BRIEFING MEETING AGENDA

UTAH BOARD OF WATER RESOURCES

Department of Natural Resources
Room 314
1594 W. North Temple
Salt Lake City, Utah

June 20, 2019

10:00 a.m.

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

The Utah Board of Water Resources meetings are regularly streamed live and are recorded so citizens can watch them later. Please use the following link to access the most recent recordings: https://goo.gl/UfyPQn

A G E N D A

UTAH BOARD OF WATER RESOURCES

Department of Natural Resources

Auditorium

1594 W. North Temple

Salt Lake City, Utah

June 20, 2019

1:00 p.m.

1. CALL TO ORDER
2. APPROVAL OF MINUTES – May 9, 2019

3. FEASIBILITY REPORT

		County	Project Manager
RE422	M & M Irrigation Company	Salt Lake	Jaqueline
RE423	Riverton City	Salt Lake	Russell
RE424	Hunstville Irrigation Company	Weber	Marisa
RE583	Trenton Town	Cache	Jaqueline

4. COMMITTAL OF FUNDS

RL584	Monroe City	Sevier	Ben

5. SPECIAL ITEM REPORT

RE409	Davis & Weber Counties Canal Co (Add'l Funds)	Davis	Tom
RE223	Brooklyn Canal Company (Withdrawal)	Sevier	Marisa
RE385	Woodruff Irrigating Company (Withdrawal)	Rich	Marisa
RE412	Rockville Pipeline Company (Withdrawal)	Washington	Marisa

6. NEW APPLICATIONS:

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

7. DIRECTOR'S REPORT

8. ADJOURNMENT

BOARD OF WATER RESOURCES
REVOLVING CONSTRUCTION FUND
Funding Status
June 20, 2019

	Funds Available for Projects This FY					$ 16,978,000
	Projects Contracted This FY					
1	Bear River Canal Co	RE420		$	379,000	
2	Center Creek Irrigation Co	RC055	**Grant		246,000	(Additional amt.)
3	Center Creek Irrigation Co	RC055	**Loan		27,000	(Additional amt.)
4	Davis & Weber Counties Canal Co. (Canal)	RE410			995,000	
5	Deseret Irrigation Co	RE406			999,000	
6	Echo Ditch Co	RE390			51,000	(Additional amt.)
7	Fremont Irrigation Co (Mill Meadow)	RC019	**Grant		1,505,000	(Additional amt.)
8	Fremont Irrigation Co (Mill Meadow)	RC019	**Loan		195,000	(Additional amt.)
9	Ivins City (Debris Basins 1-6)	RC061	**Grant		661,000	
10	Howell Blue Creek Irrigation Co (Blue Creek)	RC063	**Grant		570,000	
11	Koosharem Irrig Co (Koorsharem Dam)	RC058	**Grant		2,130,000	
12	Koosharem Irrig Co (Koorsharem Dam)	RC058	**Loan		270,000	
13	Little Cottonwood Brown Ditch Company	RE413			374,000	
14	Moon Lake WUA (Twin Pots)	RC059	**Grant		207,000	
15	North Utah County WCD (Dry Creek)	RC060	**Grant		1,600,000	
16	North Utah County WCD (Grove Creek)	RC054	**Grant		47,000	(Additional amt.)
17	Pioneer Canal Co	RE403			240,000	
18	Spanish Fork South Irrigation Co	RE414			472,600	
19	Spanish Fork South Irrigation Co	RE414			135,150	(Additional amt.)
20	Uintah Basin Irrigation Co	RE402			271,000	
21	Washington County WCD (Ivins Bench)	RC062	**Grant		321,000	
22	West Porterville Irrigation Co	RE401			996,000	
23	Woodruff Irrigating Co	RE392			319,000	(Additional amt.)
	Total Funds Contracted					$ 13,011,000
	Funds Balance					$ 3,967,000
	Projects with Funds Committed					
1	Marion Waterworks Co	RE322		$	395,000	
2	Muddy Creek Irrigation Co (Moore)	RE407			1,000,000	
3	Washington County Flood Contr. Auth. (Gypsum)	RC051	**Grant		244,125	
4	Washington County Flood Contr. Auth. (Warner)	RC049	**Grant		212,000	
5	Washington County Flood Contr. Auth. (Stucki)	RC050	**Grant		88,400	
	Total Funds Committed					$ 1,940,000
	Funds Balance					$ 2,027,000
	Projects Authorized					
1	Burns Bench Irrigation Co	RE395		$	504,900	
2	Draper Irrigation Co	RE425			977,000	
* 3	Huntsville Irrigation District	RE424			514,250	
* 4	M & M Irrigation Co	RE422			886,000	
5	Mapleton Irrigation District & Canal Co	RE418			961,350	
6	Peoa South Bench Canal & Irrigation Co	RE417			1,000,000	
7	Silver Creek Reservoir Co	RE381			500,000	
	Total Funds Authorized					$ 5,344,000
	Remaining Funds Available	(End of year balance if all listed projects were fully paid)				$ (3,317,000)

* To be presented at Board Meeting

** Dam Safety Projects

BOARD OF WATER RESOURCES

CITIES WATER LOAN FUND

Funding Status
June 20, 2019

Funds Available for Projects This FY				$ 9,434,000
Bonds Closed This FY				
1 West Warren and Warren Water ID	RE387	$ 1,800,000		
Total Bonds Closed				$ 1,800,000
Funds Balance				$ 7,634,000
Projects with Funds Committed				
* 1 Monroe City	RL584	187,000		
Total Funds Committed				$ 187,000
Funds Balance				$ 7,447,000
Projects Authorized				
1 Powder Mtn. Water & Sewer ID	RL585	1,068,000		
* 2 Trenton Town	RL583	171,000		
Total Funds Authorized				$ 1,239,000
Remaining Funds Available	(End of year balance if all listed projects were fully paid)			$ 6,208,000

