

Briefing Meeting Agenda
Utah Board of Water Resources
Board Meeting
August 8, 2019
8:30 am
Ledgestone Hotel
679 West Main Street, Vernal, Utah

- I. WELCOME/CHAIR'S REPORT CHAIRMAN NORM JOHNSON

- II. DISCUSSION OF BOARD AGENDA ITEMS
(See Board Meeting Agenda)

- III. INFORMATION TO THE BOARD

- IV. OTHER ITEMS

Agenda
Utah Board of Water Resources
Board Meeting
August 8, 2019
10:00 am
Ledgestone Hotel
679 West Main Street, Vernal, Utah

1. CALL TO ORDER
2. APPROVAL OF MINUTES – June 20, 2019

<u>Project Number</u>	<u>Applicant</u>	<u>County /Project Manager</u>
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3. FEASIBILITY REPORTS:

RE427	Ashley Central Irrigation Company	Uintah	Jaqueline
RE428	Mountain Green Secondary Water Company	Morgan	Russell

4. COMMITTAL OF FUNDS:

RE583	Trenton Town	Cache	Jaqueline
RE425	Draper Irrigation Company	Salt Lake	Tom

5. SPECIAL ITEMS:

RC046	Baker Reservoir Company	Washington	Tom
RC058	Koosharem Irrigation Company	Sevier	Tom

6. LAKE POWELL PIPELINE REPORT

*Joel Williams

7. OFFICIAL RESOLUTION APPROVING THE APPLICATION FOR GRANT FUNDS FOR WATERSMART WATER MARKETING STRATEGY GRANT

*Candice Hasenyager

8. PLANNING REPORT

9. DIRECTOR’S REPORT

10. ADJOURNMENT

BOARD OF WATER RESOURCES

REVOLVING CONSTRUCTION FUND

**Funding Status
August 8, 2019**

Funds Available for Projects This FY	\$ 16,978,000
Projects Contracted This FY	
1	
2	
 Total Funds Contracted	 \$ -
Funds Balance	\$ 16,978,000

Projects with Funds Committed

*	1 Baker Reservoir Co	RC046	**Grant	3,020,000
*	2 Baker Reservoir Co	RC046	**Loan	340,000
*	3 Draper Irrigation Co	RE425		\$ 977,000
*	4 Koosharem Irrigation Co	RC058	**Grant	3,645,000
*	5 Koosharem Irrigation Co	RC058	**Loan	405,000
	6 Marion Waterworks Co	RE322		395,000
	7 Muddy Creek Irrigation Co (Moore)	RE407		1,000,000
	8 Washington County Flood Contr. Auth. (Gypsum)	RC051	**Grant	244,125
	9 Washington County Flood Contr. Auth. (Warner)	RC049	**Grant	212,000
	10 Washington County Flood Contr. Auth. (Stucki)	RC050	**Grant	88,400
				88,400
 Total Funds Committed				 \$ 10,327,000
Funds Balance				\$ 6,651,000

Projects Authorized

	1 Burns Bench Irrigation Co	RE395		\$ 504,900
	2 Huntsville Irrigation District	RE424		514,250
	3 M & M Irrigation Co	RE422		886,000
	4 Mapleton Irrigation District & Canal Co	RE418		961,350
	5 Peoa South Bench Canal & Irrigation Co	RE417		1,000,000
	6 Silver Creek Reservoir Co	RE381		500,000
				500,000
 Total Funds Authorized				 \$ 4,367,000
Remaining Funds Available	(End of year balance if all listed projects were fully paid)			\$ 2,284,000

* To be presented at Board Meeting
** Dam Safety Projects

BOARD OF WATER RESOURCES

CITIES WATER LOAN FUND

Funding Status
August 8, 2019

Funds Available for Projects This FY \$ 9,434,000

Bonds Closed This FY

1

Total Bonds Closed \$ -
Funds Balance \$ 9,434,000

Projects with Funds Committed

1 Monroe City	RL584	\$ 187,000
* 2 Trenton Town	RL583	<u>171,000</u>

Total Funds Committed \$ 358,000
Funds Balance \$ 9,076,000

Projects Authorized

1 Powder Mtn. Water & Sewer ID	RL585	<u>\$ 1,068,000</u>
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Total Funds Authorized \$ 1,068,000
Remaining Funds Available (End of year balance if all listed projects were fully paid) \$ 8,008,000

