finance Director



#### **6:30 9. WORKSHOP ITEMS:**

- **A.** Consideration of a proposed resolution creating Voter Participation Areas <u>Resolution 21-59</u> **Kymber Housley, City Attorney**
- **B. Budget Adjustment FY 2021-2022 appropriating:** \$13,000 for a grant the Police Department was awarded from the Internet Crimes Against Children (ICAC) Task Force of Utah. These funds will be used to investigate, protect and educate the community on children exploitation Resolution 21-60 Richard Anderson, Finance Director
- 10. OTHER CONSIDERATIONS:
- 6:45 11. ADJOURN to meeting of the Logan Redevelopment Agency

#### AGENDA - LOGAN REDEVELOPMENT AGENCY

290 North 100 West, Logan UT 84321 - Tuesday, December 7, 2021 6:45 p.m. (<u>ESTIMATED</u> Time of Consideration)
Welcome – Vice Chair Jeannie F. Simmonds

#### **ACTION ITEM:**

A. PUBLIC HEARING - Budget Adjustment FY 2021-2022 appropriating: \$700,000 funds for City Hall parking lot improvements in conjunction with the Library project - Resolution 21-58 RDA - Richard Anderson, Finance Director

**ADJOURN** 

On Friday, December  $3^{rd}$  2021 at 5:00 p.m. a copy of the foregoing notice was posted in conspicuous view in the front foyer of Logan City Hall, Logan, Utah. A copy was also posted on the Logan City website at loganutah.org and the State Public Meeting Notice website at http://pmn.utah.gov.

DATED THIS 3rd day of DECEMBER 2021

Teresa Harris, City Recorder

Council Members may participate in the meeting via telephonic communication. If a Council Member does participate via telephonic communication, the Council Member will be on speakerphone. The speakerphone will be amplified so that the other Council Members and all other persons present in the Council Chambers will be able to hear all discussions. In compliance with the American with Disabilities Act, individuals needing special accommodations or assistance during this meeting shall notify Teresa Harris, City Recorder, at 435-716-9002, at least 24 hours prior to the meeting.

Holly H. Daines, Mayor Mark A. Anderson, Chairman Jeannie F. Simmonds, Vice Chair Thomas C. Jensen, Councilmember Amy Z. Anderson, Councilmember Ernesto López, Councilmember



Minutes of the meeting of the Logan Municipal Council convened in regular session on Tuesday, December 7, 2021, in the Logan Municipal Council Chambers located at 290 North 100 West, Logan, Utah 84321 at 5:30 pm. Logan Municipal Council Meetings are televised live as a public service on Channel 17 and the City of Logan YouTube channel at: https://www.youtube.com/channel/UCFLPAOK5eawKS RDBU0stRQ

Council Members present at the beginning of the meeting: Vice Chair Jeannie F. Simmonds, Councilmember Ernesto López, and Councilmember Amy Z. Anderson. Administration present: Mayor Holly H. Daines, City Attorney Kymber Housley, Assistant Finance Director Rueben Nelson, City Recorder Teresa Harris, and Deputy Recorder Esli Morales.

Participating via Zoom: Chair Mark A. Anderson and Councilmember Tom Jensen Excused: Finance Director Richard Anderson.

Vice Chair Jeannie F. Simmonds welcomed those present. There were approximately 12 in attendance at the beginning of the meeting.

#### **OPENING CEREMONY:**

Veronica Smith, Director from the Cache Refugee & Immigrant Connection (CRIC) provided the opening ceremony and led the audience in the pledge of allegiance. Ms. Smith said that CRIC is a local non-profit organization whose purpose is to promote integration, economic self-sufficiency, and close knit-connections between refugees and the community. CRIC is here to help and support refugees and immigrants as a liaison to help accomplish connectivity. There are six active programs, the most popular program is walking hours which permits the client to come in during office hours to receive aid with any problem they are facing such as navigating through everyday life to filling out a food stamp or immigration application. There are various education classes offered to obtain a driver's license, financial literacy, citizenship, etc. There is also a community garden in which the clients can have access to fresh produce and a neighbor program that pairs local families with clients to foster ties to the community. Several referral services offer free mental health care service, free health services, free immigration services, and legal consultation.

