



# Cedar City

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February 12, 2016

Mr. Kent L. Jones, State Engineer  
Utah Division of Water Rights  
646 N. Main Street  
P.O. Box 506  
Cedar City, UT 84721

**RE: Cedar Valley, Iron County - Groundwater Management Plan**

Dear Mr. Jones:

Representatives of Cedar City were in attendance at the public meeting held on January 7, 2016. We appreciate the concern that the State Engineer has for the water resources in Cedar Valley and we appreciate the time that was taken to discuss the issues regarding the process to implement a groundwater management plan. Based on the information presented at that meeting, we offer the following initial comments and questions.

- 1. Cedar City has a vested interest in ensuring that any groundwater management plan, that is implemented, will allow the continued ability to serve existing water customers and provide water for future population growth.** Cedar City is the largest municipality in the Cedar Valley basin. Cedar City is home to more than 29,000 residents and many hundreds more who commute in to work, shop, and attend school each day. Cedar City is committed to providing quality water resources to all of its citizens and providing for future growth. To the extent possible, municipal water supplies should be protected for public health, fire safety, and economic concerns associated with Cedar City's continued ability to supply water to its citizens. The declining water level in the Cedar Valley aquifer has led to increased power and infrastructure costs. Cedar City agrees that it is imperative that water levels in the aquifer be stabilized in order to prevent further groundwater mining. In our opinion, the process by which this goal is accomplished must be carefully considered.

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Administration  
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Airport  
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Building and Zoning  
865-4519

Economic Development  
586-2770

City Engineer  
586-2963

Parks & Recreation  
865-9223

Public Works  
586-2912

2. **Cedar City has seen sustained population growth over the past several decades and the City is planning for continued sustained growth in the future.** During the past 15 years, the population of Cedar City has grown from 20,740 to 29,483. The Governor's Office of Planning and Budget (GOPB) forecasts a population of 73,000 in 40 years for Cedar City. In order to keep pace with growth and to plan for future needs, Cedar City has been proactive in acquiring water rights to meet the future demands of its citizens and businesses. In addition to purchasing water rights, Cedar City has also spent millions of dollars over the past several years in constructing water infrastructure necessary to support the needs of a growing community. All of this work has been done based on the assumption that the City's water rights would be available for use into the foreseeable future. As a municipal government, Cedar City has the duty and responsibility to not only provide adequate water supply to current residents, but to also plan for the water needs of future population growth. The continued growth and development of Cedar City is dependent on an adequate supply of water rights that can be used to meet current and future demands.
  
3. **Cedar City has a vested interest in ensuring that any groundwater management plan, that is implemented, will allow for the continued economic growth and vitality of this community.** Cedar City is a regional economic hub that provides a significant tax base for Iron County and the State of Utah. Significant public and private economic investment has been made in Cedar City to support the educational, commercial, manufacturing, and tourism industries. Many of these industries have been promoted and encouraged by the local governments and by the state of Utah. Cedar City is home to a major state-sponsored university, Southern Utah University (SUU), which has an enrollment of more than 8,800 students. In 2015, SUU led all state universities in enrollment growth with a 16% increase over the previous year. Cedar City is home to many federal, state, and local government facilities. There are also numerous commercial businesses, and several industrial and manufacturing facilities located in Cedar City which provide good quality jobs for local residents and provide significant tax revenue. Cedar City, known as Festival City USA, is home to major festivals and events each year, including the Utah Shakespeare Festival, the Neil Simon Festival, and the Utah Summer Games. These events draw tens of thousands of tourists to Cedar City annually, many coming from out of state. Cedar City is also known as the gateway to the National Parks. Visitors come from all over the world to experience the natural wonders and beauty that are found in the area.
  