* To be presented at Board Meeting

BOARD OF WATER RESOURCES

CONSERVATION & DEVELOPMENT FUND

**Funding Status
August 8, 2019**

Funds Available for Projects This FY \$ 70,537,000

Projects Contracted/Bonds Closed This FY

1 Murray City RL581 \$ 8,054,000

Total Funds Contracted/Closed \$ 8,054,000

Funds Balance \$ 62,483,000

Projects with Funds Committed

1 Draper Irrigation Co RE419 \$ 3,000,000

Total Funds Committed \$ 3,000,000

Funds Balance \$ 59,483,000

Projects Authorized

*	1 Ashley Central Canal Co	RE427	\$	1,093,000
	2 Ashley Upper Irrigation Co	RE373		5,045,000
	3 Blanding City	RE415		1,359,000
	4 Box Elder Cnty & Perry City Flood Control Dist	RE369		660,000
	5 Davis & Weber Counties Canal Co	RE416		3,400,000
*	6 Mountain Green Secondary Water Co	RE428		807,500
	7 Riverton City	RE423		11,985,000
	8 Settlement Canyon Irrigation Co (Phase 2)	RE240R2		552,500
	9 Summit Creek Irrigation and Canal Co (Phase 4)	RE308		1,198,000
	10 Uintah WCD	RE316		36,550,000
	11 Weber Basin WCD (Phase 5+)	RE225R5		7,000,000
	12 Weber-Box Elder Cons Dist	RE400		1,687,000
	13 West Cache Irrigation Co	RE421		2,125,000
	14 Woodruff Irrigating Co	RE365		<u>3,200,000</u>

Total Funds Authorized \$ 76,662,000

Remaining Funds Available (End of year balance if all listed projects were fully paid) \$ (17,179,000)

* To be presented at Board Meeting

BOARD OF WATER RESOURCES

August 8, 2019

ADDITIONAL FUTURE FUNDING NEEDS

Sponsor	No.	Fund	Est. Board Cost	Total Cost
1 Sanpete WCD (Narrows Dam)	RD377	C&D	\$ 29,325,000	\$ 34,500,000
2 Kane County WCD	RD828	C&D	1,500,000	2,000,000
3 Hooper Irrigation Co (Press Irr, Ph 3+)	RE060R3-	C&D	11,033,000	12,980,000
4 Weber Basin WCD	RE312	C&D	85,000,000	100,000,000
5 Ferron Canal & Reservoir Co	RE320	C&D	2,720,000	3,200,000
6 Wellsville-Mendon Conservation District	RE364	C&D	680,000	800,000
7 Mosby Irrigation Co	RE374	RCF	331,000	4,379,000
8 Glendale Irrigation Co	RE408	C&D	196,000	1,109,000
9 Glenwood Town (NRCS Dam Safety Grant)	RC056	RCF	969,000	3,568,000
10 Daniel Town	RL580	CWL	1,505,000	2,021,000
11 Coyote & East Fork Irrigation Co	RE411	RCF	722,500	1,700,000
12 Cove Water Works	RE429	RCF	85,000	100,000
Subtotal			\$134,067,000	\$166,357,000

* New Application

INACTIVE PROJECTS

Long Term Large Water Conservation Projects

1 Wayne County WCD	RD494
2 Cedar City Valley Water Users	RD584
3 Bear River WCD	RD738
4 Central Utah WCD (Prepay FY98,99,00)	RD960

BOARD OF WATER RESOURCES

Feasibility Report



Applicant: Ashley Central Irrigation Company

Project Number: RE427

Fund: Revolving Construction Fund

Cost Estimate: \$2,186,000

Application Received: 4/29/2019

Board Meeting Date: 8/8/2019

Board Member: Randy Crozier

Project Manager: Jaqueline Pacheco

Project Summary: The purpose of the project is to pipe approximately 2.4 miles of canal within and near Vernal City and Naples to reduce seepage, increase conveyance efficiencies, and improve safety.

Recommendation: Staff recommends the board authorize 45.7% of the project cost, up to \$1,000,000, and that the project be purchased at 0% interest over 20 years with annual payments of approximately \$50,000.

Project Contacts:

President:

Wayne Simper
44 N. 100 W.
Vernal, UT 84078
435-790-7111

Secretary:

Shirley Slaugh
44 N. 100 W.
Vernal, UT 84078
435-789-3212

Engineer:

Brian Deeter - J-U-B Engineers
466 N. 900 W.
Kaysville, UT 84037
801-547-0393

Location

A portion of the project is located within Vernal City and the rest is located in the unincorporated Uintah County just outside of the Vernal City limits.

Introduction & Background

The Ashley Central Irrigation Company supplies irrigation water to 4,000 acres of farmland through the 9.6-mile Ashley Central Canal which is over 100 years old. There are 495 shareholders and 6,332.19 shares in the company. Steinaker shares account for 94% or 5,935.5 shares where one share is equivalent to 1 acre-foot of water. Primary shares account for 6% or 396.69 shares where one share is equivalent to 30 acre-feet of water. The annual assessments for the Steinaker and Primary shares are \$13 and \$80, respectively.

The Ashley Central Irrigation Company diverts water from Ashley Creek on the northwest portion of Ashley Valley. The diversion structure is approximately 4 miles north and west from Vernal City. They receive water stored in Steinaker Reservoir through the Steinaker Service Canal located at approximately 400 North. The Ashley Central Canal travels through Vernal City, Naples City, and unincorporated areas of Uintah County. The canal travels through populated areas with numerous roadway crossings, culverts, and other modifications made because of growth that has occurred in the area. The lower end of the canal has a segment enclosed in a concrete box culvert approximately 1,540 feet in length.

The applicant received financial assistance from the board in 1983 to modify its existing diversion channel and repair irrigation facilities near Steinaker Reservoir.