* To be presented at Board Meeting

BOARD OF WATER RESOURCES

CONSERVATION & DEVELOPMENT FUND

Funding Status
June 20, 2019

Funds Available for Projects This FY				$ 70,537,000
Projects Contracted/Bonds Closed This FY				
1	Benson Irrigation Co	RE378	$ 1,845,000	
2	Davis & Weber Counties Canal Co. (Secondary)	RE409	2,500,000	
* 3	Davis & Weber Counties Canal Co. (Secondary)	RE409	730,000	(Additional amt.)
4	Fremont Irrigation Co	RE279	8,415,000	
5	Fremont Irrigation Co	RE279	1,400,000	(Additional amt.)
6	Muddy Creek Irrigation Co (Emery)	RE405	1,171,000	
7	Payson City	RL582	8,985,000	
8	Summit Creek Irrigation and Canal Co	RE308	84,500	(Additional amt.)
	Total Funds Contracted/Closed			$ 25,131,000
Funds Balance				$ 45,406,000
Projects with Funds Committed				
1	Draper Irrigation Co	RE419	$ 3,000,000	
2	Murray City	RL581	8,054,000	
	Total Funds Committed			$ 11,054,000
Funds Balance				$ 34,352,000
Projects Authorized				
1	Ashley Upper Irrigation Co	RE373	$ 5,045,000	
2	Blanding City	RE415	1,359,000	
3	Box Elder Cnty & Perry City Flood Control Dist	RE369	660,000	
~ 4	Brooklyn Canal Co	RE223	1,000,000	
5	Davis & Weber Counties Canal Co	RE416	3,400,000	
* 6	Riverton City	RE423	11,985,000	
7	Settlement Canyon Irrigation Co (Phase 2)	RE240R2	552,500	
8	Summit Creek Irrigation and Canal Co (Phase 4)	RE308	1,198,000	
9	Uintah WCD	RE316	36,550,000	
10	Weber Basin WCD (Phase 5+)	RE225R5	7,000,000	
11	Weber-Box Elder Cons Dist	RE400	1,687,000	
12	West Cache Irrigation Co	RE421	2,125,000	
13	Woodruff Irrigating Co	RE365	3,200,000	
	Total Funds Authorized			$ 75,762,000
Remaining Funds Available		(End of year balance if all listed projects were fully paid)		$ (41,410,000)

* To be presented at Board Meeting
~ To be withdrawn at Board Meeting

BOARD OF WATER RESOURCES

June 20, 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	Woodruff Irrigating Co	RE385	C&D	5,000,000	6,885,000
	9	Glendale Irrigation Co	RE408	C&D	196,000	1,109,000
	10	Glenwood Town (NRCS Dam Safety Grant)	RC056	RCF	969,000	3,568,000
	11	Daniel Town	RL580	CWL	1,505,000	2,021,000
	12	Coyote & East Fork Irrigation Co	RE411	RCF	722,500	1,700,000
~	13	Rockville Pipeline Co	RE412	RCF	60,000	80,000
*	14	Ashley Central Canal Co	RE427	C&D	1,022,000	2,102,000
*	15	Mountain Green Secondary Water Co	RE428	C&D	683,000	803,000
		Subtotal			$140,747,000	$176,127,000

* New Application
~ To be withdrawn at Board Meeting

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: **M & M Irrigation Company**

Project Number: RE422

Fund: Revolving Construction Fund

Cost Estimate: $1,883,000

Application Received: 3/12/2019

Board Meeting Date: 6/20/2019

Board Member: Blaine Ipson

Project Manager: Jaqueline Pacheco

Project Summary: The purpose of the project is to replace 3.5 miles of canal with 30-inch HDPE pipe and install a SCADA system and metering devices at each pipe outlet along the pipeline.

Recommendation: Staff recommends the board authorize 47.1% of the project cost, up to $886,000, and that the project be purchased at 0% interest over 25 years with annual payments of approximately $35,500.

Project Contacts:

President:
Frank Eliason
P.O. Box 447
Moroni, UT 84646
435-469-0374

Secretary:
Troy Prestwich
P.O. Box 66
Moroni, UT 84646
435-851-6977

Engineer:
Tyler Faddis
Jones & DeMille Engineering, Inc.
50 S. Main, Suite #4
Manti, Utah 84642
435-835-4540

Location

The proposed project is located four miles north of Mount Pleasant in Sanpete County.

Introduction & Background

The M & M Irrigation Company started supplying irrigation water in 1876 and was incorporated in 1937. They are currently registered in good standing with the state Department of Commerce. There are 81 shareholders and a total of 1,059.25 shares in the company. One share is equal to 0.35 acre-feet and the annual assessment is $70 per share. The city of Moroni holds approximately 15% of the shares. The applicant delivers water to approximately 2,000 acres of land.

Their systems consists of 3.5 miles of unlined open canal, 8.67 miles of pipeline, and two ponds – Pump Pond (3 acre-feet) and the Big Irrigation Pond (30-acre-feet). Water is diverted from the Sanpitch River and travels through approximately 3.5 miles of gravity-fed canal. It then flows into an 8-mile 30-inch pipeline that conveys water to the Pump Pond. Following the Pump Pond, the remainder of the distribution system is approximately 0.67 miles of pressurized pipe through which water is pumped to the Big Irrigation Pond.

The applicant received financial assistance from the board in 1979 and in 2006. A sprinkler irrigation system was installed in 1979 and the last payment was due in 2004. The 2006 project piped approximately eight miles of canal. The applicant requested a payment delay of one year in 2018, due to the severe drought conditions in Sanpete County, with the final payment due in 2032.

Existing Conditions & Problems

Inflow and outflow measurements, taken in 2014 and 2018, were used to calculate that approximately 1,221 acre-feet of water is annually lost through seepage along the 3.5-mile length of unlined canal. This is equivalent to 349 acre-feet per mile. Another observation made was that the rate at which water is lost to seepage is proportional to the amount of flow in the canal and varies throughout the year.

Proposed Project

The purpose of the project is to replace 3.5 miles of canal with 30-inch HDPE pipe and install a SCADA system and metering devices at each pipe outlet along that portion of the pipeline.

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

Benefits

The estimated 1,221 acre-feet of water that is currently lost though seepage will be used by the shareholders and will lead to increased crop production. The project will also allow the applicant to better manage their water supply. Operation and maintenance costs will be reduced and safety will increase as a result of enclosing the canal.

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	$33,500	$33,500
2	Pipe Inlet Structure	1	EA	6,000	6,000
3	SCADA	1	EA	40,000	40,000
4	30-inch HDPE, DR-32.5	3,700	LF	83	307,100
5	30-inch HDPE, DR-41	14,800	LF	71	1,050,800
6	30-inch Valve	2	EA	11,000	22,000
7	30-inch Turnout	1	EA	5,000	5,000
8	6-inch Turnout and Valve	4	EA	4,000	16,000
9	6-inch Meter	4	EA	3,000	12,000
10	Air Vent	8	EA	3,500	28,000
				Construction Cost	**$1,520,400**
				Contingency	152,400
				Design & Construction Engineering	167,000
				Legal and Administrative	19,200
				Permits, Fees & Testing	24,000
				TOTAL	**$1,883,000**

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$886,000	47.1%
WaterSMART Grant	841,000	44.6
Applicant	156,000	8.3
TOTAL	**$1,883,000**	**100%**

The applicant applied for a WaterSMART Grant from the Bureau of Reclamation in 2019 and plan on reapplying in 2020 if they are not awarded the grant this calendar year. The project will need to be reauthorized if they pursue the project without the WaterSMART Grant.

