

A G E N D A

UTAH BOARD OF WATER RESOURCES

Brigham City Offices
20 North Main Street
Brigham City, Utah

June 18, 2015

9:30 a.m.

1. CALL TO ORDER
2. APPROVAL OF MINUTES - May 7, 2015
3. CHAIR'S REPORT
4. FEASIBILITY REPORTS
E368 Rock Point Canal
E369 Perry Flood Control Dist.
5. COMMITMENT OF FUNDS REPORTS
E351 Cache Highline Water Assoc.
6. SPECIAL ITEMS REPORTS
E277 Kane County WCD (Amendment)
E370 Daniel Irr. Co.
(Feas. & Comm. of Funds)
E280 Newton Water Users Assoc. (Amendment)
7. DAM SAFETY CONSTRUCTION FUNDING
C044 Kaysville Irr. Co. (Add. Funds)
C045 Red Creek Irr. Co. (Add. Funds)
8. LAKE POWELL PIPELINE PROJECT REPORT
9. DIRECTOR'S REPORT
10. ADJOURNMENT

County

Uintah
Box Elder

Cache

Kane
Wasatch

Cache

Davis
Duchesne

BOARD OF WATER RESOURCES

REVOLVING CONSTRUCTION FUND

**Funding Status
June 18, 2015**

Funds Available for Projects This FY \$ 10,080,000

Projects Contracted This FY

1 Manderfield Irr and Res Co (additional funds)	C043	**	\$ 8,000	
2 Manderfield Irr and Res Co (additional funds)	C043	**Grant	72,000	
3 Red Creek Irrigation Co (additional funds)	C045	**	347,000	
4 Red Creek Irrigation Co	C045	**Grant	<u>3,122,000</u>	
Total Funds Contracted				\$ 3,549,000
Funds Balance				\$ 6,531,000

Projects with Funds Committed

1 Rockville Town Ditch Cc	E313		\$ 145,000	
2 Marion Waterworks Co	E322		247,000	
3 North Utah County WCD	C048	**Grant	1,481,000	
* 4 Daniel Irrigation Co	E370		240,000	
* 5 Kaysville Irrigation Co (additional funds)	C044	**Grant	<u>301,500</u>	
Total Funds Committed				\$ 2,415,000
Funds Balance				\$ 4,116,000

Projects Authorized

1 Salem Pond Co	E329		\$ 93,000	
2 Red Creek Irrigation Co	E356		430,000	
3 Ephraim Irrigation Co	E361		<u>497,000</u>	
Total Funds Authorized				\$ 1,020,000
Remaining Funds Available				# \$ 3,096,000

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

End of year balance if all listed projects were fully paid

BOARD OF WATER RESOURCES

CITIES WATER LOAN FUND

**Funding Status
June 18, 2015**

Funds Available for Projects This FY \$ 8,855,000

Bonds Closed This FY

1 None	\$	-	
Total Bonds Closed			\$ -
Funds Balance			\$ 8,855,000

Projects with Funds Committed

1 None	\$	-	
Total Funds Committed			\$ -
Funds Balance			\$ 8,855,000

Projects Authorized

1 Weber-Box Elder Conservation Distric	E326	\$	1,445,000	
2 Duchesne County WCD	E334		3,000,000	
3 Herriman City	E344		4,930,000	
Total Funds Authorized			<u>9,375,000</u>	\$
Remaining Funds Available		#	\$	(520,000)

* To be presented at Board Meeting

End of year balance if all listed projects were fully paid

BOARD OF WATER RESOURCES

CONSERVATION & DEVELOPMENT FUND

**Funding Status
June 18, 2015**

Funds Available for Projects This FY \$ 52,245,000

Projects Contracted/Bonds Closed This FY

1 Cottonwood Creek Consolidated Irr Cc	E325	\$ 1,340,000	
2 Cub River Irrigation Co	E339	3,825,000	
3 Dry Gulch Irr. Co (Class D, E - additional funds)	E285	40,000	
4 Dry Gulch Irrigation Co (Class E, F, K2)	E357	1,037,000	
5 Gunnison Irrigation Co	E350	540,000	
6 Kays Creek Irrigation Co (additional funds)	E268	582,000	
7 McArthur Frandsen Ditch Co	E348	723,000	
8 North Summit Pressurized Irrigation Cc	E297	3,910,000	
9 Parowan City	E319	3,464,000	
10 Saratoga Springs City	L574	53,000	
11 Settlement Canyon Irrigation Co (Phase 1)	E240	891,400	
12 Weber Basin WCD (Phase 4)	E225	10,000,000	
13 Westfield Irrigation Cc	E335	1,254,000	
		<u>27,659,000</u>	
Total Funds Contracted/Closed			\$ 27,659,000
Funds Balance			\$ 24,586,000