Existing Conditions & Problems

The 2.4-mile portion of the canal is losing an estimated 3,907 acre-feet of water annually through seepage. Erosion and sediment along the canal have also caused embankments to sluff off and collapse, becoming hazardous to homes that have backyards near the canal in Vernal. Water has leaked into basements along some portions of the canal.

Proposed Project

The purpose of the project is to replace approximately 2.4 miles of unlined canal with HDPE pipe ranging from 26 to 36 inches in diameter, install a screening/overflow structure, and install user turnout meters. The canal is used by Vernal City for stormwater runoff and will be left open.

This project fits in Prioritization Category 3 (agricultural water projects that provide a significant economic benefit for the local area).

Benefits

The estimated 3,907 acre-feet of water that is currently lost through seepage will be used by the shareholders and will substantially increase crop production. Operation and maintenance costs will be greatly reduced as water conveyance efficiency increases. The project will also allow the applicant to better manage its water supply.

Cost Estimate

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Unit Price	Total
1	Mobilization	1	LS	\$120,000	\$120,000
2	26" HDPE DR 41 Pipe	4,550	LF	61	277,600
3	28" HDPE DR 41 Pipe	540	LF	65	35,100
4	30" HDPE DR 41 Pipe	430	LF	70	30,100
5	32" HDPE DR 41 Pipe	230	LF	80	18,400
6	34" HDPE DR 41 Pipe	4,500	LF	72	324,000
7	36" HDPE DR 41 Pipe	2,450	LF	85	208,300
8	Fittings	1	LS	60,400	60,400
9	Screening & Overflow Structure	1	EA	91,000	91,000
10	Furnish & Install Turnout Assembly	14	EA	22,000	308,000
11	Remove Trees	12,700	LF	2	25,400
12	Remove & Replace Existing Fence	900	LF	20	18,000
13	Highway Slipline	2	EA	7,000	14,000
14	Fill Existing Ditches	12,700	LF	5	63,500
15	Reseeding	12,700	LF	2	25,400
16	Furnish Imported Pipe Bedding Material Type A3	4,398	TON	25	110,000
17	Furnish Imported Foundation Material Type A5	860	TON	30	25,800
Construction Cost					\$1,755,000
Contingency					176,000
Design & Construction Engineering					190,000
Legal and Administrative					15,000
Permits, Fees & Testing					50,000
TOTAL					\$2,186,000

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	\$1,000,000	45.7%
WaterSMART Grant	900,000	41.2
Applicant	286,000	13.1
TOTAL	\$2,186,000	100%

The applicant has been awarded three \$300,000 WaterSMART Grants from the Bureau of Reclamation.

Staff recommends the board authorize 45.7% of the project cost, up to \$1,000,000, and that the project be purchased at 0% interest over 20 years with annual payments of approximately \$50,000.

Economic Feasibility

The results indicate that the project has a benefit-cost ratio of 1.19 when estimating an increase of \$25.11 in net profit per acre for the 4,000 acres of production agriculture. This result includes the cost of construction for the 2.4 miles of pipeline and only considers the benefits accrued from conveyance system updates. The cost to the Board of Water Resources is approximately \$1,000,000. This project results in increased annual income of \$100,440 from this phase of the larger project, which in its entirety results in substantial efficiency gains to the system and increased net profit for the shareholders.

Financial Feasibility

The annual net benefit is as follows:

Benefit	Amount
Estimated Annual Net Increased Crop Income	\$100,440
Reduced Operation & Maintenance Costs	10,000
NET ANNUAL BENEFIT	\$110,440

The board's share is approximately 45.7% of the project. An annual repayment based on the board's share of the net annual benefit would result in annual payments of approximately \$50,471. Staff recommends a repayment term of 20 years at 0% interest, which would result in annual payments of approximately \$50,000.

The net profit per acre is estimated at \$25.11. Annual assessments for Steinaker (\$13) and Primary shares (\$80) distributed among the 4,000 acres of land result in a cost of approximately \$27.22 per acre. The repayment would result in an increase of approximately \$12.70 per acre. The applicant indicated that they are unsure how they will change their assessments post-project.

Water Rights & Supply

Water rights related to this project are as follows:

Water Right Number	Flow / Volume (cfs)
45-167	178.9

Easements

The proposed project improvements will take place entirely within existing right-of-way.

Environmental

The proposed project is not expected to have any significant, long-term impacts on the environment.