Staff recommends the board authorize 47.1% of the project cost, up to $886,000, and that the project be purchased at 0% interest over 25 years with annual payments of approximately $35,500.

Economic Feasibility

The results of the Economic Feasibility indicate the piping project has a benefit cost/ratio of 1.03. The project will result in increased water availability due to savings from seepage. The increased

benefit from the net crop income is estimated to be approximately $69,800.

Financial Feasibility

The financial benefits from the project include increased crop production resulting from eliminated seepage, plus reduced operation and maintenance costs. The annual net benefit is as follows:

Benefit	Amount
Estimated Annual Net Increased Crop Income	$69,800
Reduced Operation & Maintenance Costs	5,500
NET ANNUAL BENEFIT	**$75,300**

The board's share of the total cost for this project is 47.1%. Staff therefore recommends the annual payment be 47.1% of the increased benefit of $75,300, or $35,500. This repayment is equal to about $33.52 per share ($17.75 per acre). The current annual assessment is $70 per share where one share is equal to 0.35 acre-feet.

Water Rights & Supply

The board currently holds ownership of the applicant's water rights from a previous project. The board will retain these water rights until the project has been fully purchased by the applicant. Water rights related to this project are as follows:

Water Right Number	Flow (cfs)
65-3199	0.88
65-3208	0.2
65-3219	1.0
65-3241	0.08
65-3257	25

Easements

The majority of the project will be contained within existing easements with proposed realignment of short segments to straighten the pipeline.

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 1,221 acre-feet annually. The water will be used by shareholders currently experiencing shortages.

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: **Riverton City**

Project Number: RE423

Fund: Conservation and Development Fund

Cost Estimate: $14,100,000

Application Received: 3/17/2019

Board Meeting Date: 6/20/2019

Board Member: Juliette Tennert

Project Manager: Russell Hadley

Project Summary: The purpose of the project is to install secondary water meters on all 10,200 customer connections. This will conserve approximately 3,000 acre-feet and will help stretch existing supplies to satisfy build-out conditions.

Recommendation: Staff recommends the board authorize 85% of the project cost, up to $11,985,000, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $929,000 (includes reserves). Bond payments will begin in 2022, with interest only payments due in 2020 and 2021.

Project Contacts:

Mayor:
Trent Staggs
12830 S. Redwood Rd.
Riverton, UT 84065
801-208-3129

Water System Manager:
Duane Green
12830 S. Redwood Rd.
Riverton, UT 84065
385-222-9390

City Engineer:
Trace Robinson
12830 S. Redwood Rd.
Riverton, UT 84065
801-208-3129

Location

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

Introduction & Background

The applicant serves culinary water and secondary water to about 10,200 connections.
In 2001, the Board helped construct the existing secondary system consisting of four diversion structures, a regulating pond, four booster pump stations, 40,000' of 14"and18" ductile iron transmission pipe, 223,000' of 6 to 8" PVC distribution pipe, for 3700 service connections. This cost $27 million of which the board provided $1.5 million; the majority of the funding was provided by the Central Utah Water Conservancy District. This funding will be repaid in 2020. The board also helped with a 1988 culinary water project consisting of installation of about 45,000' of 8" to 18" ductile iron transmission pipe, rehabilitation of three wells, telemetry system, and a pump station. The board funded $1.6 million, which was repaid in 2000. The applicant also has several market bonds on the secondary system currently being repaid.

Existing Conditions & Problems

The applicant has witnessed a lot of over-watering on the lawns and gardens throughout the city. As Utah Lake does have a limited supply, the applicant sees the need to prevent abuse of the secondary system going into the future. It is calculated that about 3,000 acre-feet are likely being wasted due to over-watering. The applicant would like to show regional leadership by pursuing metering of the secondary water to improve watering efficiency, measurability, and accountability.

Proposed Project

The applicant is requesting financial assistance from the board to install meters on all 10,200 secondary connections. The city's engineering department will act as the project construction engineers. The project will be constructed over 4 years with 25% of the meters installed per year.

Benefits

Construction of the project will conserve approximately 3,000 acre-feet and will help stretch existing supplies to satisfy build-out conditions. It will also improve watering efficiency, measurability, and accountability.

Cost Estimate

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

Item	Description	Quantity	Unit	Unit Price	Total
1	Meter installation	10,200	EA	$475	$4,845,000
2	1" meter assembly & box	10,200	EA	325	3,315,000
3	1" Neptune™ Mach 10 meter	10,200	EA	450	4,590,000
				Construction Cost	**$12,750,000**
				Contingency	1,275,000
				Legal, Administrative, and Bonding	75,000
				TOTAL	**$14,100,000**

The applicant currently has a Neptune™ AMI (advanced metering infrastructure) in place and is already reading several hundred existing Mach 10 secondary meters. They also have Neptune™ culinary meters and AMI system in operation as well.

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$11,985,000	85%
Applicant	2,115,000	15
TOTAL	**$14,100,000**	**100%**

Staff recommends the board authorize 85% of the project cost, up to $11,985,000, and that the bonded indebtedness be returned at 1% interest over 15 years with annual payments of approximately $929,000 (includes reserves). Bond payments will begin in 2022, with interest only payments due in 2020 and 2021.

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 Riverton residents could pay up to $74.57 per month for all water. The current average monthly culinary water bill is approximately $25.21 and secondary irrigation bill is about $22.93. Water-related property tax in Riverton City is approximately $11.09 per month, resulting in a current cost of water, per connection, per month, of about $59.23. The proposed annual payment to the board of $929,000, divided between the 10,200 total secondary connections, equals $7.59 per month per connection.

Water Rights & Supply

The applicant owns numerous water rights from nine wells, the Jordan River, Utah Lake, and shares in various irrigation companies with waters coming from the South Jordan Canal, Utah Lake Canal, Utah-Salt Lake Canal, and the Welby Jacob Canal, to supply its culinary and secondary irrigation systems.

Easements

The applicant states they have ownership of existing valve boxes and related easements. No problems are expected.