Tiar Hoff, a board member of the Cache Refugee & Immigrant Connection (CRIC) emphasized that their organization is not simply a non-profit, but a method of bringing communities together. CRIC offers a safe space for the local refugee and immigrant communities to ask for help or assistance. CRIC partners with other community organizations to help refugees feel connected to their local communities. A new initiative is Women's Story Circle that permits refugee women to come together in a safe place to talk and meet to form their own community.

**Meeting Minutes**. Minutes of the Council meeting held on November 16, 2021, were reviewed and approved with no corrections.

**Meeting Agenda**. Vice Chair Simmonds announced there are two public hearings scheduled for tonight's Council meeting.

ACTION. Motion by Councilmember A. Anderson seconded by Councilmember López to approve the November 16, 2021, minutes and approve tonight's agenda. Motion carried unanimously.

**Meeting Schedule**. Vice Chair Simmonds announced that regular Council meetings are held on the first and third Tuesdays of the month at 5:30 pm. The next regular Council meeting is Tuesday, January 4, 2022. She also announced the December 21, 2021, council meeting has been canceled.

#### **QUESTIONS AND COMMENTS FOR MAYOR AND COUNCIL:**

Vice Chair Simmonds explained that any person wishing to comment on any item not otherwise on the agenda may address the City Council at this point by stepping to the microphone and giving his or her name and address for the record. Comments should be limited to not more than three (3) minutes unless additional time is authorized by the Council Chair. Citizen groups will be asked to appoint a spokesperson. This is the time and place for any person who wishes to comment on non-agenda items. Some items brought forward to the attention of the City Council will be turned over to staff to respond outside of the City Council meeting.

Earl Peterson, Commander of the American Legion from Hyrum highlighted the urgent need for a public restroom that is wheelchair accessible at the Logan cemetery.

Mayor Daines responded that a Cemetery Master Plan is presently being made which will address the issue.

Gail Yost, a resident of Logan shared the lighting of the menorah and the story behind the celebration of Hanukkah.

Lacey, a citizen of Logan and a student at USU applauded the Plastic Management Program as an excellent proposal but requested that the plastic bag ban is not repealed as it is not sufficient in her belief. She said there is ongoing research on the impact of micro-plastics from an environmental level to a biological level and taking into account these extensive factors, she requested that the Council maintain the plastic bag ban.

There were no further comments or questions for the Mayor or Council.

#### **MAYOR/STAFF REPORTS:**

# Board Appointment (Parks & Recreation Advisory Board; Golf Course Advisory Board) – Mayor Daines

Mayor Daines asked the Council for ratification to appoint Melissa Dahle and Mike Wolford to serve on the Parks & Recreation Advisory Board. Both are new appointments.

Mayor Daines also asked the Council for ratification to reappoint Dawn Drost to the Golf Course Advisory Board.

ACTION. Motion by Councilmember A. Anderson seconded by Councilmember López to approve ratification of Melissa Dahle, Mike Wolford and Dawn Drost as presented. Motion carried unanimously.

No further Mayor/Staff Reports were presented.

#### **COUNCIL BUSINESS:**

# FY2021 Financial Statement Presentation – Rueben Nelson, Assistant Finance Director and Steven Rowley

Rueben Nelson, Assistant Finance Director thanked the Council for the opportunity and presented Steven Rowley, State Auditor, who conducted the FY2021 financial audit.

Mr. Rowley thanked the Council for the opportunity to speak. He stated that his responsibility as auditor is to present and report to the Council tonight of the findings of the FY2021 financial audit. It is the Council's responsibility to govern the City through the accounting department to oversee the day-to-day operations that are led by Richard Anderson, the Finance Director. The financial audit is to ensure anyone who handles the finances in any city department plays a part and ensures that the audit goes smoothly. The purpose of an auditor is to review the financial statements and give an opinion on the presented financial statements in accordance with the accounting principles generally accepted in the United States of America and that of governance standards and be in compliance with the state law.

Mr. Rowley said the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City of Logan, Utah, as of June 30, 2021, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America. (Meaning that the financial statements are correct and can be relied upon).

Mr. Rowley also said the internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs. Our responsibility is to express an opinion on compliance for each of the City's major federal programs based on our audit of the types of compliance requirements referred to above. In our opinion, the City of Logan, Utah, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2021.

In our opinion, the City of Logan, Utah, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2021.

Mr. Rowley reiterated that in the four reports and tests, the City of Logan was found to be in compliance with no negative findings.