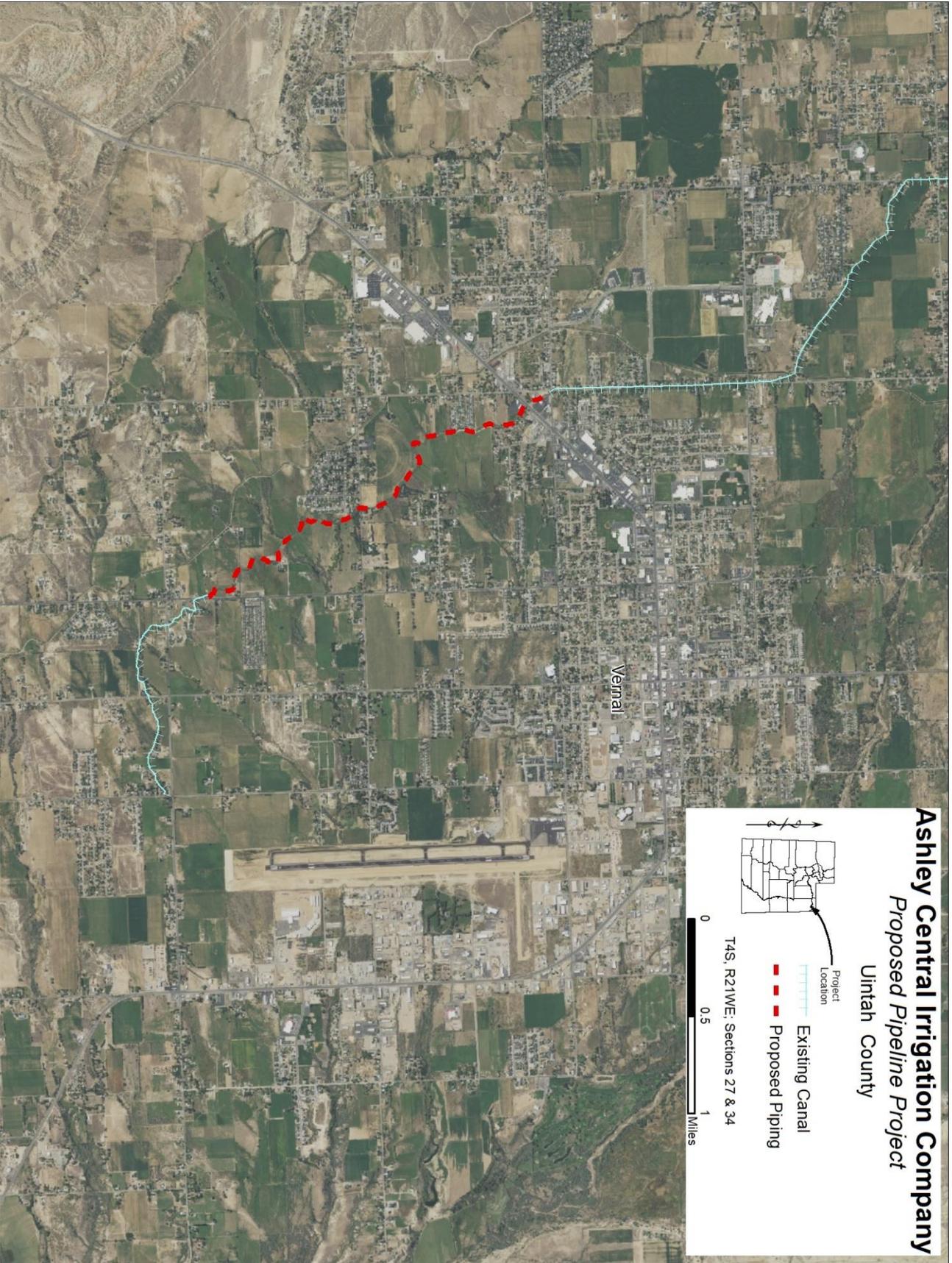
Water Conservation

The applicant estimates that the proposed project will conserve approximately 3,907 acre-feet annually. Shareholders currently experiencing shortages will use this water.

Applicant's Responsibilities

If the board authorizes the proposed project, the applicant must do the following before a purchase agreement can be executed:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate majority (as defined in the company's Articles of Incorporation and Bylaws) authorizing its officers to do the following:
 - a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
 - b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the board.
3. Have an attorney give the Board of Water Resources a written legal opinion that:
 - a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
 - b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
 - c. The company has obtained all permits required for the project.
 - d. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
 - e. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.
 - f. The company is in compliance with sections 73-10-33, 10-9a-211, and 17-27a-211 of the Utah Code governing management plans for water conveyance facilities.
4. Submit a water conservation plan for its service area, and obtain approval of it from the Division of Water Resources.
5. Obtain approval of final plans and specifications from the Division of Water Resources.
6. Obtain letters from all outside financing agencies establishing their commitment of funds to the project.



BOARD OF WATER RESOURCES

Feasibility Report



Applicant: **Mountain Green Secondary Water Company**

Project Number: RE428

Fund: Conservation and Development Fund

Cost Estimate: \$950,000

Application Received: 5/20/2019

Board Meeting Date: 8/8/2019

Board Member: Kyle Stephens

Project Manager: Russell Hadley

Project Summary: The purpose of the project is to install secondary water meters on all 625 lawn and garden system connections.

Recommendation: Staff recommends the board authorize 85% of the project cost, up to \$807,500, and that the project be purchased at 1% interest over 15 years with annual payments of approximately \$58,200.

Project Contacts:

President:
Rulon Gardner
201 S. Main St, Suite 2015
Salt Lake City, UT 84111
801-558-1879

Secretary:
Blake Gardner
201 S. Main St, Suite 2015
Salt Lake City, UT 84111
801-456-1280

Engineer:
Ensign Engineering
45 W. 10000 South, Suite 500
Sandy, UT 84070
801-255-0529

Location

The proposed project is located in Mountain Green, in lower Weber Canyon in Morgan County.