Environmental

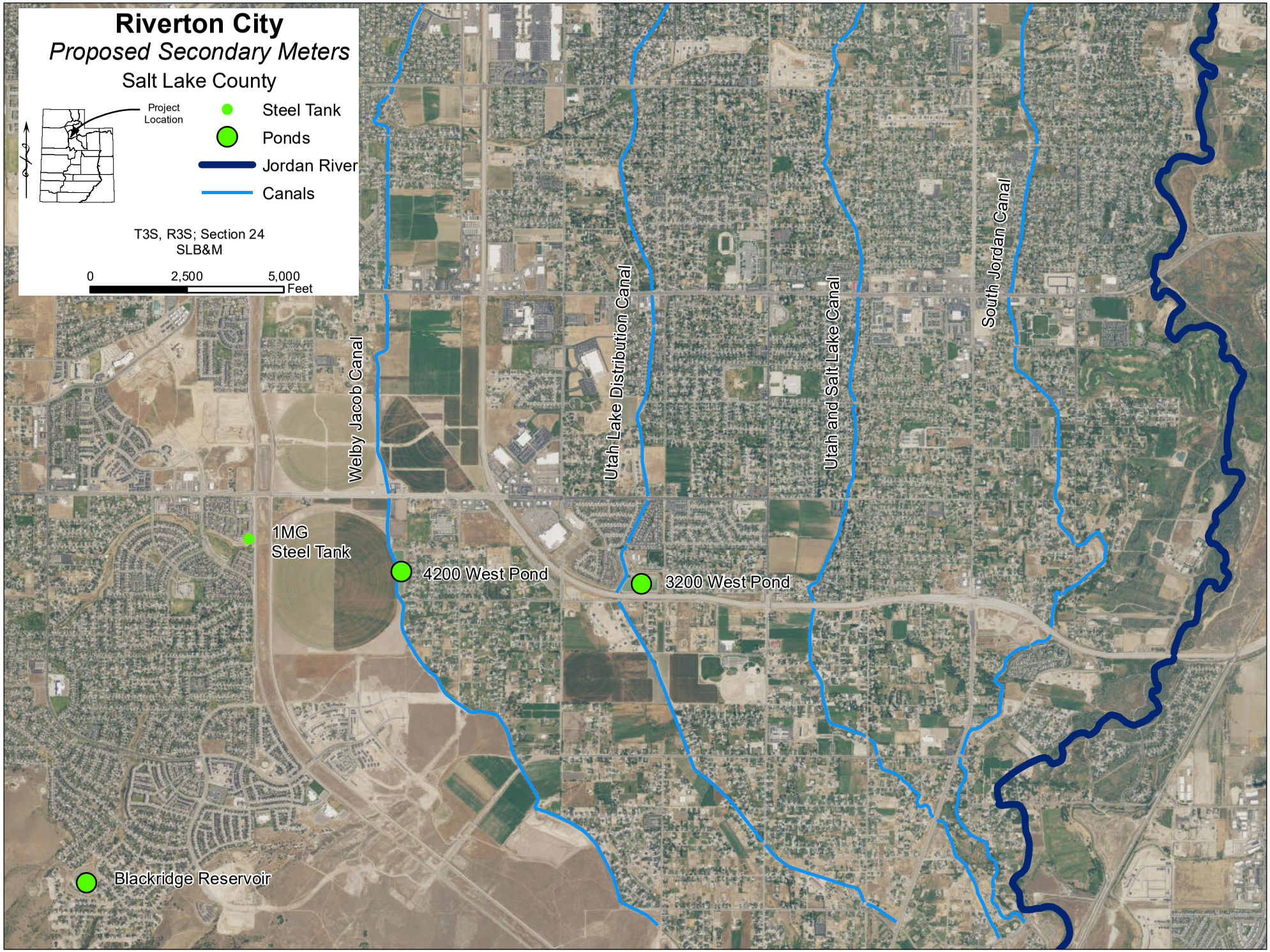
No adverse environmental effects are expected.

Water Conservation

Construction of the project will conserve approximately 3,000 acre-feet and will help stretch existing supplies to satisfy build-out conditions. Billing secondary watered on a tiered rate structure has been proven to decrease water waste and improve efficiency.

Applicant's Responsibilities

The applicant will be required to make all arrangements to sell the board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the applicant.


Riverton City
Proposed Secondary Meters
Salt Lake County
Project Location
Steel Tank
Ponds
Jordan River
Canals
T3S, R3S; Section 24
SLB&M
0
2,500
5,000
Feet
Welby Jacob Canal
Utah Lake Distribution Canal
Utah and Salt Lake Canal
South Jordan Canal
1MG
Steel Tank
4200 West Pond
3200 West Pond
Blackridge Reservoir

BOARD OF WATER RESOURCES

Feasibility Report

Applicant: **Huntsville Irrigation Company**

Project Number: RE424

Fund: Revolving Construction Fund

Cost Estimate: $605,000

Application Received: 3/20/2019

Board Meeting Date: 6/20/2019

Board Member: Kyle Stephens

Project Manager: Marisa Egbert

Project Summary: The purpose of the project is to extend the existing pressurized irrigation system to incorporate two neighboring irrigation companies. The project will include the installation of approximately 8,000 feet of pipeline.

Recommendation: Staff recommends the board authorize 85% of the project cost, up to $514,250, and that the project be purchased at 0% interest over 25 years with annual payments of approximately $20,570.

Project Contacts:

President:
Rex Mumford
8115 East 500 South
Huntsville, Utah 84317
801-721-2677

Secretary:
Brenda Grow
8826 East 100 South
Huntsville, Utah 84317
801-745-1895

Engineer:
JUB Engineers
466 North 900 West
Kaysville, Utah
801-547-0393

Location

The proposed project is located just southeast of Huntsville in Weber County.

Introduction & Background

The company diverts water from the South Fork of the Ogden River near Huntsville, delivering water through a pressurized system consisting of approximately 11 miles of pipeline to more than 800 acres. The company received financial assistance from the Board in 2012 to install the existing pressurized system. The annual repayment for that project is about $95,000 and is scheduled be repaid by 2049.

Existing Conditions & Problems

Two neighboring irrigation companies have approached the applicant to discuss potentially merging with the applicant's company. The two companies are the Anderson, Felt, Winters Irrigation Company (A-F-W) and the Felt, Petersen, Slater Water Company (F-P-S). The two companies currently use flood-irrigation practices with low conveyance efficiencies and water losses due to seepage.