Mr. Nelson thanked the auditors for their great efforts including auditor partners, who actually come on-site for an entire week.

Councilmember A. Anderson also thanked Brett Hugie, a sub-committee member for his participation in the audit.

Mayor Daines reminded the public that all the information presented this evening is available on the city website: loganutah.org.

Mr. Nelson said that the City financially is in a good position, but there is always the worry of the future, maintaining employees, etc. There are reserve funds, but there are always projects occurring throughout the City.

Vice Chair Simmonds remarked on the need for constant vigilance. She asked Mr. Rowley if the City is well run on a financial level.

Mr. Rowley answered that he cannot give an opinion. Their sole purpose is to audit the financial aspect not the performance aspect to determine how well the City performs.

Vice Chair Simmons rephrased the question and asked how the finance department is to work with.

Mr. Rowley answered that it was a pleasure to work with the finance department.

### Planning Commission Update – Vice-Chair Simmonds

Vice Chair Simmonds reported that the Planning Commission will meet on December 9, 2021. On 50 West 800 North, a mixed-use project called, the Brickyard was approved with 30 residential units and 2 commercial suites. The project was approved 6 to 1. The Food Pantry is creating a larger access point and to do so, a home will have to be removed to expand the driveway for an additional delivery location. The project was approved 7:0. Zeppos Italian Ice will occupy the former popcorn location on 811 N Main St. The project was approved 7:0. Ethan's Honest Automotive Service and Repair is requesting a zone change from commercial to commercial services. The project recommendation was denied by Planning Commission 7:0. And should the proponent elect to pursue the project, the proposal will come before the City Council as the legislative body.

### Council Chair and Vice Chair for 2022 - Vice-Chair Simmonds

Vice Chair Simmonds stated that at the beginning of each new year a new Council Chair and Vice Chair are selected.

Councilmember A. Anderson nominated Vice Chair Simmonds for the position of Chair.

Vice Chair Simmonds nominated Councilmember López as Vice Chair.

Vice Chair Simmonds briefly explained for the benefit of the public that the Chair and Vice Chair are elected before the New Year to permit the Chair time to appoint Council Members to various committees. This also permits Council Members to familiarize themselves with the new committee assignments.

ACTION. Motion by Councilmember A. Anderson seconded by Councilmember López to <u>nominate Vice Chair Simmonds to serve as the Council Chair for 2022 as presented.</u> Motion carried unanimously.

ACTION. Motion by Vice Chair Simmonds seconded by Councilmember A. Anderson to nominate Councilmember López to serve as the Council Vice Chair for 2022 as presented. Motion carried unanimously.

# Winter Parking - Councilmember Amy Anderson

Councilmember A. Anderson explained the process of winter parking permits. These permits require a fee and the requirement of certain conditions having to be met. The home must be built prior to 1968, if there is adequate parking available, etc. Currently, there are 233 properties that are eligible for permits and as of this year, 209 permits have been sold. A question from the public is if it is possible to meet some of the requirements if not all and be eligible to apply for a winter parking application.

Kymber Housley, the City Attorney clarified the dates that Winter Parking runs from November 15 to March 15.

Vice Chair Simmonds stated that the topic warrants a discussion, but as the year has already commenced it would be more prudent to not make any changes in the middle of the winter season.

Councilmember López inquired what kind of changes could be made to the winter parking code.

Councilmember A. Anderson responded that any kind of changes can be made in regard to the winter parking code such as increasing the number of parking permits. In part, the reason for the topic is in older neighborhoods that have narrower driveways.

Vice Chair Simmonds reminded the Council that permits, and winter parking restrictions exist because of snow, the clearing of streets as it is a liability issue for the City.

Chairman A. Anderson and Councilmember Jensen agreed with the assessment of Vice Chair Simmonds to discuss the topic again in the spring or summer.

No further Council Business items were presented.

### **ACTION ITEMS:**

Consideration of a proposed resolution approving the Water Conservation Plan – Resolution 21-52 – Cameron Draney, Water/Wastewater Manager

At the November 16, 2021, Council meeting, Water/Wastewater Manager Cameron Draney addressed the Council regarding the proposed resolution approving the Water Conservation Plan. The Water Conservation Plan is required by the State. It is a program tailored to improve water systems within the city rather than that of public outreach.