Projects with Funds Committed

* 1 Newton Water Users Assoc	E280	\$ 2,805,000	
2 North Summit Pressurized Irr Co (add'l funds)	E297	345,000	
3 Levan Irrigation Co (additional funds)	E314	128,000	
* 4 Cache Highline Water Association	E351	2,150,000	
		<u>5,428,000</u>	
Total Funds Committed			\$ 5,428,000
Funds Balance			\$ 19,158,000

Projects Authorized

1 Brooklyn Canal Co	E223	\$ 1,000,000	
2 Fremont Irrigation Co	E279	8,177,000	
3 Summit Creek Irrigation and Canal Co (Phase 3)	E308	1,700,000	
4 Uintah WCD	E316	36,550,000	
5 Lake Creek Irrigation Cc	E333	3,275,000	
6 Richmond Irrigation Co	E347	3,700,000	
7 Green River Canal Co	E353	1,200,000	
8 Holmes Creek Irr Cc	E327	731,000	
9 Manti City Creek Water Users Mutal Assoc.	E342	1,606,000	
10 Ephraim Irrigation Co	E352	1,870,000	
11 Weber Basin WCD (Phase 5+)	E225	7,000,000	
12 Woodruff Irrigating Cc	E365	3,200,000	
* 13 Rock Point Canal Co	E368	615,000	
* 14 Perry Flood Control Distric	E369	660,000	
		<u>71,284,000</u>	
Total Funds Authorized			\$ 71,284,000
Remaining Funds Available			# \$ (52,126,000)

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

End of year balance if all listed projects were fully paid

BOARD OF WATER RESOURCES

June 18, 2015

ADDITIONAL ACTIVE PROJECTS

Sponsor	No.	Fund	Est. Board Cost	Total Cost
1 Sanpete WCD (Narrows Dam)	D377	C&D	\$29,325,000	\$ 34,500,000
2 Woodruff Irrigating Cc	D680	C&D	680,000	800,000
3 Kane County WCD	D828	C&D	1,700,000	2,000,000
4 Weber Basin WCD (Secondary, Ph 3-5)	E029R3+	C&D	27,178,000	28,900,000
5 Hooper Irr Co (Press Irr, Ph 3+)	E060R3+	C&D	11,033,000	12,980,000
6 East Juab County WCD	E071	C&D	425,000	500,000
7 Parowan City (Bond Ins Grant)	E121	C&D	34,000	2,034,000
8 Fremont Irr Co	E131	C&D	1,700,000	2,000,000
9 Kingston Irr Water Co	E169	RCF	85,000	240,000
10 Fountain Green Irr Co (Flow Augment)	E186	RCF	85,000	100,000
11 San Juan WCD	E198	C&D	3,400,000	4,000,000
12 Corinne City	E216	C&D	85,000	100,000
13 Westview Irr Co	E265	RCF	128,000	150,000
14 Westview Irr Co	E310	RCF	170,000	200,000
15 Weber Basin WCD	E312	C&D	85,000,000	100,000,000
16 South Willard Water Co	E317	C&D	1,700,000	2,000,000
17 Ferron Canal & Res Co	E320	C&D	2,720,000	3,200,000
18 Juab Lake Irrigation Co	E324	C&D	510,000	600,000
19 Fountain Green Co-op Well	E328	RCF	255,000	300,000
20 Co-op Farm Irrigation Cc	E340	RCF	159,000	187,000
21 Ouray Park Irrigation Cc	E343	C&D	850,000	1,000,000
22 Silver Creek Irrigation Cc	E349	RCF	150,000	325,000
23 La Sal Irrigation Co	E354	C&D	1,530,000	1,800,000
24 Pineview West Water Co	E355	RCF	383,000	450,000
25 Duchesne County Water Conservancy Distric	E358	C&D	99,000	116,000
26 Uintah and Whiterocks River Commission	E359	C&D	47,000	55,000
27 New Fayette Irrigation Cc	E360	C&D	850,000	1,000,000
28 Moon Lake Water Users Association	E362	C&D	1,382,000	3,250,000
29 Wellsville-Mendon Conservation Distric	E364	C&D	680,000	800,000
30 Taylor-West Weber Water Impr. Dist	E366	C&D	6,120,000	7,200,000
31 Marion Upper & Lower Ditch Companies	E367	C&D	2,210,000	2,600,000
32 Washington County Flood Control Authority	C049	RCF	970,000	3,077,000
33 Washington County Flood Control Authority	C050	RCF	582,000	1,847,000
34 Washington County Flood Control Authority	C051	RCF	473,000	1,500,000
Subtotal			\$182,698,000	\$ 219,811,000