Proposed Project

The project will include the installation of about 1.5 miles of pipeline to the applicant's existing system. This additional pipeline will provide water to all of the shareholders in the A-F-W service area and approximately 25% of the shareholders in the F-P-S service area.

Benefits

The project will provide higher on-farm and conveyance efficiencies.

Cost Estimate

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

Item	Description	Unit	Quantity	Unit Price	Total
1	Mobilization	LS	1	$40,000	$40,000
2	SWPPP	LS	1	5,000	5,000
3	4" DR 26 HDPE	LF	100	15	1,500
4	6" DR 26 HDPE	LF	1200	20	24,000
5	8" DR 32.5 HDPE (Install/Excavation)	LF	1250	20	25,000
6	10" DR 26 HDPE	LF	2000	33	66,000
7	12" DR 26 HDPE	LF	2150	40	86,000
8	12" DR 32.5 HDPE (remove exist. pipe)	LF	1400	38	53,200
9	10" Gate Valve	EA	1	2,000	2,000
10	Drains	EA	3	2,000	6,000
11	Air Vas	EA	3	5,000	15,000
12	1.5" Service	EA	13	1,800	23,400
13	4" Service	EA	9	2,500	22,500
14	12"x12"x8" Tee	EA	1	1,500	1,500
15	10"x8"x6" Tee	EA	1	1,200	1,200

16	12"x10" Reducer	EA	1	1,200	1,200
17	Connect to existing pipe	EA	2	2,000	4,000
18	Tree Removal	EA	30	250	7,500
19	Dewatering	LS	1	15,000	15,000
20	Fence Repair	LF	500	10	5,000
21	Reseeding	LS	1	5,000	5,000
22	Restore Road Crossing	EA	5	8,000	40,000
				Construction Cost	**$450,000**
				Contingency	64,000
				Design & Construction Engineering	75,000
				Legal and Administrative	16,000
				TOTAL	**$605,000**

Cost Sharing & Repayment

The cost sharing and repayment are:

Agency	Cost Sharing	% of Total
Board of Water Resources	$514,250	85%
Applicant	90,750	15
TOTAL	**$605,000**	**100%**

Staff recommends the board authorize 85% of the project cost, up to $514,250, and that the project be purchased at 0% interest over 25 years with annual payments of approximately $20,570.

Economic Feasibility

The estimated net increased crop income with the project has been calculated to be approximately $25,000 annually.

Financial Feasibility

The financial benefit of this project is an increased net crop income of about $25,000 annually. However, since the project will add 175 new acres to the applicant's system, the operation and maintenance costs will increase, thus reducing the overall annual net benefit.

Benefit	Amount
Estimated Annual Net Increased Crop Income	$25,000
Reduced Operation & Maintenance Costs	($7,000)
NET ANNUAL BENEFIT	**$18,000**

With the proposed board share of the project being 85%, the applicant's repayment is typically calculated as 85% of the annual benefit calculated above, or $15,300 ($87.42/acre). However, with an annual repayment of $15,300, the applicant would need more than 33 years to repay the project. The board's repayment terms are typically between 15-25 years. The applicant has indicated they can repay the financial assistance in 25 years.

Water Rights & Supply

Water rights related to this project are as follows:

Water Right Number	Flow / Volume (cfs / ac-ft)
A-F-W System	**A-F-W System**
35-10659	33.93 ac-ft
35-7165	66.63 ac-ft
35-7233	1.63 cfs / 364.15 ac-ft
35-7234	364.12 ac-ft
35-7235	364.12 ac-ft
35-7251	0.44 cfs
35-7389	0.06 cfs
F-P-S System	**F-P-S System**
35-7208	1.03 cfs
35-7214	1.03 cfs

Easements

Easements will be needed for the project. All of the easements will be from private landowners.

Environmental

Vegetation along the existing ditches that will be abandoned may be affected by the reduction of water in the ditches.

Water Conservation

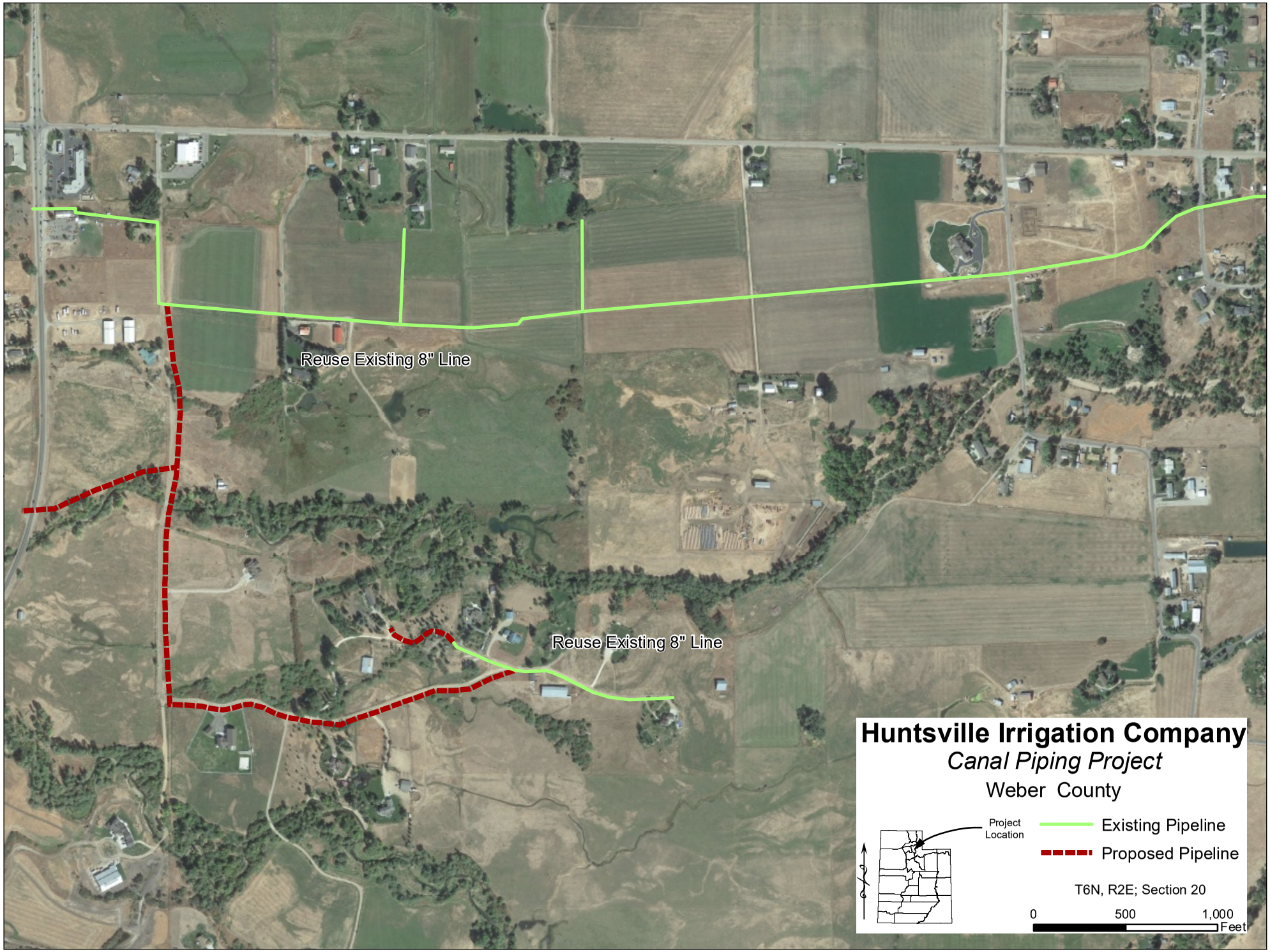
The project is expected to conserve approximately 240 acre-feet of water.

