

SUBMISSION OF WATER DEVELOPMENT PROJECTS

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Through the development of scientific studies defining the aquifer within the Cedar Basin it has been documented that additional water resources will be necessary to sustain the growth and further development of the area. Without water for the future economic development will be impacted by the availability and cost of existing water supplies to accommodate only the growth capable within our current water budget. This template is being developed for the purpose of helping to document additional water supply sources that could be utilized to further alleviate the deficit of water that we currently have and provide water for the future residents of the valley. This form will be evaluated for completeness of content. Please ensure that the proposed project is fully defined and information to substantiate the claim is submitted for a complete evaluation.

Application Number

Date Filed

Name and address of applicant (*include zip code*)
 Central Iron County Water Conservancy District
 88 E. Fiddlers Canyon Rd. Suite A
 Cedar City, Utah 84721

Name, title, and address of authorized agent if different from item 1 (*include zip code*)

Telephone (area code)

Applicant

Authorized Agent

- A. Provide names, addresses, phone numbers and email addresses of those who filled out this form.
 Kelly Crane, PE, District Engineer, Ensign Engineering and Land Surveying, 1870 North Main Street, Suite 104, Cedar City, Utah 84721, 435-865-1453
 Paul Monroe, General Manager, CICWCD, 88 E. Fiddlers Canyon Rd. Suite A, Cedar City, Utah 84721, 435-865-9901

B. Project Description (Details are Vital)

1. Scope of Work and Project Description
2. Type of System or Facility
3. Quantity of Water Anticipated
4. Scientific Analysis of Water Resource
5. Uses (irrigation, culinary, industrial etc.)
6. Years Resource is Available
7. Constructability
8. Additional information to describe resource and availability (utilize additional sheets as necessary)

SScope of Work – Reservoir

The reservoir project includes the transmission pipeline northeast from Cedar City's sewer treatment plant to Winn Gap and create a storage reservoir. Water discharged from the sewer treatment plant currently is discharged to neighboring property and infiltrates to the aquifer. This water could be utilized for irrigation for farmers in the valley to supplement Coal Creeks water on low water years rather than relying solely on pumping groundwater. The reservoir capacity would be approximately 10,000 acre-feet. The annual discharge of the sewer treatment plan is approximately 3,000 acre-feet. The Winn Gap is part of the Braffits Creek drainage that will also supplement and help restore the Enoch Graben. Which is an area with historic ground water mining and surface fissures.

Type of System or Facility

The reservoir would be constructed by adding a concrete dam at the opening of a natural bowl. The size of the dam is approximately 125 feet tall and 2,000 feet wide. The pipeline to transport the water to the dam would extend from the treatment plant to the site and cover private and public property.

Quantity of Water Anticipated

The reservoir capacity would reach 10,000 acre-feet with approximately 3,000 acre feet available to fill it. The amount of discharge would balance out to the inflow once the reservoir reaches capacity.

Scientific Analysis of Water Resource

The water discharged from the treatment plant does not meet drinking water standards but would be ideal for irrigation purposes.

Water quality has not been tested.

Uses

The water from this project will be used to supply the local farmers for irrigation purposes.

Years Resource is Available

The water resource will be available annually.

Constructability

The location and site of the reservoir may need to be modified to sit on BLM land. Some of the current site sits on private property and negotiations will need to take place. The pipeline will cross over private property and through public property that will transport to the reservoir. Infrastructure to the farmers will need to be planned to best fit all of their needs and locations.

C. Attach a map covering the area of development and location of proposed project.

1. Identify Property Ownership
2. Identify Potential Conflicts
3. Provide Details of the Area and Necessary Changes to the Area
 See Attached Exhibit

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D. Identify any Federal, State or Local Government Issues

1. Federal

- a. Army Corp of Engineers
- b. Bureau of Land Management
- c. Fish and Wildlife
- d. Forest Service
- e. Other

Beureau of Land Management will need to be contacted in conjunction with this project. Most of the reservoir will be located on their property and surveys will need to be done to ensure nothing is impacted adversely.

2. State

- a. Department of Environmental Quality
- b. Division of Water Rights
- c. Other

3. Local

- a. County
- b. Municipal
- c. Other

Iron County will need to work with CICWCD as well as the private irrigation companies. Iron County will need to address any concerns and issues with constructing a large dam within the county and the liability of having a larger body of water. The irrigation companies would need to have input to where they would like water delivered and what would be the best approach of delivering water. Cedar City would also need to be coordinated with because it is its sewer treatment plant that will be delivering the water to the reservoir.

