# WATER CONSERVATION PLAN

# **FOR**

EAST CARBON CITY, UTAH

## **DESCRIPTION OF OUR CITY**

Located in Eastern Carbon County and in the 2<sup>nd</sup> driest state in the nation. Our cities 2010 census population was 1,301. We have 788 water connections, of which approximately 736 are active on average. Water quality and quantity have always been a top priority in our city.

We have approximately 40 acres of land that is used for our city parks and ball fields.

Growth in East Carbon's population has been stagnant for the last 20 years. When the Republic Waste Landfill was built in 1992 and the "C" Canyon coal mine was opened it kept the city steady. The city does not expect any large growth in the near future.

### WATER SYSTEM OVERVIEW

Water for the culinary system comes from Grassy Trail Reservoir which is located approximately 5 miles up Whitmore Canyon from the city. Built in 1950 it had a storage capability of 915 acre feet. It is now estimated at 900 acre feet due to silt build up. Raw water is carried down canyon 2 (two) miles via a 12" ductile iron pipeline to the water treatment plant.

In addition to Grassy Trail Reservoir, East Carbon City owns 2 (two) springs and 2 (two) well sources for water. These sources are not currently connected to the waterworks system.

# **SPRINGS**

Whitmore Springs Galanis Springs

## **WELLS**

Dragerton Wells 90-1 Well

East Carbon City also owns water rights in Range Creek. The city has been in contact with the U.S. Bureau of Reclamation about the possibility of developing a dam in Range Creek with some way of getting the water over or thru the mountain. The bureau is looking at some old studies done by the mining companies in the past and have flown over the area by helicopter and taken photos of the sites proposed for a dam. We have engineering firms looking at the possibilities to see if it is feasible for the city.

It seems that about every 14 years or so we suffer a major drought. This happened in 1976, 1990, 2004, and 2012.

# WATER TREATMENT PLANT AND SYSTEM

The original plant was built in 1984 and then upgraded from 2 (two) Trident 210 units to 4 (four) units in 2000. Each of these are capable of filtering 425 gallons per minute according to Utah State Standards. There were more upgrades done to the treatment plant in 2010 and 2011.

## **USAGE**

Summer: April thru October 900,000 gpd Winter: November thru March 428 gpd

#### Industrial users water usage:

Sunnyside Cogeneration 31,057,011 per year

ECDC: Meter #2 4,581,000 per year

Westridge Resources 770,860 Housing Authority 4,985,000

## **WATER RATES**

\$32.00 Base Rate 0-8,000 gallons \$2.00 per thousand 8,001 and up

In 1996 the City replaced all its water and sewer lines and installed new meters with backflow prevention devices, new streets and new sidewalks. The water meters have since been upgraded to electronic radio read meters in 2016. We are served by 3 (three) 500,000 gallon water tanks and 1 (one) 200,000 gallon tank at the Columbia Subdivision.

# **EVALUATION OF WATER CONSERVATION MEASURES**

Our cities current water system is directed primarily at giving our customers quality water at a price they can afford. By this is refer to the fact that East Carbon has such a low income and high poverty rate that the schools lunch and breakfast is free. The state reduced property taxed by 24% in 2003

The city has eliminated watering the city property between 10:00 A.M. and 6:00 P.M. watering only enough to keep grass alive during water shortages and leaving the grass a little longer when cutting.

We have educated the public about watering during the heat of the day. Advocated sweeping driveway and sidewalks instead of washing them. We have also sent out information on leaking taps and toilets.

#### **FUTURE**

East Carbon City is in excellent shape in some aspects. Number one being that as far as Carbon County is concerned we have water rights that can yet be developed. That would put the East Carbon area as a potential area for future development in Carbon County.

The City also has plans on updating and upgrading the treatment plant. Looking at options to increase our reservoir capacity for future development or population increases. We are also looking into the water rights at Westridge Mine. We also have plans on looking into the possibility of constructing a new reservoir in Bear Canyon. This would give the city a secondary source for water to supply.