Introduction & Background

The applicant has been to the Board of Water Resources once before for financial assistance. That 2014 project was for the construction of the Cobble Creek secondary pond and related pumping facilities. That project is due to be repaid in 2032.

Existing Conditions & Problems

The applicant serves secondary lawn and garden water to 595 homes. Secondary irrigation water is diverted from Cottonwood Creek and Sulphur Springs, and stored in Silverleaf Reservoir (3 acre-feet) , Cobble Creek Reservoir (40 acre-feet), and Northwest Reservoir (about 200 acre-feet). Cottonwood Mutual Water Company, the local culinary water supplier, covers basically the same service area as that of the applicant. Those not connected to the secondary system use culinary water for outdoor irrigation; however, the culinary water company requires all new houses in the subdivisions to connect to the secondary system.

The applicant is concerned about the limitations of its secondary water supply and wants to stretch it into future growth as far as possible.

Proposed Project

The purpose of the project is to install water meters and telemetry to 625 secondary irrigation system connections. Ensign Engineering will provide design and construction engineering services.

Benefits

It is estimated about 30% of the secondary water use will be saved by installing meters and starting a tiered rate structure. The applicant estimates this could save up to 60 acre-feet annually.

Cost Estimate

The following cost estimate is based on the engineer's preliminary design and has been reviewed by staff:

Item	Description	Quantity	Unit	Unit Price	Total
1	1" secondary meter & appurtenance	625	EA	\$300	\$187,500
2	Meter reading equipment	625	EA	300	187,500
3	Installation	625	EA	500	312,500
4	Landscaping repair	625	EA	250	156,250
Construction Cost					\$843,750
Contingency					84,375

Design & Construction Engineering	10,000
Legal and Administrative	11,875
TOTAL	\$950,000

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	\$807,500	85%
Applicant	142,500	15%
TOTAL	\$950,000	100%

Staff recommends the board authorize 85% of the project cost, up to \$807,500, and that the project be purchased at 1% interest over 15 years with annual payments of approximately \$58,200.

Economic Feasibility

It is in the best interests of the state to require all water to be metered. No alternative to the proposed project will obtain this goal; therefore, the benefit/cost ratio for the metering project is assumed to be 1.0.

Financial Feasibility

The board's affordability guideline suggests Mountain Green residents could pay up to \$96.39 per month for all water.

Water costs with the project, based on 625 connections, are summarized as follows:

Water Cost	Annual Cost	Cost/Conn/Mo
Avg. Culinary Water Bill	\$412,425	\$54.99
Avg. Secondary Water Bill	202,500	27.00
Property Tax for Water	16,725	2.23
Proposed Board of Water Resources Loan	58,200	7.76
TOTAL	\$689,850	\$91.98

Water Rights & Supply

The applicant holds water rights 35-8247, 35-11718, and 35-12279 as amended under Change Application a33923. These rights allow diversion of Cottonwood Creek and Sulphur Springs of up to 6.21 cfs during high water and one third of the flow the remainder of the season up to 414.99 acre-feet, to irrigate 132 acres.

Easements

No easement problems are expected. All valve boxes are located on company easements in front of the homes.

Environmental

No adverse environmental effects are expected.