* New Application

INACTIVE PROJECTS

Long Term Large Water Conservation Project

1 Wayne County WCD	D494
2 Cedar City Valley Water Users	D584
3 Bear River WCD	D738
4 Central Utah WCD (Prepay FY98,99,00)	D960
5 Woodruff Irr Co (Woodruff Cr Dam Enlargement)	E059

BOARD OF WATER RESOURCES

Feasibility Report

Conservation and Development Fund

Appl. No.: **E-368**
Received: 3/1/15
Approved: 3/18/15

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **ROCK POINT CANAL AND IRRIGATION COMPANY**

President: Leon Kidd

LOCATION: The proposed project is located north of Vernal in Uintah County.

EXISTING CONDITIONS & PROBLEMS: The sponsor serves approximately 1,900 acres of farm ground (900 sprinkle and 1,000 flood irrigated) immediately south of Steinaker Reservoir. Water is obtained from direct diversions from Ashley Creek, Steinaker, and other mountain reservoirs. The water is delivered through the nearly nine mile-long Rock Point Canal. It is estimated that approximately 35 percent of the water is lost through seepage and evaporation or as spills at the end of the canal, with total losses averaging about 1,300 acre-feet annually. Nearly three miles of the lower part of the canal has recently been piped. Some of the irrigators have to pump to pressurize their on-farm systems.

PROPOSED PROJECT: The sponsor is requesting financial assistance from the board to pipe the remainder of the Rock Point Canal. This will include nearly five miles of 28-inch to three-inch HDPE and PVC pipe.

It is anticipated that an additional 500 acres will convert to sprinkle irrigation with the proposed project.

The sponsor has yet to hire a design engineer. Henrie Engineering has provided preliminary

engineering to complete an application for a Colorado River Salinity Control Program grant.

COST ESTIMATE: The following cost estimate is based on one developed for the Colorado River Salinity Control Program grant application:

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$75,000	\$ 75,000
2.	Pipe			
	a. 28" HDPE	6,000 LF	82	492,000
	b. 24" HDPE	4,200 LF	67	281,400
	c. 18" PVC	4,000 LF	34	136,000
	d. 15" PVC	2,000 LF	22	44,000
	e. 10" HDPE	2,300 LF	12	27,600
	f. 3" HDPE	7,000 LF	3.00	21,000
3.	Valves	LS	35,000	35,000
4.	Intake Structures	LS	55,000	55,000
5.	Road Crossings	LS	25,000	25,000
Construction Cost				\$1,192,000
Contingencies				113,000
Environmental & Cultural Compliance				75,000
Legal and Administrative				20,000
Design and Construction Engineering				150,000
TOTAL				\$1,550,000

COST SHARING & REPAYMENT: The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$ 615,000	39.7%
Salinity Grant	825,000	53.2
Sponsor	110,000	7.1
TOTAL	\$1,550,000	100%

If the board authorizes the project, it is suggested it be purchased at 1% interest over 20 years with annual payments of approximately \$34,100.

The sponsor has applied for grants through the Colorado River Salinity Control Program. It is anticipated that if the sponsor obtains salinity control grants, the project will be constructed in fall 2016.

ECONOMIC FEASIBILITY: A project is economically feasible if its benefits outweigh its costs. In this case the primary benefit is increased crop yield with decreases in pumping and operation and maintenance costs as secondary benefits. When the value of these benefits over the 50-year life of the project are discounted to present worth and compared to total project construction costs, the benefit to cost ratio is 1.13.