In 2005, the City of Logan submitted a Water Conservation Plan to address excessive water use. In 1992, average water use exceeded 400 gallons per capita daily (gpcd)

throughout the City. Recognizing this problem, the City implemented several efforts to reduce this water use, primarily by searching for leaks in the system. By 2003, this number was decreased to about 350 gpcd. The Public Works Department has recognized water conservation to be very important, not only for environmental reasons but for economic reasons. In 2003 and 2004, our summer peak demands nearly exceeded our ability to deliver water. As a result, very aggressive goals were set to prevent this from happening again.

As part of those efforts, the following programs were implemented: 1. Golf Course reservoir replacement project (2008) 2. DeWitt Pipeline replacement project to eliminate major leaks (2008) 3. Automation of water system controls to eliminate storage tank overflows (SCADA updated 2008) 4. Implementing aggressive leak detection and repair programs 5. Installing water meters on all services to eliminate estimating errors (2010) 6. Replacing old water meters to correct under measurements (Ongoing) 7. Implementing monthly meter reading using radio systems (2007) 8. Implementing pressure reducing valves to decrease pressures to service lines (2014)

As a result of these efforts, the City of Logan has reduced our total water use to 175 gpcd in 2020. This was further emphasized by the reduction of our summer peak demands from 36 million gallons per day (mgd) in 2003 to 24 mgd in 2020.

Additionally, the projects have increased our system capacity from 55.7 cfs (36 mgd) in 2004 to 69 cfs (44.6 mgd) in 2014. These improvements, combined with the reduced water demands, have significantly reduced stress on our system during the summer months.

Mr. Draney stated that while these improvements have been fantastic, the City of Logan needs to again refocus on new priorities. First, while major improvements have been made, we are still losing 25 percent of the water we deliver in the system associated with leaks, main breaks, and other unaccounted for water. This causes significant costs in pumping and facility maintenance. In order to further address these issues, Logan City has identified the following additional goals.

1. The further implementation of the pipe replacement plan developed in 2007 and the proposed update to the plan in 2012. 2. Completion of a water audit of the City's accounting system to identify any errors in the process. This will also allow us to try to identify possible illegal connections within the City. 3. The participation of the implementation of a vast multi-city pressurized secondary irrigation system.

These combined efforts are expected to continue to reduce our water losses and demands on the system and extend our water supply into the future.

Councilmember Jensen commended the work of staff as did the rest of the Council.

ACTION. Motion by Councilmember Jensen seconded by Chairman M. Anderson to approve <u>Resolution 21-52 as presented</u>. Motion carried by roll call vote.

M. Anderson: Aye A. Anderson: Aye

Jensen: Aye Lopez: Aye Simmonds: Aye

Consideration of a proposed ordinance repealing Logan Municipal Code Chapter 8.36 "Prohibition of the Distribution of Disposable Plastic Bags" – Ordinance 21-23 Issa Hamud, Environmental Director

At the November 16, 2021 Council meeting, Environmental Director Issa Hamud addressed the Council regarding the proposed ordinance. The ordinance prohibits the distribution of disposable plastic bags. It creates a problem between communities of low and high income. The ordinance would not go into effect until January 1, 2022.

Issa Hamud, Environmental Director emphasized the importance and vital need of a County-Wide Plastic Waste Management Program. The program will go into effect for the entire county, but the plastic ban will not go into effect until January 2022 and it would solely be in Logan. Considering the impact of the plastic bag ban on low-income families, the pandemic, and the difficulty in implementation of the ordinance, it is requested that the ordinance be repealed.

Vice Chair Simmonds requested further clarification regarding the status of the Plastic Waste Management Program and if there is any other entity that must weigh in before the program fully goes into effect.

Mr. Hamud replied that the County-Wide Plastic Waste Management Program will go into effect all over the County, but the Solid Waste Advisory Board may halt or change the program implementation. The County has requested that the Environmental Department commence program implementation but requested that the City of Logan be on board.

Vice Chair Simmonds clarified for the public that Cache County regulates trash and has granted the responsibility to Issa Hamud, Environmental Director to run the program. Hence, the reason why the current bureaucracy system exists. She asked what the steps for approval are for the program.

Mr. Hamud reiterated that this is the proper course of action to handle plastics. The action of the City to take the first step and repeal the ordinance.