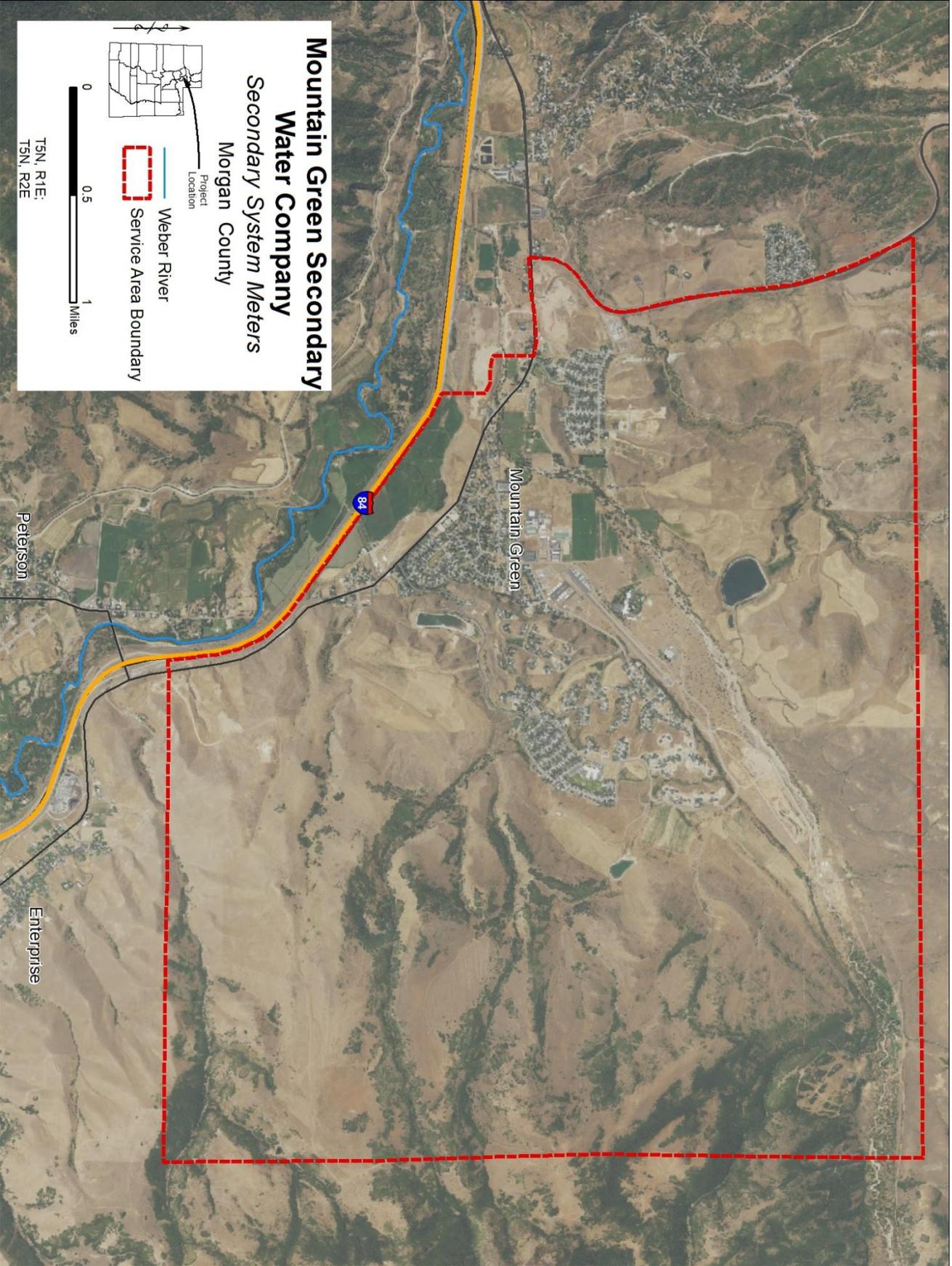
Water Conservation

The applicant estimates up to 60 acre-feet could be saved by installing secondary meters.

Applicant's Responsibilities

If the board authorizes the proposed project, the applicant must do the following before a purchase agreement can be executed:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate majority (as defined in the company's Articles of Incorporation and Bylaws) authorizing its officers to do the following:
 - a. Assign properties, easements, and water rights required for the project to the Board of Water Resources.
 - b. Enter into a contract with the Board of Water Resources for construction of the project and subsequent purchase from the board.
3. Have an attorney give the Board of Water Resources a written legal opinion that:
 - a. The company is legally incorporated for at least the term of the purchase contract and is in good standing with the state Department of Commerce.
 - b. The company has legally passed the above resolution in accordance with the requirements of state law and the company's Articles of Incorporation and Bylaws.
 - c. The company has obtained all permits required for the project.
 - d. The company owns all easements and rights-of-way for the project, as well as the land on which the project is located, and that title to these easements, rights-of-way, and the project itself can be legally transferred to the Board.
 - e. The company's water rights applicable to the project are unencumbered and legally transferable to the Board of Water Resources, and that they cover the land to be irrigated by the project.
 - f. The company is in compliance with sections 73-10-33, 10-9a-211, and 17-27a-211 of the Utah Code governing management plans for water conveyance facilities.
4. Submit an updated water conservation plan for its service area, and obtain approval of it from the Division of Water Resources.
5. Obtain approval of final plans and specifications from the Division of Water Resources.
6. Submit final plans and specifications to the Division of Drinking Water.
7. Adopt a rule prohibiting its users from irrigating landscapes between the hours of 10:00 a.m. and 6:00 p.m.
8. Pass an ordinance or resolution requiring all new connections on the secondary irrigation system to install water meters.
9. Provide an educational component about efficient landscape watering on the billing statement or bill all metered connections based on a tiered conservation rate structure.
10. Report water use data gathered through the new metered connections annually to the Utah Division of Water Rights.



BOARD OF WATER RESOURCES

Committal of Funds



Applicant: Trenton Town

Project Number: RL583

Fund: Cities Water Loan Fund

Total Cost: \$401,000

Application Received: 11/23/2018

Authorized: 6/20/2019

Board Meeting Date: 8/8/2019

Board Member: Charles Holmgren

Project Manager: Jaqueline Pacheco

Project Summary: The purpose of the project is to reconstruct the Sparks Spring culinary water collection system by replacing approximately 200 feet of collection pipe, removing deep-rooted vegetation, and installing metering equipment. The Big Birch and North Fork Spring area will be fenced to protect the water source from surface contamination.

Recommendation: Staff recommends the board commit 42.6% of the project cost, up to \$171,000, and that the bonded indebtedness be returned at 0% interest over 25 years with annual payments of approximately \$7,000 (including reserves).