FINANCIAL FEASIBILITY: Benefits will include increased crop yields and reduction in pumping and operation and maintenance costs, as follows:

Annual Net Increased Crop Income	\$83,600
Reduced Operation & Maintenance Costs	12,000
Reduced Pumping Costs	6,500
Annual On-farm Sprinkler and Pipe Costs	<u>-16,800</u>
NET ANNUAL BENEFIT	\$85,300

With the proposed board cost share of the project being 39.7%, it is suggested the sponsor's repayment ability be calculated as 39.7% of the net annual benefit calculated above, or approximately \$33,900 (\$17.84 per acre). Recent assessments have been \$200 per share in anticipation of this project. Additional assessments are made for Steinaker and Ashley Valley shares.

BENEFITS: Piping the remainder of the Rock Point Canal will conserve approximately 1,300 acre-feet annually, which will be utilized in the sponsor's service area or stored in Steinaker Reservoir for its future use. Operation and maintenance of the system will be enhanced and pumping costs of individual water users will be reduced.

PROJECT SPONSOR: The Rock Point Canal and Irrigation Company was originally organized in 1911 and includes 82 stockholders holding 231 shares. The sponsor is registered in good standing with the state Department of Commerce.

The sponsor has not received financial assistance from the board in the past

WATER RIGHTS & SUPPLY: The sponsor owns Water Right #45-104, which allows it to divert 19.8% of Ashley Creek up to 75 cfs. The sponsor also owns 565 shares of Vernal Unit CUP water

in Steinaker Reservoir, which equates to approximately one acre-foot per share, and 1,182 shares in Ashley Water Users with each share being worth about one-third acre-foot per share (about 394 acre-feet).

EASEMENTS: The proposed project will primarily be constructed along the existing canal alignment. Wherever it diverges easements will need to be obtained.

ENVIRONMENTAL: No long-term environmental impact is anticipated due to the project. As part of the salinity control funding, a Habitat Replacement Plan will be developed to mitigate damages to habitat due to the project.

WATER CONSERVATION: The project will conserve approximately 1,300 acre-feet annually, which will be used in the sponsor's service area or stored in Steinaker Reservoir for its future use. The sponsor will be required to prepare a Water Management and Conservation Plan and have it approved by the division.

SPONSOR'S RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before a funding 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 (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock 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.

4. Obtain approval of final plans and specifications from the Division of Water Resources.

5. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

6. Provide written justification satisfactory to the Board as to why the sponsor was unable to adopt a water conveyance facilities management plan during the time period provided in accordance with Section 73-10-33 of the Utah Code (if the sponsor owns or operates a water conveyance facility that has a potential risk location and has not adopted a management plan as required).

7. Obtain letters from all outside financing agencies establishing their commitment of funds to the project.

8. Be in compliance with Section 73-10-33, Section 10-9a-211, and Section 17-27a-211 of the Utah Code.

PROJECT
CONTACT
PEOPLE:

President: Leon Kidd
1010 East 2000 North
Vernal, UT 84078
Phone: 435-790-1775

Secretary: Kenneth D. Lang
850 East 1500 North
Vernal, UT 84078
Phone: 435-789-4150

