



# Water Advisory Committee



of the Central Iron County Water  
Conservancy District

## Report of Recommendation for the CICWCD Board of Directors

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# **Objectives of the Water Advisory Committee**

## **Follows the Integrated Resource Process**

- ✓ Is a widely used planning strategy in public resource management.
- ✓ Includes a diverse mix of community representation.
- ✓ Made an in-depth study of specific issues with those representatives.
- ✓ Concludes by recommending how to meet present and future needs.

## **Focus of the Central Iron County Water Conservancy District**

- ✓ Provide information to the public and receive community feedback on important water-related issues.
- ✓ Curate discussions on water resource issues.
- ✓ Learn in greater depth what the citizens of Cedar Valley believe about water issues.
- ✓ Incorporate those thoughts, suggestions, and recommendations into the evolution of future water planning efforts.

## **Focus of the Committee Member**

- ✓ Develop understanding of existing and future water supplies.
- ✓ Develop an understanding of the financial support system that makes water resource management and delivery possible.
- ✓ Review present and future funding options.
- ✓ Make recommendations for water resource strategy and planning.
- ✓ Review current and future challenges associated with maintaining a safe and reliable water supply.
- ✓ Further disseminate what they have learned to the broader community.

# **Recommendations of the Water Advisory Committee**

## **Introduction**

The information listed below is a summary of comments and recommendations, from the Water Advisory Committee, for the Board of Directors of the Central Iron County Water Conservancy District (hereafter ‘District’). The Water Advisory Committee was created by the District’s Board of Directors in September of 2018 to achieve the objectives listed on the previous page. The committee included various professionals and leaders from the community. The topics below are arranged based on the frequency in which they were discussed among the committee.

## **Public Information & Education**

There is a lack of sufficient water knowledge in the community. This is in spite of the fact that water is the resource most likely to adversely constrain the Cedar Valley in the future. The District currently provides the 4<sup>th</sup> grade water fair, the annual water festival, and water-wise courses for the community. However, there is a need for more education about water in the community, and the committee recommends that the District increase public information by:

- Creating a public campaign that has simple talking points and main ideas. This campaign must be consistent, truthful, transparent, and easily understood.
- Improving relationships with elected officials and cities in Cedar Valley. Working with these entities is essential in the public education process as the entities will be the ultimate decision-makers.
- Improving relationships with the private sector to educate the community. This could be done by working with organizations such as the Cedar City Chamber of Commerce, Southern Utah University, Rotary Club, and others.
- Increasing public education about water resources and their development and conservation through multiple media outlets.
- Educating the public that the state of Utah has proposed a groundwater management plan (GMP) for Cedar Valley. This is a sign that our state sees our issues as both chronic and unique.

## **Residential Conservation**

Conservation in municipal areas is expected and encouraged. It is important to take care of the available water resources. The community must strive to efficiently use its water resources, which requires education and intervention. More conservation is an immediately implementable solution, and the District should give more priority to teaching conservation. However, the scale of our issues will always relegate residential conservation to a contribution that is partial and

ultimately minor. The committee recommends that the District increase residential conservation by:

- Continuing to promote and create policies that encourage water conservation and efficiency for new development. These policies would be similar to the District’s “Resolution 2018-6-21-01 Water Right Exchange Rates” which promotes lower water usage in new developments.
- Continuing to promote water checks, water saving rebates, etc. to improve residential water usage.
- Continuing to provide and promote water saving landscape design courses such as Locascapes® and xeriscaping.
- Beginning to educate the community that it is already past the point where conservation can solve all the water issues in the basin.

## **Agriculture & Irrigation**

Agriculture has been a stable economic provider in the Cedar Valley for many years and is a great part of the community’s heritage. Agriculture is the largest water user in the Cedar Valley Basin, and therefore should be a larger focus when it comes to water conservation and efficiency. We recognize that technological advances have and will most likely continue to shift us from an agriculturally desirable region to a residentially desirable community. The committee recommends that the District increase agriculture & irrigation conservation by:

- Continuing to promote water efficient sprinklers, such as Low Elevation Spray Application (LESA) in the agricultural community.
- Investigating the creation of a water bank for Cedar Valley. This would encourage efficient water usage in agriculture, as well as protect water rights from forfeiture.
- Continuing to be involved with the State Agricultural Optimization Initiative. This team is promoting a study conducted at Southern Utah University by Utah State University to research different types of crops, irrigation techniques, growing methods, soils, etc.
- Working to balance agricultural heritage, water resources, and municipal growth in the Cedar Valley by evaluating new irrigation practices as well as buying and drying farms.