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.
   g. The company has completed all legal work necessary to incorporate the two other companies.
4. Update 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.


Reuse Existing 8" Line
Reuse Existing 8" Line
Huntsville Irrigation Company
Canal Piping Project
Weber County
Project Location
Existing Pipeline
Proposed Pipeline
T6N, R2E; Section 20
0
500
1,000
Feet

BOARD OF WATER RESOURCES

Feasibility Report

Applicant: **Trenton Town**

Project Number: RL583

Fund: Cities Water Loan Fund

Cost Estimate: $401,000

Application Received: 11/23/2018

Board Meeting Date: 6/20/2019

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 – North Fork Spring area will be fenced to protect the water source from surface contamination.

Recommendation: Staff recommends the board authorize 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 (includes reserves).

Project Contacts:

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

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

Engineer:
Marcus Simons
J-U-B Engineers, Inc.
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.

Introduction & Background

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 serval years. The applicant received financial assistance from the board in 2004 to replace the majority of their distribution lines. Repayment for that project is anticipated to be completed in 2029. The United States Department of Agriculture – Rural Development provided funding for them to update the remainder of their 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.

Existing Conditions & Problems

Deep-rooted vegetation in the Sparks Spring collection system restricts the flow to less than one gallon per minute when it should be operating at approximately 12 gallons per minute. Grazing livestock currently have access to the Sparks and Big Birch – North Fork Spring collection areas which could adversely affect their water quality.

Proposed Project

The purpose of this project is to redevelop the Sparks Spring collection area including replacing approximately 200 feet of collection pipe, clearing the deep-rooted vegetation, and installing a meter. Another component of the project is to fence the area around the Big Birch – North Fork Spring to prevent grazing animals from accessing the collection area.

The project fits in Prioritization Category 2 (municipal water projects that are required to meet an existing or impending need).

Benefits

Redevelopment of the Sparks Spring will allow Trenton to use their full allocation of water to provide drinking water to their community, meet fire protection for future development, and add protection to the water source. Fencing the land around the Big Birch – North Fork Spring will provide an additional level of protection to the water by keeping grazing animals out of the area.

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	$20,000	$20,000

2	4” Gate Valve	2	EA	1,200	2,400
3	Connect to Existing Spring Box	1	EA	2,500	2,500
4	6” PVC Collection Pipe	50	LF	36	1,800
5	6” PVC Perforated Collection Pipe	130	LF	40	5,200
6	40 Mil Polyethylene Liner	1240	SY	15	18,600
7	Import Clay Material	1232	TON	25	30,800
8	¾” Drain Gravel	2480	TON	30	74,400
9	Re-Seed with CRP Seed Mix	1	AC	1,200	1,200
10	Diversion Ditch	385	LF	20	7,700
11	Cut Off Wall	125	LF	152	19,000
12	Clear and Grub Spring Area	1	LS	4,000	4,000
13	Collection Box Modifications	1	LS	7,500	7,500
14	Spring Excavation	1	LS	22,000	22,000
15	5 Strand Barbed Wire Fence	860	LF	10	8,600
16	20’ Gate	1	LS	1,300	1,300
17	Access Road Improvement	1000	LF	18	18,000
18	Purchase of Land	1	LS	40,000	40,000
				Construction Cost	**$285,000**
				Contingency	29,000
				Design & Construction Engineering	43,000
				Legal and Administrative	24,000
				Permits, Fees & Testing	20,000
				TOTAL	**$401,000**

Cost Sharing & Repayment

The recommended cost sharing and repayment are:

Agency	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%**

Trenton received a $200,000 Community Development Block Grant, federal funding, through the U.S. Department of Housing and Urban Development.

Staff recommends the board authorize 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 (includes reserves).

Financial Feasibility

The board's affordability guidelines suggest that the community can afford to pay $44.62 per month for water. The current average monthly culinary water bill is approximately $62.85 and the secondary water bill is about $15.30.

The applicant is making annual payments of approximately $103,000 per year towards existing debt for water projects. The breakdown of annual payments are $52,000 to the Board of Water Resources, $28,000 to the Drinking Water Board, and $23,000 to the U.S. Department of Agriculture.

The proposed annual payment to the board of $7,000, divided between the 192 connections, would result in a monthly increase of approximately $3.03 per connection.

Water Cost	Annual Cost	Cost/Conn/Mo
Average Water Bill	$144,806	$62.85
Average Secondary Water Bill	35,243	15.30
Proposed Board of Water Resources Loan	7,000	3.03
TOTAL	**$186,833**	**$81.18**

Water Rights & Supply

Water rights related to this project are as follows:

Water Right Number	Flow (cfs)
25-3080	0.760
25-7209	3.0
25-9265	0.176

Easements

The applicant is interested in purchasing 32 acres of land around the Sparks Spring area. Construction easements will be required on this property if they are unable to purchase the land. However, the property has been for sale for serval years and the applicant does not anticipate issues purchasing the property.