Councilmember A. Anderson pointed out that the ordinance does not go into effect until January 1, 2022.

Mr. Housley agreed and for that reason, the ban repeal is being requested.

Mayor Daines stated that the Plastic Management Plan is a proposal to address environmental concerns at a County level and not just at a City level. The program will permit retailers a choice and grant citizens a variety of environmental options. The ban is contentious for members of the public and would only be limited to the City of Logan and not the entire County.

Mr. Housley clarified on behalf of Vice Chair Simmonds the question made. The County does not need to approve the resolution for the program to go into effect, but rather this is a request to show support of the program. Under Environmental Director Hamud as the director, the program can still be implemented. In the worst case scenario, the County can terminate the existing contract and hire another contractor for garbage collection. However, that requires a notice of at least several years.

Mayor Daines said that the County can vote to change the fee structure. The thought is that the program would be better to address the program throughout the entire county rather than just be limited to the City of Logan.

Councilmember A. Anderson said that was her primary concern with the ban is that retailers and members of the public would be caught unaware and the adverse effects resulting from the ban going into effect.

Mr. Housley clarified that even with program implementation that does not mean that the fee schedule will go immediately into effect. Staff will first reach out to business owners and work with them to ensure a proper fee schedule, plan, due notice will be given, and only then will fees commence. There are also alternative options as long as it is satisfactory.

Councilmember A. Anderson emphasized that the plastic bag ordinance must either be repealed, or the ordinance deadline be extended. She rather likes the fee associated with the plastic management plan as that helps motivate the community rather than the ban can serve as a frustration.

Councilmember López asked that if the plastic ban continues along with the proposed resolution if the County would fully support the program.

Mr. Housley answered that is an option as well as the County reacting to handling fees. The change in fee structure would impact how tires are handled, medical waste, or even terminate the contract with the City.

Councilmember López inquired what the process for termination would be.

Mr. Housley replied that there is a two-year notice of termination on the contract.

Mayor Daines clarified that termination is unlikely to happen. The plastic bag ban is a contentious topic with the County and in order to be a better partner, therefore, the alternative would be the plastic waste management program which is being proposed.

Chairman M. Anderson remarked that he reached out to the County Council, and the County responded that they did not have sufficient information at this time to make a determination. Recycling must commence at a retail level and for that, a plan with options is needed.

Councilmember A. Anderson asked if there was enough staff and funding for public and retail education for the implementation of the new program.

Mr. Hamud responded that there is a list of businesses that handle plastics contact information to reach out to them. There will be public education and a fee structure will commence much as it did with recycling in the past.

Councilmember Jensen spoke in favor of the Plastic Waste Management Program and the repeal of the Prohibition of the Distribution of Disposable Plastic Bags as there is no need for two plans to be in operation.

## Motion by Councilmember Jensen failed for lack of a second.

Vice Chair Simmonds asked the Council for alternative ideas.

Councilmember López said that he would prefer an official stance from the County before the plastic bag ordinance is repealed since he fully supports the proposed program. He commented that on his trip to Mexico during the summer, there was a similar ban implemented in the entire county and even more importantly 90% of the citizens were actively not using plastic bags.

Councilmember A. Anderson spoke in favor of motivating behavior rather than an outright ban. If the ban and proposal are maintained, a citizen may not have a plastic bag in Logan, but in the County, they can purchase a bag for a fee. She would prefer that businesses across the County be permitted an option, rather than a ban for a certain sector.

Vice Chair Simmonds reminded that a decision must be made and Mayor Daines added that there is not another council meeting before the ban goes into effect.

Councilmember López asked if delaying the implementation of the ban for three or four months would be sufficient time to receive a response from the County.

Mr. Housley interjected that it depended on what the Council desired to learn during that time period.

Councilmember Jensen repeated his current stance on repealing the ban as there is no need for two action plans.

Chairman M. Anderson agreed with Councilmember Jensen that there needs to be a consensus with the County and the ban will not achieve that.

Councilmember A. Anderson agreed.

ACTION. Motion by Councilmember Jensen seconded by Chairman M. Anderson to repeal Ordinance 21-23 "Chapter 8.36" Prohibition of the Distribution of Disposable Plastic Bags in the City of Logan as presented. Motion carried by roll call vote (3-2).