4. **The method of implementation of a groundwater management plan could have a negative economic impact, not only on Cedar City, but also on the entire southwestern region of Utah.** Due to Cedar City's tremendous economic benefit to the region, it is impossible to ignore the fact that any policy enacted that limits Cedar City's ability to utilize its' existing water rights could have a negative economic impact. We recommend that a thorough economic analysis be done that looks at the effects of a groundwater management

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plan on the local and regional economies. We also recommend an analysis of the effect that a groundwater management plan would have on local and state tax revenues; including property, income, and sales tax revenue. Due to the large population base in this valley, beneficial use should be considered based on the highest and best use of the water. To the extent possible, municipal water rights should be protected based on the benefit to the community and to the State as a whole. Municipal water use in Cedar Valley benefits approximately 4 people/ac-ft; whereas, agricultural water use only benefits about 0.02 people/ac-ft.

5. **A cutback in water rights based solely on priority date, without regard to the nature of use, could produce a significant economic hardship on the residents of Cedar City.** It is understood that current state law restricts groundwater management plans to be implemented based on the principles of prior appropriation. However, due to the varied uses of water in Cedar Valley, the nature of use should be considered in the implementation of a groundwater management plan. Utah Code 73-3-21.1 currently allows for preference to be given to domestic and municipal water users during times of water shortage. The application of this “preference” in a groundwater management plan may require legislative action, or possibly might require a separate voluntary agreement among water users, but Cedar City feels strongly that municipal uses should be protected in order to provide for public health, fire protection, and economic stability. A cut in water rights based solely on priority date would likely require senior water rights to be purchased at significant cost to the residents (assuming that those senior rights were even available for purchase). Inability to supply the required water to meet demand could result in lost water revenue to the City, jeopardize the ability of the City to provide adequate water service that is required by the Division of Drinking Water, slow economic growth, and discourage business investment in Cedar City.
6. **Based on the data presented at the meeting on January 7<sup>th</sup>, there are a significant number of water rights that are not currently being used in the Cedar Valley** (these rights either in non-use, protected municipal rights, or are just not being used). Cedar City recommends that an analysis be done to determine the threshold of water rights that can be “left on the books” to account for the historical proportion of water rights actually being used in the valley. The groundwater management plan should address the fact that this valley has a significant amount of water rights that have been appropriated but are not being used.
7. **The groundwater management plan should incorporate the possibility of outside water sources supplementing the Cedar Valley aquifer.** The Central Iron County Water Conservancy District (CICWCD) filed to appropriate water rights in Pine and Wah Wah Valleys. 15,000 acre-feet in Pine Valley and 6,525 acre-feet in Wah Wah Valley have been approved by the State Engineer. This water is planned to be developed and conveyed to Cedar Valley and is currently in the preliminary stages of the environmental process.

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8. **The State Engineer should more aggressively enforce supplemental water rights that are used for irrigation.** It is our understanding that irrigators with supplemental rights should use their surface rights when they are available before using underground rights. Existing rules should be enforced by the Division of Water Rights.
9. **Due to growth in Cedar Valley, over time it is highly likely that some agricultural water use will be converted to municipal use.** The conversion from agricultural use to municipal use can result in less water being withdrawn from the aquifer. Conversion to municipal use results in about half the water use compared to agriculture. Agricultural conversion should be considered in the groundwater management plan.
10. **Over the past several years, Cedar City has been actively promoting the importance of water conservation.** The citizens have responded positively to this endeavor. The per capita water use has decreased from 270 gpcd in 2004 to 232 gpcd in 2014. Cedar City strongly encourages water conservation through the use of an inclining block rate structure, educating the public, and daytime watering restrictions. However, even with these strict water conservation measures, municipal water conservation does not have a great effect on the overall aquifer because municipal use only accounts for approximately 25% of the overall water use in the valley. Irrigation use accounts for about 75% of the overall water use. While the citizens of Cedar City are making an effort to conserve water, it does not seem like irrigators have any incentive or encouragement to conserve. We would like to see some incentive for irrigation users to conserve water. We recommend that the State Engineer look closely at the current duty of 4 acre-feet/acre that is allotted to agricultural users to see if the duty could be revised downward to account for the use of center pivots.
11. **Based on the information presented in the public meeting, there are some critical areas that area seeing more decline than other areas – i.e., Quichapa and Enoch areas.** Could the City take the effluent from the WWTP to recharge those areas? Also, could water be pumped from one area of the basin and be used to recharge another area (i.e., pump water from Rush Lake area and convey it to Quichapa or Enoch, or drill additional wells in the east part of the basin for the City's pressurized irrigation system)?
12. **In order to more fully understand the scope of the problem and to provide more informed comments during this process, Cedar City requests that the Division of Water Rights please consider the following questions:**
  - Will there be an overall economic analysis done to show the impacts of the proposed implementation strategies?
  - Will there be an analysis done on tax revenue generated from municipal water rights and the effects of a groundwater management plan on tax revenue (property, income, and sales tax revenues)?