Environmental

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

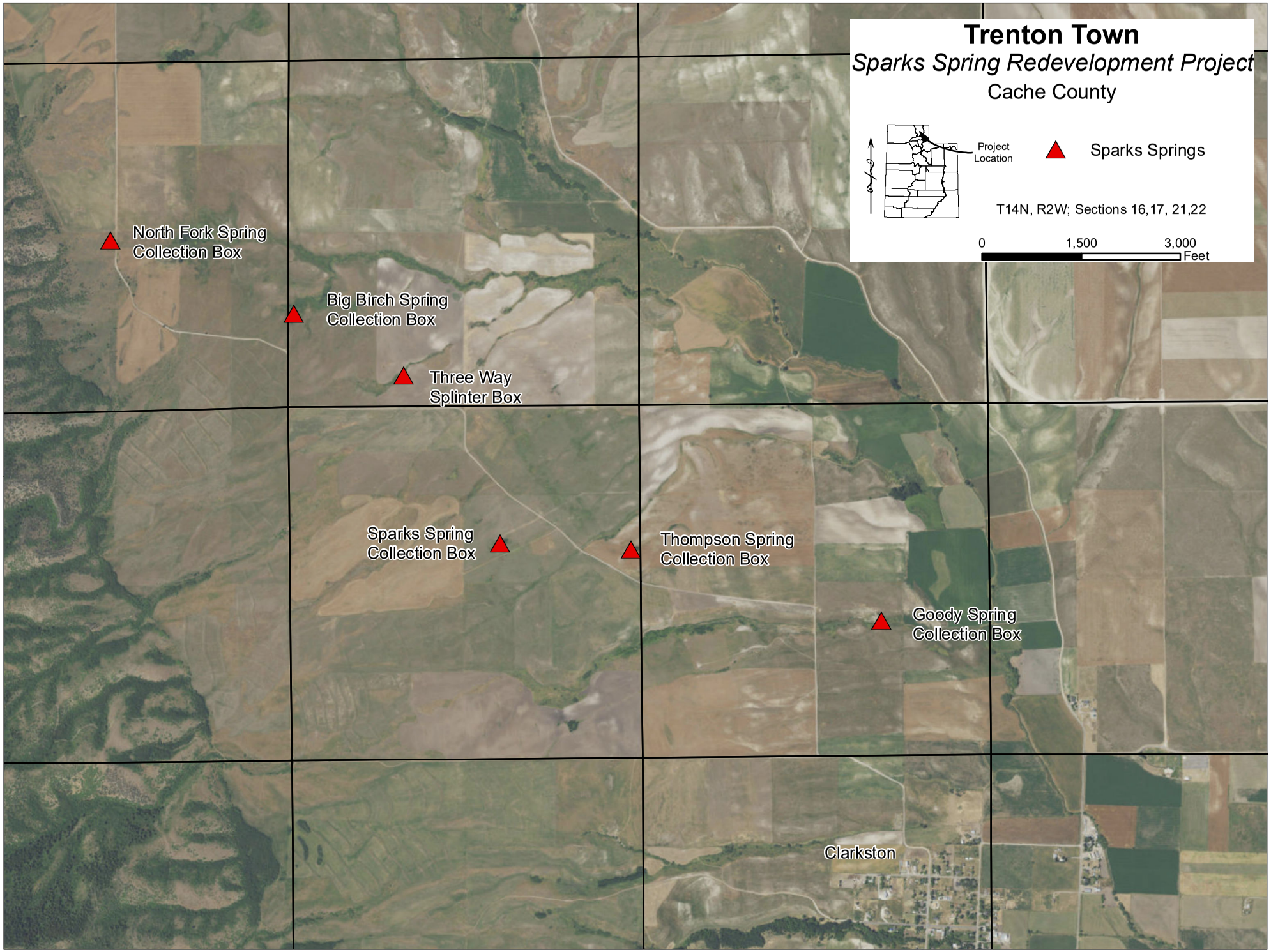
Water Conservation

The applicant estimates that the proposed project will conserve approximately 65 acre-feet annually.

Applicant's Responsibilities

The applicant will be required to make all arrangements to sell the board a non-voted revenue bond, as well as verify it has adequate water rights and rights-of-way to construct the project. If the

project is authorized, a full list of requirements and procedures necessary to close the bond will be furnished to the applicant.


Trenton Town
Sparks Spring Redevelopment Project
Cache County
Project Location
Sparks Springs
T14N, R2W; Sections 16,17, 21,22
0
1,500
3,000
Feet
North Fork Spring Collection Box
Big Birch Spring Collection Box
Three Way Splinter Box
Sparks Spring Collection Box
Thompson Spring Collection Box
Goody Spring Collection Box
Clarkston

BOARD OF WATER RESOURCES

Committal of Funds

Applicant: **Monroe City**

Project Number: RL584

Fund: Cities Water Loan Fund

Total Cost: $220,000

Application Received: 1/14/2019

Authorized: 3/20/2019

Board Meeting Date: 6/20/2019

Board Member: Blaine Ipson

Project Manager: Ben Marett

Project Summary: The purpose of the project is to replace approximately 585 culinary water meters throughout the city, which represents approximately 2/3 of the meters in the city.

Recommendation: Staff recommends the board commit 85% of the project cost, up to $187,000, and that the bonded indebtedness be returned at 3.07% interest over 15 years with annual payments of approximately $17,000 (includes reserves).

Project Contacts:

Mayor:
Johnny Parsons
10 N. Main St.
Monroe, UT 84754
435-527-4621

Secretary:
Allison Leavitt
10 N. Main St.
Monroe, UT 84754
435-527-4621

Location

The proposed project is located in Monroe City in Sevier County.

Project Summary

The City of Monroe installed automated mechanical water meters on its culinary water system in 2000. These meters began to fail shortly after the warranty on them expired. Because these meters did not last as long as expected, the applicant began replacing the old meters with iPearl electromagnetic meters as the old ones failed, and has replaced 365 of the failed meters. The applicant budgets $15,000 per year to replace the old meters as they fail. Unfortunately, the old meters are beginning to fail at a faster rate than they can be replaced, given the applicant's budget allotment. Approximately 585 more meters need to be replaced to finish out the system-wide upgrade to electromagnetic meters.

The purpose of the project is to replace approximately 585 culinary water meters throughout the city, which represents approximately 2/3 of the city's connections. This project was authorized by the Board in March 2019. Construction is expected to begin late summer 2019.

