

CITY COUNCIL WORK SESSION

Tuesday, June 3, 2014 6:00 p.m.

Community Recreation Center

10640 N Clubhouse Drive, Cedar Hills, Utah

Present: Mayor Gary Gygi, Presiding
Council Members: Trent Augustus, Rob Crawley, Jenney Rees, Daniel Zappala
Absent/Excused: Mike Geddes
David Bunker, City Manager
Chandler Goodwin, Assistant City Manager
Charl Louw, Finance Director
Jeff Maag, Public Works Director
Greg Gordon, Recreation Director
Others: Lt. Sam Liddiard, Spencer Edward, Mark Cram

This work session of the City Council of the City of Cedar Hills, having been properly noticed, was called to order at 6:05 p.m. by Mayor Gygi.

Items of Discussion:

Overview of the City's Pressurized Irrigation System – David Bunker

One aspect of the water system is water rights. The city has well rights and rights from water coming out of American Fork Canyon. These are spread out so we don't get all of our water from one source. We also get water from the Central Utah Project (CUP) pipeline. The ability to produce water comes from pumps, pipes, etc. to get water throughout the city. In 2002 the city went to a pressurized irrigation (PI) system to utilize all water resources. American Fork Canyon delivers water to Pump #10 on the Golf Course. Water from the Canyon is utilized by Lehi, Pleasant Grove Irrigation System, Cedar Hills, American Fork and Highland. From Pond #10 a series of boosters takes water to Pond #12. From Pond #12 water is pumped into the PI storage tank. Pond #12 can also gravity flow down to Pond #17, which provides water to the lower zone of the city. The issue with this water is it's all based on the amount of water coming out of the canyon. We aren't guaranteed to get any water from this source and it will always be divided amongst the above mentioned cities.

Canyon Well is owned by the city but is not a culinary grade well. This gives us 600-700 gallons per minute and puts water into Pond #10. We also have the North Central Utah Project Turnout, which provides water from CUP. We also have a South CUP Project Turnout at the south end of the city. The Canyon Well is our least producing well. South CUP pushes into Pond #17, typically without being pumped. If users in other cities downstream and pull more water from CUP then this has a major impact on water pressure for our residents. When this happens there is a booster station at the south end of the city that can be used to improve water pressure.

On Pond #10 we have 5 pumps that boost water to Pond #12. This pipe is used at full capacity during summer months so we cannot push any more water through the system than we already are.

Pond #18 is used to water the golf course. Water from Pond #17 gravity flows into Pond #18.

Cottonwood Well can go directly to Pond #17 when it's in irrigation mode. It can also be turned to push water into the culinary water system and fills the lower culinary water tank, located at the south end of the city. During summer months, this well is used exclusively for irrigation water.

The Harvey Well only pumps into the culinary system and fills the lower culinary tank. There is a booster station on Bayhill that takes culinary water from the lower zone to the upper culinary water tank.

The Cottonwood Well is 1,000 feet deep. The Harvey Well is 800 feet deep. There are no guarantees that the aquifer will supply the same amount of water forever. Other wells built in other cities can have an impact on how much water is in our aquifers.

CUP allows us 710 acre feet of water. Some years we use less and others we use more. Last year we used over 800 acre feet of water. CUP allows us to use based on a 5 year running average. If we continue to go over, CUP can cap us and stop sending any additional water for the season. It's expensive water but it's very reliable. We can only get more shares if there are shares available for sale. It's difficult right now as it is split between cities and a city would have to give up shares for it to be available to others.

In 2008 we ran out of water in the PI system. We added a few wet wells near Pond #12 to boost water right into the system instead of sending it to the PI tank first.

We have the potential to add about 2,500 residents before the city is built out. A few years ago, Manila Water went out of business and the city took about 100 homes that were on the Manila Water system. Many of these lots are larger than the average lot in Cedar Hills and use more PI water, which impacted the system.

In the summer months we do borrow culinary water from American Fork as Lone Peak uses our culinary water to water outdoor fields. The booster really "kept Cedar Hills alive" before the Harvey Well was completely functional. We are supposed to be balancing what we take with what we supply. What we take out of the booster should balance out – we don't need this and don't have to take this during the winter. In the last few years, we have sent much more water to the high school than we have taken. American Fork City owns the shares although Cedar Hills delivers the water. During the winter months, we have the Cottonwood and Harvey Wells to supply all culinary. In the summer months, we have high consumption and we utilize the Cottonwood Well to feed further to the PI system. If one of the wells went down, could we fully manage the PI system?

Mayor Gygi would like to bring this item back to the Council for a Work Session.

This work session was adjourned at 6:50 p.m. by Mayor Gygi.

/s/ Colleen A. Mulvey .
Colleen A. Mulvey, CMC
City Recorder