E. Provide cost estimates of project

NA

F. Describe additional evaluated alternatives, if any

G. Describe any environmental effects the proposed project would have on wildlife and/or plant species

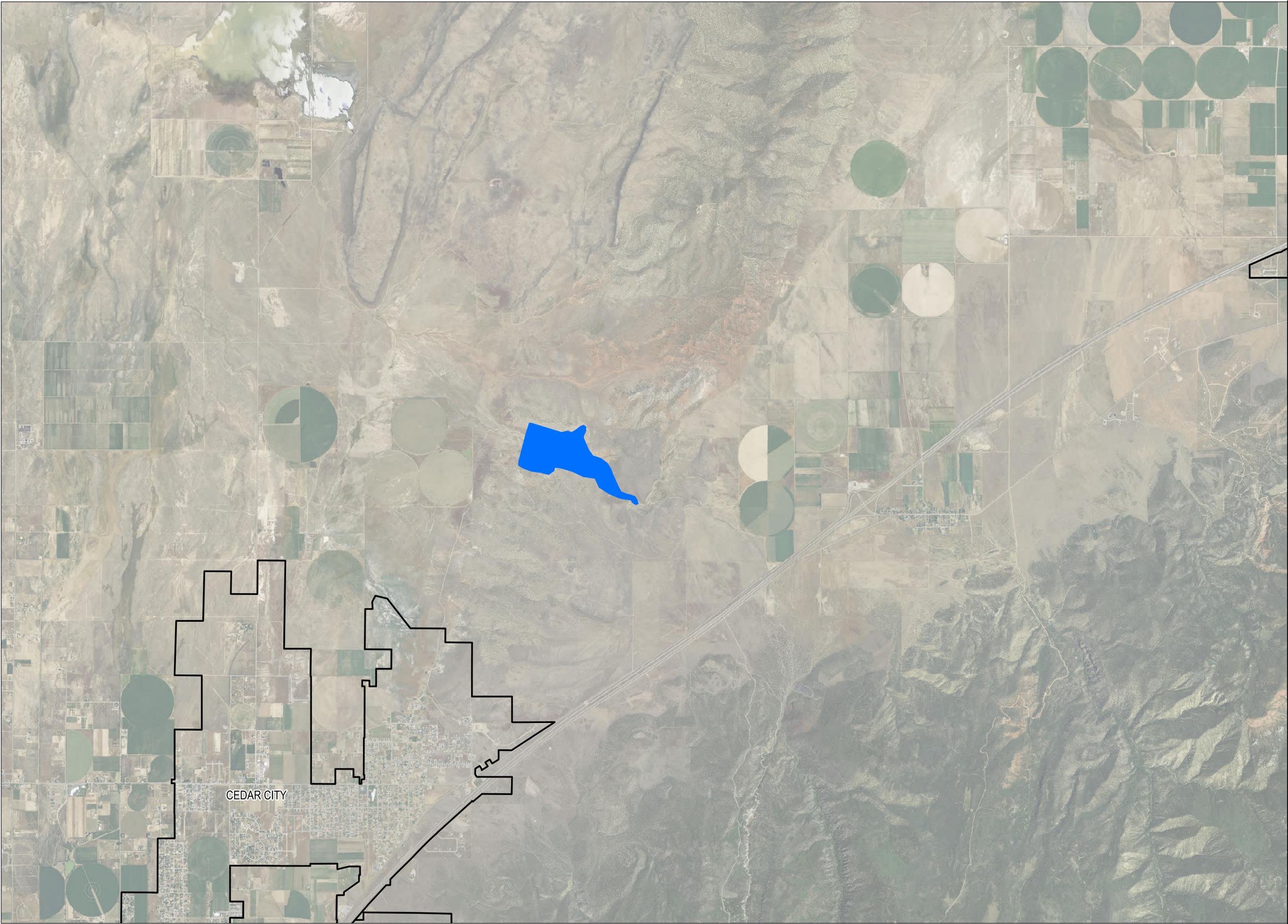
A large area of vacant ground will be affected. Any vegetation and wildlife in that area will be affected. Wildlife would need to be assessed and relocated to areas that have similar environments. If there is any vegetation that is endangered or poses a problem, the reservoir site will need to be reassessed.

H. Provide cultural resource evaluations of proposed area

There could possibly be areas of cultural significance in the area of development. A cultural survey will need to be completed..

I. Provide any additional information deemed necessary in the evaluation of this project to provide future sustainable water resources to the Cedar Basin

The reservoir would be able to supply supplemental water to the irrigation companies in the years that Coal Creek is not producing enough water or a low supply. This would alleviate the pumping of groundwater to some degree.



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CENTRAL IRON COUNTY WCD
WINN GAP RESERVOIR
AUGUST 2015

LOCATION
MAP

PROJECT NUMBER: PRINT DATE:
SUBJECT: 8/12/2015
DRAWN BY: CHECKED BY:
JFN CLN
PROJECT MANAGER:
CLN

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