Cost Estimate & Sharing

The cost estimate and sharing remain as authorized:

Agency	Authorized Cost Sharing	% of Total
Board of Water Resources	$187,000	85%
Applicant	33,000	15
TOTAL	**$220,000**	**100%**

Repayment

Staff recommends the board commit 85% of the project cost, up to $187,000, and that the bonded indebtedness be returned at 3.07% interest over 15 years with annual payments of approximately $17,000 (includes reserves).

BOARD OF WATER RESOURCES

Special Item - Additional Funds

Applicant: **Davis & Weber Counties Canal Company**

Project Number: RE409
Fund: Conservation and Development Fund
Total Cost: $3,800,000

Application Received: 4/13/2018
Authorized: 6/21/2018
Committed: 6/21/2018
Board Meeting Date: 6/20/2019

Board Member: Kyle Stephens
Project Manager: Tom Cox

Project Summary: The purpose of the project is to install approximately 4,800 feet of 42-inch PVC pipe along 1300 North in Clinton and Sunset to address low pressure issues in the secondary irrigation system.

Recommendation: Staff recommends the board commit an additional $730,000 to the project, and amend the purchase agreement to state the board will provide 85% of the project cost, up to $3,230,000, and that the project be purchased at 3% interest over 13 years with annual payments of approximately $303,800, that an interest only payment will be due December 1, 2019 and that the first principal payment will be due December 1, 2020.

Project Contacts:

President:
Scott Paxman
138 W. 1300 N.
Sunset, UT 84015
801-771-1677

Manager:
Rick Smith
138 W. 1300 N.
Sunset, UT 84015
801-774-6373

Engineer:
Nate Smith, J-U-B Engineering
466 North 900 West
Kaysville, UT 84037
801-547-0393

Location

The project is located in Clinton and Sunset in Davis County.

Project Summary

In June 2018, the board committed funds for a project to install approximately 4,800 feet of 42-inch PVC pipe along 1300 North in Clinton and Sunset to increase the amount of water that can be delivered from the applicant's Sunset Reservoir to users in Clinton to address low pressure issues. All but the last few hundred feet of pipe were installed in time to be used this irrigation season. Installation of the last section is being postponed as it crosses under a roundabout at 1000 West and Clinton City is still in the process of deciding what it wants to do with the road there. It is anticipated the rest of the pipe will be installed after this year's irrigation season is over.

Funds were committed before the final construction cost was set. Prices came in much higher than anticipated and changes to the project have increased costs.

Cost Estimate & Sharing

The project cost estimate has increased by $860,000, from $2,940,000 to $3,800,000. The committed and proposed cost sharing are:

Agency	Committed Cost Sharing	% of Total	Proposed Cost Sharing	% of Total
Board of Water Resources	$2,500,000	85%	$3,230,000	85%
Applicant	440,000	15	570,000	15
TOTAL	**$2,940,000**	**100%**	**$3,800,000**	**100%**

Purchase Agreement

Funds were originally committed to the project under the following terms; that the project will be purchased at 3% interest over 10 years with payments of approximately $293,100.

The applicant is requesting that the board provide additional funds for the project and that the first principal payment be postponed one year so that the project will be complete before the payment is due.

Staff recommends <u>the board commit an additional $730,000, and amend the purchase agreement to state the board will provide 85% of the project cost, up to $3,230,000, and that the project be purchased at 3% interest over 13 years with annual payments of approximately $303,800, that an interest only payment will be due December 1, 2019 and that the first principal payment will be made December 1, 2020</u>.

BOARD OF WATER RESOURCES

Special Item - Withdrawal Report

Applicant: **Brooklyn Canal Company**

Project Number: RE223

Fund: Conservation and Development Fund

Application Received: 4/4/2007

Authorized: 10/12/2007

Board Meeting Date: 6/20/2019

Project Manager: Marisa Egbert

Project Contacts:

President:	Secretary:
Frank Batty	Lisa Wells
PO Box 125	PO 225
Annabella, Utah 84711	Elsinore, Utah 84724
(435)201-2850	(435)558-0361

Location

The proposed project is located two miles south of Elsinore in Sevier County.

Summary

In April 2007 the applicant requested financial assistance from the board to replace canals/ditches with pipe. The company has since determined that they cannot complete such a large project.

Staff therefore recommends the project be withdrawn from further consideration by the board.

BOARD OF WATER RESOURCES

Special Item - Withdrawal Report

Applicant: **Woodruff Irrigating Company**

Project Number: RE385

Fund: Conservation and Development Fund

Application Received: 3/7/2016

Board Meeting Date: 6/20/2019

Project Manager: Marisa Egbert

Project Contacts:

President:
Wesley Tingey
PO Box 520
Woodruff, UT 84086
801-556-5116

Location

The proposed project is located six miles west of Woodruff in Rich County.

Summary

In March 2016 the applicant requested financial assistance from the board Phase II of a larger project. Phase II would include installing a pipeline from Woodruff Creek Reservoir to Woodruff Creek. The larger project continues to evolve and change. This application was to be part of a WaterSMART funding grant. However, that grant is not available to the company.

Staff therefore recommends the project be withdrawn from further consideration by the board.

BOARD OF WATER RESOURCES
Application Summary

Applicant: **Ashley Central Irrigation Company**

Project Number: RE427
Fund: Conservation and Development Fund
Cost Estimate: $2,102,000

Application Received: 4/29/2019
Board Meeting Date: 6/20/2019

Board Member: Randy Crozier
Project Manager: Jaqueline Pacheco

Project Contacts:

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

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

Engineer:
Brian Deeter - J-U-B Engineers
466 W. 100 N.
Vernal, UT 84078
801-726-5819

Location
The proposed project is located in Vernal and Naples in Uintah County.

Proposed Project
The applicant is requesting financial assistance from the board to pipe approximately 2.4 miles of canal.

Water Rights
- 45-167

BOARD OF WATER RESOURCES
Application Summary

Applicant: **Mountain Green Secondary Water Company**

Project Number: RE428
Fund: Conservation and Development Fund
Cost Estimate: $803,000

Application Received: 5/20/2019
Board Meeting Date: 6/20/2019

Board Member: Kyle Stephens
Project Manager: Russell Hadley

Project Contacts:

President:
Rulon Gardner
201 S. Main St, Ste 2015
Salt Lake City, UT 84111
801-456-1280

Secretary:
Blake Gardner
201 S. Main St, Ste 2015
Slc, UT 84111
801-456-1280

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

Location
The proposed project is located in Mountain Green in Morgan County.

Proposed Project
The applicant is requesting financial assistance from the board to install water meters on all secondary irrigation system connections.

Water Rights
- 35-8247
- 35-11718
- 35-12279