Project Contacts:

Mayor:
Lynn G. Payne
9481 N. Hwy. 23
Trenton, UT 84338
435-669-1821

Secretary:
Macall Smith
50 E. Main
Trenton, UT 84338
435-563-9929

Engineer:
Marcus Simons - J-U-B Engineers
1047 S 100 W, Ste. 180
Logan, UT 84321
435-713-3514

Location

The proposed project is located approximately three miles northwest of Clarkston in Cache County.

Project Summary

Trenton supplies culinary water to 191 residential connections and one commercial connection. West Cache Irrigation Company supplies secondary water to approximately 90% of the residents. The town's original water system was built in 1939 and was comprised of wells, a storage tank, and composite asbestos-concrete pipes.

There have been significant updates to the system over the last several years. The applicant received financial assistance from the board in 2004 to replace the majority of its distribution lines. Repayment for that project is anticipated to be completed in 2029. The United States Department of Agriculture – Rural Development provided funding for the applicant to update the remainder of its distribution lines in 2014. The Utah Division of Drinking Water has provided financial assistance to redevelop two springs in 2015 and 2017.

The current system consists of six springs (Big Birch, Garner, Goody, North Fork, Sparks, and Thompson), two underground storage tanks (200,000 and 220,000 gallons) and approximately 23 miles of PVC pipe.

The purpose of the project is to reconstruct the Sparks Spring culinary water collection system by replacing approximately 200 feet of collection pipe, removing deep-rooted vegetation, and installing metering equipment. The areas around Big Birch Spring and North Fork Spring will be fenced to protect the water source from surface contamination.

Cost Estimate & Sharing

The cost estimate and sharing remain as authorized:

Agency	Authorized Cost Sharing	% of Total
Board of Water Resources	\$171,000	42.6%
Community Development Block Grant	200,000	49.9
Applicant	30,000	7.5
TOTAL	\$401,000	100%

Repayment

Staff recommends the board commit 42.6% of the project cost, up to \$171,000, and that the bonded indebtedness be returned at 0% interest over 25 years with annual payments of approximately \$7,000 (including reserves).

BOARD OF WATER RESOURCES

Committal of Funds



Applicant: Draper Irrigation Company

Project Number: RE425

Fund: Revolving Construction Fund

Total Cost: \$1,150,000

Application Received: 3/28/2019

Authorized: 5/9/2019

Board Meeting Date: 8/8/2019

Board Member: Juliette Tennert

Project Manager: Tom Cox

Project Summary: The purpose of the project is to install a section of pipeline needed to deliver the applicant's share of reuse water from a proposed multi-agency project, which will utilize treated water from the South Valley Sewer District's Jordan Basin Water Reclamation Facility in secondary irrigation systems in the area.

Recommendation: Staff recommends the board commit 85% of the project cost, up to \$977,000, and that the project be purchased at 0% interest over 25 years, with annual payments of approximately \$39,100.

Project Contacts:

President:
Ryan Daw
1236 E. 13230 S.
Draper, UT 84020
801-916-9111

Secretary:
Dale Smith
1236 E. 13230 S.
Draper, UT 84020
801-641-8988

Engineer:
Michael Hartvigsen - Epic
Engineering
3341 S 4000 West
West Valley City, UT 84120
801-255-9065

Location

The proposed project is located in Draper City in Salt Lake County.

Project Summary

The applicant is partnering in a future, multi-agency project to utilize treated water from the Jordan Basin Water Reclamation Facility which will allow each entity to use its share of water in their respective secondary irrigation systems. Each entity is responsible to install the facilities necessary to transport the water to its system.

Of the 19,200 feet of pipe needed for Draper Irrigation to utilize its share of water, the company has installed approximately 7,900 feet on its own. It has obtained the necessary permits to install the next section, about 2,200 feet of pipe under the Jordan River, along Bangerter Highway and beneath the Union Pacific and Frontrunner railroads tracks and is requesting the board commit funds for this project.

Cost Estimate & Sharing

The cost estimate and sharing remain as authorized.

Agency	Authorized Cost Sharing	% of Total
Board of Water Resources	\$977,000	85%
Applicant	173,000	15
TOTAL	\$1,150,000	100%

Repayment

Staff recommends the board commit 85% of the project cost, up to \$977,000, and that the project be purchased at 0% interest over 25 years, with annual payments of approximately \$39,100.

BOARD OF WATER RESOURCES

Dam Safety Report



Applicant: Baker Reservoir Company

Project Number: RC046

Fund: Revolving Construction Fund

Total Cost: \$3,700,000

Application Received: 7/23/2013

Phase I Committal: 8/8/2013

Board Meeting Date: 8/8/2019

Board Member: James A. Lemmon

Project Manager: Tom Cox

Project Summary: The purpose of the project is to complete the minimum state dam safety upgrades on the structure, including constructing a new spillway and crest parapet wall and to install toe drains.

Recommendation: Staff recommends the board commit an additional \$3,020,000 as a grant and \$340,000 as a loan and amend the agreements to state that the board will provide 90% of the project cost up to \$3,330,000 as a dam safety grant, and 10% of the project cost up to \$370,000 as a loan with the balance to be returned at 0% interest over 20 years with annual payments of approximately \$18,500.