## **Recharge & Reservoirs**

The District and local communities have implemented artificial water recharge projects since 2016 and have made initial progress to counterbalance declines in the aquifer. Many communities in the Western United States use reservoirs as water storage facilities. Multiple studies and sites have been evaluated regarding locations for reservoirs in the Cedar Valley; however, none so far have been found suitable. The committee recommends that the District:

- Continue the development of artificial recharge and sedimentation basins to assist in the balance of the Cedar Valley aquifer.

- Educate the community that recharge is an alternative to reservoirs, that may not offer additional amenities but is more appropriate for our geology.
- Continue the evaluation of off-stream locations for a reservoir to help increase water storage, recreation, and wildlife habitat.
- Educate the community that reservoirs have many hidden and/or implicit costs, and the District should not pursue one that does not yield net benefits.

## **Extending Our Reach**

It is typical in the Western United States for water from distant sources to be concentrated for municipal service. In 2006, the District filed for water rights in the Pine, Wah Wah, and southern Hamlin valleys. In 2019, the water right settlement for the Pine and Wah Wah valleys was completed. The District has been working since 2009 to prepare the Pine Valley Water Supply & Conservation Project (hereafter ‘Project’) to shift water to Cedar Valley. The committee recommends that the District:

- Maintain cooperation with local municipalities and create agreements with those entities. The District cannot afford this Project alone and will therefore need assistance from the local municipalities.
- Educate the community on the need for the Project, and the likely effects on their individual bills and taxes, but also on the nature and appearance of our community.
- Develop a plan for the project, so that it can be completed when the community is ready to fund final development of this additional water resource.
- The Project is by far the largest contributor to our future water security. The District should create contingency plans if unforeseen circumstances were to arise. This could include larger scale buying and drying agricultural water rights, developing water resources we may have missed, or accepting ‘offers we can’t refuse’ to sell water to a larger community.
- Work on settling the water rights for Utah’s portion of Hamlin Valley.
- Prepare for ultimate inclusion of Wah Wah and Hamlin Valley waters in the Project.

## **Cedar Valley Water Rights**

The Cedar Valley Basin has a yearly safe water yield of 21,000 acre-feet and already uses 28,000 acre-feet each year. The valley has been running this water deficit for many years, and that is without development of the further 23,000 acre-fee of water rights already in private hands. For this reason, the State Division of Water Rights has proposed a Groundwater Management Plan (GMP) for the Cedar Valley. The proposed GMP would gradually reduce the excess water rights in the valley to safe water yield. The committee recommends that the District:

- Conduct an economic study regarding the use of water in the Cedar Valley and the effects of a GMP in the community.

- Consider a phased approach to acquiring senior agricultural water rights to help supply the increasing population with water.
- Continue to work with state officials to lessen the potential negative effects that a GMP could have on a community.
- Begin to educate the public that the majority of water rights threatened by the GMP are already owned by Cedar City, and the city will need additional water resources in the near future.

## **Environmental Aspects**

History shows that land in Cedar Valley looked very different in the past. Artesian wells and springs were prominent throughout the valley. A significant decline in the aquifer has eliminated those springs and artesian wells and induced subsidence and fissures in the Cedar Valley. The native piñon and juniper trees were typically burned every few years by the Native Americans in the mountain areas. Currently, our mountains have significant re-encroachment by piñon and juniper trees. This is problematic because these trees are heavier consumers of water than the meadows created by Native Americans. The committee recommends that the District:

- Follow closely and partner with the Utah Watershed Restoration Initiative to assist in the removal of piñon and juniper trees in the area.
- Continue monitoring subsidence in the Cedar Valley.
- Carefully plan future projects and developments to avoid or minimize direct or indirect impacts on wildlife and wildlife habitats.
- Begin to educate the public that our meadows, while desirable, are not natural, but nonetheless should be preserved as an important part of the Cedar Valley we know.

## **New Science**

It is well understood that knowledge of science throughout time has evolved and changed, and humans are continually learning more each day about the world. There are many examples of this, such the shape of the earth, washing hands regularly, and the internet. It is wise to have an “open-mind” when considering new ideas and sciences. The committee recommends that the District:

- Evaluate the use of additional un-recognized science and techniques, while also taking into consideration the reliability of science and use of public funds.