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- Will there be an economic analysis done to determine the economic benefit of water in Cedar Valley – i.e., economic benefit of municipal use vs. agricultural use?
- Will there be any consideration of the nature of use when determining the water rights needed to be cut back to meet the safe yield? If not, what recourse is there for municipalities to maintain a level of service necessary to meet public health requirements, supply fire protection, and maintain economic stability?
- How will the State Engineer determine the priority date at which water rights will be cut back?
- Will the priority date be cut down all the way to the safe yield, or will additional water rights be “left on the books” to account for water rights not being used?
- If water rights are left on the books, how can it be assured that the safe yield will be protected in the future when water rights are put back into use?
- How many water rights are currently being held in non-use?
- Can the estimate of current depletion be defined more accurately?
- Cedar City is concerned that irrigation wells are not required to keep flowrate records by metering. What can be done to get a more accurate measure of diversion and depletion in the basin?
- The safe yield of the aquifer needs to be better defined. What is the safe yield of the overall basin? What methodology will be used to determine the safe yield? Will an independent consulting engineer (non-biased) be retained to review the safe yield calculations to ensure accuracy?
- What is the safe yield of the sub-basins south of SR-56 and north of SR-56? Will there be an attempt made to define the safe yield of each sub-basin?
- What is the amount of authorized diversions and depletion in the sub-basins south of SR-56 and north of SR-56?
- Since the Cedar Valley basin is divided into two separate areas, will there be a separate list of water rights generated for the south side and the north side of SR-56?
- If it is determined that the priority date needs to be cut back, will there be different cutback dates for the north and south sides of SR-56?
- Would the State Engineer look at the possibility of relaxing the requirement of keeping water rights on one side of the SR-56 divide – i.e., allow rights to be moved from north to the south as part of the groundwater management plan?
- What is the safe yield in the localized critical areas of Quichapa and Enoch? Will there be an attempt to define a boundary for these critical areas and determine a safe yield in these critical areas?
- How will the localized critical areas (i.e., Quichapa and Enoch) be considered in the groundwater management plan?
- What is the total amount of authorized diversions and depletion under currently valid appropriations in the overall basin?

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- If additional outside water is introduced into Cedar Valley, how will this affect the Groundwater Management Plan? Will the safe yield be increased to account for the additional water coming into the valley?
- Does the calculation of the safe yield for the aquifer include surface rights that are being used? What if more surface rights start to be used and begin to have an effect on the recharge into the aquifer?
- How many underground water rights in the basin are supplemental to surface water rights? What effect would stricter enforcement of existing rules on supplemental water rights have on the groundwater management plan?
- Is there a possibility that the State would consider appropriating new water rights if it was found that water contained in bedrock aquifers does not contribute to the valley aquifer?
- What incentives are there for agriculture users to improve their irrigation practices and reduce their water use?
- What consideration will be made as part of the groundwater management plan to account for conversion from agricultural to municipal use over time?
- Will the State Engineer look at making any cuts in surface or spring water rights?

13. Cedar City has started working on reviewing all of the water rights that it owns which are listed on the Division of Water Rights' website. However, it is going to take us some time to go through all of the City's water rights.

14. Cedar City appreciates the opportunity to provide these comments to the Division of Water Rights. Cedar City is available to assist in finding solutions to the problems that have been identified and in drafting the groundwater management plan.

Sincerely,



Maile L. Wilson  
Mayor

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