M. Anderson: Aye A. Anderson: Aye

Jensen: Aye Lopez: Nay Simmonds: Nay

Consideration of a proposed resolution supporting a Countywide Plastic Waste Management Program – <u>Resolution 21-55</u> - Issa Hamud, Environmental Director

At the November 16, 2021 Council meeting, Environmental Director Issa Hamud addressed the Council regarding the proposed resolution.

### **Plastic Waste Management Program Problems:**

- State and federal rules prohibit litter surrounding the landfill
- Plastic litter is unsightly in the landscape
- Plastic litter prevents us from being a good neighbor to our community
- Plastic waste litter control is expensive
- Plastics waste recycling contamination
- Lack of viable recycling options

### **Development of Program:**

- Community and retail assessment on bag distribution in 2019
- Plastic waste education campaigns using the newspaper, radio, and other social media outlets
- Meeting with manufacturers, and retailers.

## **Program Objectives:**

- Minimize plastic waste nuisances
- Meet state and federal requirements
- Meet community expectations
- Be a good neighbor
- Make plastic waste management simple and easy to comply
- Make it customer friendly
- Make it business-friendly (manufacturing and retailers)

## **Pre-consumer Plastic Reduction Requirements:**

- **Option 1:** Recycling. Businesses will implement plastic bag/film recycling at their facility and provide reports quarterly.
- Option 2: Containment. Businesses will bundle bags sufficiently before being disposed of with the garbage so that plastic bag waste cannot blow at the landfill or transfer station or from the trucks.

### **Proposal:**

- Retailer Plastic Reduction Requirements:
- **Option 1:** Retailers will eliminate free single-use plastic bags or implement an approved recycling program.
- Option 2: Retailers will provide plastic bags only if the retailer charges a \$0.10 fee per bag supplied (the retailer keeps the revenue).

ACTION. Motion by Councilmember A. Anderson seconded by Chairman M. Anderson to approve <u>Resolution 21-55 as presented</u>. Motion carried by roll call vote.

M. Anderson: Aye A. Anderson: Aye Jensen: Aye

Lopez: Aye Simmonds: Aye

PUBLIC HEARING - Budget Adjustment FY 2021-2022 appropriating: \$6,999 a grant the Police Department was awarded from the State of Utah, Justice Assistance Grant (JAG) funds to purchase police equipment; \$599,744 funds for an employee retention stipend; \$2,020,000 funds for land acquisition for Fire Station 70 relocation; \$3,300,000 water & sewer reserves for the Logan City/North Logan City sewer trunk line extension – Resolution 21-57 – Richard Anderson, Finance Director

Assistant Finance Director Rueben Nelson summarized the budget adjustment.

Vice Chair Simmonds asked if the \$3.3 million dollars is not supposed to go towards the new city tank.

Mayor Daines responded this portion of the funds is not part of the ARP funds.

Vice Chair Simmonds opened the meeting to a public hearing.

Dr. Gail B. Yost, a resident of Logan asked what property will be purchased for the fire station land acquisition.

Mr. Housley responded that this is merely an appropriation of funds for the purchase of property. The City is still in negotiations and nothing can be disclosed to the public at this time as it is not under contract.

There were no further public comments and Vice Chair Simmonds closed the public hearing.

ACTION. Motion by Councilmember A. Anderson seconded by Chairman A. Anderson to approve <u>Resolution 21-57 as presented</u>. Motion carried by roll call vote.

M. Anderson: Aye A. Anderson: Aye

Jensen: Aye Lopez: Aye Simmonds: Aye

### **WORKSHOP ITEMS:**

Consideration of a proposed resolution creating Voter Participation Areas – Resolution 21-59 – Kymber Housley, City Attorney

City Attorney Kymber Housley addressed the Council and explained that in 2019 the Legislature passed a law requiring all municipalities to have voter participation areas. These voter participation areas are specifically required for initiatives and referendums. The City was required to pass it at the end of the year, and it was passed in June of that year, but that law also required that by January 1, 2022, voter participation areas be reviewed. The presentation will be after due to the date due to the date of the next council meeting. As the voter participation areas were being put together County sent out a new map, and adjustments have been made.

Councilmember A. Anderson asked if the voter precincts have been changed for the City.

Mr. Housley responded that the current County map has completely changed the entire voting precincts. There will be an education program for the public's benefit in the future.