Project Contacts:

President:
Robert Houston
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435-574-2905

Secretary:
Ed Bowler
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St George, UT 84790-6139
435-673-4554

Engineer:
RB&G Engineering
1435 West 820 North
Provo, UT 84601
801-374-5771

Location

The proposed project is located four miles northeast of Veyo in Washington County.

Project Summary

Baker Dam was built in 1950 to impound waters of the Santa Clara River to provide irrigation water for approximately 1,100 acres of ground in and around the towns of Gunlock, Veyo and Central. The embankment is 66 feet high and about 683 feet long and is rated high hazard due to its location upstream of the communities. It does not meet state minimum safety standards due to inadequate spillway capacity and embankment seepage.

The board committed funds for Phase I in 2013 to slip-line the outlet conduit and construct new outlet structures to address sink holes that developed due to embankment material piping into cracks in the outlet conduit. Remaining work required to bring the structure up to current state safety standards includes construction of a new spillway and parapet wall on the crest to pass the required flood event, and to install toe drains. Construction plans and specs are being reviewed by the State and it is anticipated the project will be built starting this fall.

Cost Estimate & Sharing

The Phase I previously committed, and total project proposed cost sharing is as follows:

Agency	Phase I Cost Sharing	% of Total	Proposed Cost Sharing	% of Total
BWRe Dam Safety Grant	\$270,000	90%	\$3,330,000	90%
BWRe Dam Safety Loan	30,000	10	370,000	10
TOTAL	\$300,000	100%	\$3,700,000	100%

Previously the board committed 90% of the project cost of Phase I up to \$270,000 as a dam safety grant and 10% of the cost up to \$30,000 as a loan to be returned at 0% interest over 10 years with annual payments of \$3,000. Included in the committed Phase I amount was funds to design Phase II. The original dam safety grant contract expired with \$38,054.98 not used. A new grant contract was executed for the unused balance of the previous one plus \$40,000 to ensure all engineering design costs are covered, for a total of \$310,000 grant committed to date. Several annual loan payments have been made.

Staff recommends the board commit an additional \$3,020,000 as a grant and \$340,000 as a loan and amend the agreements to state that the board will provide 90% of the project cost up to \$3,330,000 as a dam safety grant, and 10% of the project cost up to \$370,000 as a loan with the balance to be returned at 0% interest over 20 years with annual payments of approximately \$18,500.



Applicant: Koosharem Irrigation Company

Project Number: C058

Fund: Revolving Construction Fund

Total Cost: \$6,750,000

Application Received: 6/13/2017

Phase A Committal: 10/11/2018

Board Meeting Date: 8/8/2019

Board Member: Blaine Ipson

Project Manager: Tom Cox

Project Summary: The purpose of the project is to bring Koosharem Dam up to state dam safety minimum standards. Slip-lining the outlet was completed last year. The remaining upgrade work is anticipated to be accomplished this year to bring the structure up to standard.

Recommendation: Staff recommends the board commit an additional \$3,645,000 as a grant and \$405,000 as a loan and amend the agreements to state that the board will provide 90% of the project cost up to \$6,075,000 as a dam safety grant, and 10% of the project cost up to \$675,000 as a loan to be returned at 0% interest over 25 years with annual payments of approximately \$27,000.

Project Contacts:

President:
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Secretary:
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Koosharem, UT 84744
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Engineer:
Robert Snow, AECOM
756 East Winchester St, Ste 400
Salt Lake City, UT 84107
801-904-4000

Location

The proposed project is located five miles north of Koosharem in Sevier County.

Project Summary

Koosharem Dam was constructed around 1900 and enlarged in 1919. The embankment is 26 feet high and 1,850 feet long, and impounds approximately 3,860 acre-feet. The existing structure does not meet current state dam safety minimum standards because of an undersized spillway, inadequate and aging structures, and downstream seepage.

Minimum dam safety standards work will include replacing the outlet structures and extending the outlet, installing downstream drains, constructing a downstream berm and a new spillway. Slip-lining of the outlet pipe was completed last year.

Last fall the board committed grant and loan funds to complete the outlet slip-lining and downstream drain work; however, due to the lateness of the season, the drains were not installed. It is intended to amend the existing grant contract and loan purchase agreement to cover the entire project.

Cost Estimate & Sharing

The Phase A previously committed, and total project proposed cost sharing is as follows:

Agency	Phase A Committed	% of Total	Proposed Cost Share	% of Total
BWRe Dam Safety Grant	\$2,430,000	90%	\$6,075,000	90%
BWRe Dam Safety Loan	270,000	10	675,000	10
TOTAL	\$2,700,000	100%	\$6,750,000	100%

Previously the board committed 90% of the project cost up to \$2,430,000 as a dam safety grant and 10% of the cost up to \$270,000 as a loan to be returned at 0% interest over 20 years with annual payments of \$13,500.

Staff recommends the board commit an additional \$3,645,000 as a grant and \$405,000 as a loan and amend the agreements to state that the board will provide 90% of the project cost up to \$6,075,000 as a dam safety grant, and 10% of the project cost up to \$675,000 as a loan to be returned at 0% interest over 25 years with annual payments of approximately \$27,000.