Vice Chair Simmonds asked if the changes in the voting precincts occurred simply because the County desired to do so.

Mr. Housley answered he could not confirm what statute the County is operating on.

Councilmember A. Anderson interjected that her understanding is the County acted in order to comply with the new statewide maps.

Mr. Housley replied that very well could be the case.

Councilmember A. Anderson asked for further clarification on how voter participation areas are created.

Mr. Housley replied that the voting precinct maps are created by the County and based on that map, the voter participation areas are created into 8 districts that are required by law.

Councilmember A. Anderson inquired when the County will be voting on the precinct map.

Mr. Housley responded soon and would be in place prior to the next Council meeting.

The proposed resolution will be an action item at the January 4, 2022, Council meeting.

Budget Adjustment FY 2021-2022 appropriating: \$13,000 for a grant the Police Department was awarded from the Internet Crimes Against Children (ICAC) Task Force of Utah. These funds will be used for investigating, protect and educate the community on children exploitation – Resolution 21-60 – Rueben Nelson, Assistant Finance Director

Assistant Finance Director Rueben Nelson addressed the Council and explained the proposed budget adjustment.

Vice Chair Simmonds invited the public to attend a presentation on December 14, 2021 at 6 pm. in the Logan City Council Chambers where Detective Vehrs with the Logan City Police Internet Crimes Against Children (ICAC) Task Force will provide a community presentation regarding child sexual predators and internet safety. This presentation includes mature topics and is intended to educate the community on the psychology of a pedophile/child sex offender, signs of child grooming/molestation, child pornography, and other internet sex crimes, as well as information about social media and general internet safety.

The proposed resolution will be an action item and public hearing at the January 4, 2022, Council meeting.

## **OTHER CONSIDERATIONS:**

Councilmember A. Anderson invited the public to participate in the Christmas Concert Series hosted by the Cache Community Connections and begins at 7:00 pm. Masks are recommended.

There were no further considerations addressed by the Council.

**ADJOURNED.** There being no further business to come before the Council, the Logan Municipal Council adjourned to a meeting of the Logan Redevelopment Agency.

The Logan Redevelopment Agency convened on Tuesday, December 7, 2021, at 7:08 pm, in the Logan Municipal Council Chambers located at 290 North 100 West, Logan, Utah 84321. Logan Municipal Council Meetings are televised live as a public service on Channel 17 and the City of Logan YouTube channel at: <a href="https://www.youtube.com/channel/UCFLPAOK5eawKS\_RDBU0stRQ">https://www.youtube.com/channel/UCFLPAOK5eawKS\_RDBU0stRQ</a>

Council Members present at the beginning of the meeting: Vice Chair Jeannie F. Simmonds, Councilmember Ernesto López, and Councilmember Amy Z. Anderson. Administration present: Mayor Holly H. Daines, City Attorney Kymber Housley, Assistant Finance Director Rueben Nelson, Economic Development Director Kirk Jensen, City Recorder Teresa Harris, and Deputy City Recorder Esli Morales.

Participating via Zoom: Chair Mark A. Anderson and Councilmember Tom Jensen.

Excused: Finance Director Richard Anderson.

Vice Chair Jeannie F. Simmonds welcomed those present. There were approximately 1 in attendance at the beginning of the meeting.

### **ACTION ITEM:**

PUBLIC HEARING - Budget Adjustment FY 2021-2022 appropriating: \$700,000 funds for City Hall parking lot improvements in conjunction with the Library project - Resolution 21-58 RDA - Richard Anderson, Finance Director

At the November 16, 2021 Council meeting, Finance Director Richard Anderson addressed the Council regarding the proposed budget adjustment. The reserves have been put in place to restructure the parking area around City Hall, the Library, and the Hampton Inn Hotel. This has been the intention for several years as the Library begins construction.

Vice Chair Simmonds opened the meeting to a public hearing.

There were no public comments and Vice Chair Simmonds closed the public hearing.

ACTION. Motion by Chairman A. Anderson seconded by Councilmember López to approve <u>Resolution 21-58 RDA as presented</u>. Motion carried by roll call vote.

M. Anderson: Aye A. Anderson: Aye

Jensen: Aye Lopez: Aye Simmonds: Aye

**ADJOURNED.** There being no further business, the Logan Redevelopment Agency adjourned at 7:10 pm.

Esli Morales, Deputy City Recorder