Engineer: Jay Henrie
1829 South 100 West
Orem, UT 84058
Phone: 801-885-7444

Rock Point Canal & Irrigation Company Canal Piping Project



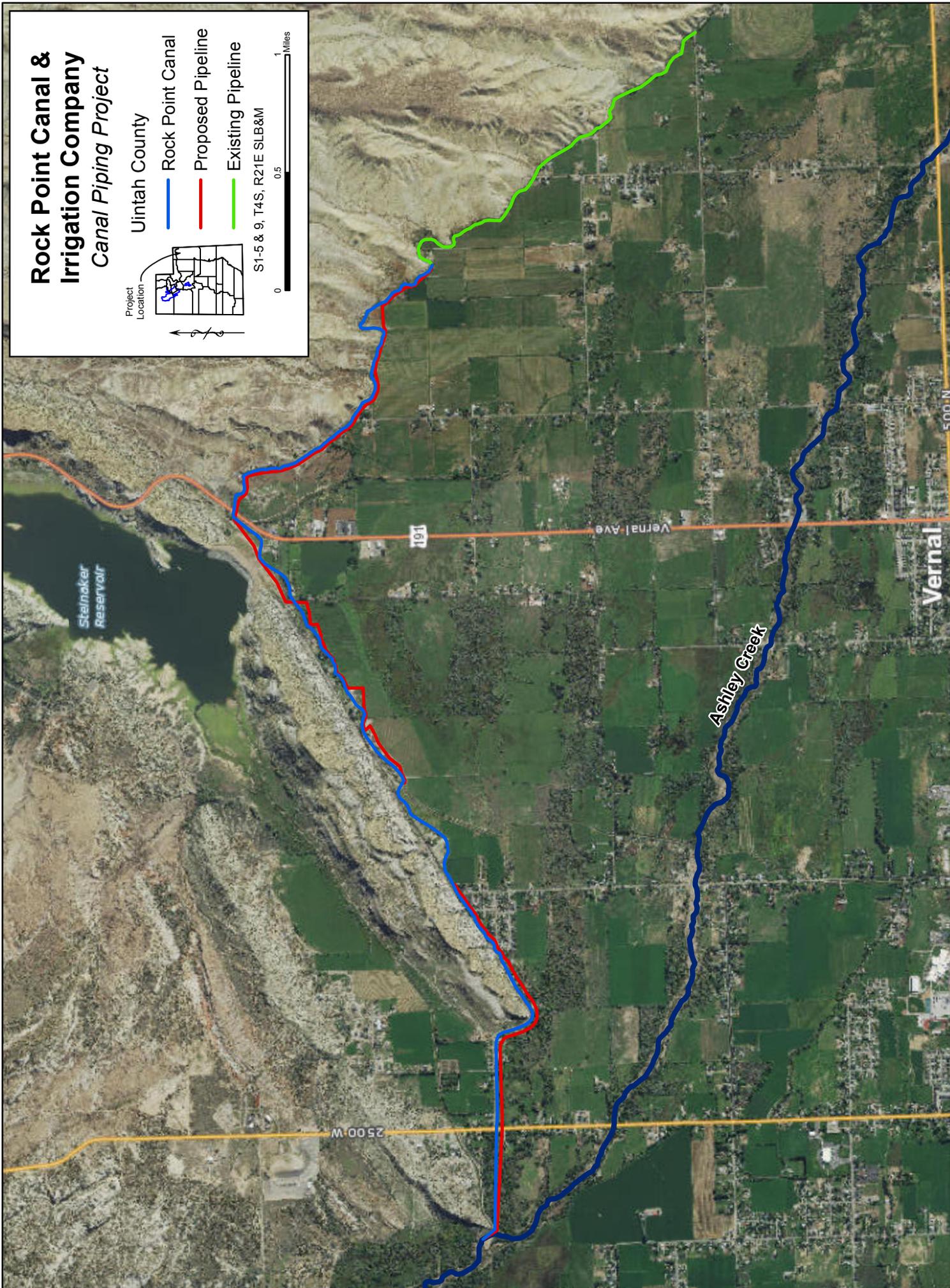
Project Location



Uintah County

- Rock Point Canal
- Proposed Pipeline
- Existing Pipeline

S1-5 & 9, T4S, R21E SLB&M



BOARD OF WATER RESOURCES

Feasibility Report

Conservation and Development Fund

Appl. No.: **E-369**
Received: 3/31/15
Approved: 5/7/15

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **BOX ELDER COUNTY AND PERRY CITY FLOOD
CONTROL DISTRICT**

Chairman: Greg Hansen

LOCATION: The proposed project is located in Perry City, about two miles south of Brigham City in Box Elder County.

EXISTING CONDITIONS & PROBLEMS: Perry City has experienced new home development similar to other towns along the Wasatch Front, with farmlands being converted to subdivisions. Two such areas in the city have had some minor flooding events from flows coming out of Mathias and Evans canyons. A 1986 report by RB&G Engineering showed that a majority of the stream flow from these canyons was being diverted for irrigation but that nuisance flooding occurred during high flows.

Mathias Canyon has a drainage area of about 1.03 square miles and Evans Canyon has a drainage area of about 0.81 square miles, with peak estimated flows during a 100-year storm event of 56 and 49 cfs, respectively. Preliminary estimates suggest the debris flows could be as high as 63,000 and 51,000 cubic yards, respectively, in a relatively short time frame during such a peak flood event.

RB&G Engineering's report recommended that large sediment basins be installed, but instead a small collection/diversion box was built in Mathias Canyon with 24-inch overflow piping directed to a small earthen debris basin constructed in Evans Canyon. The box directs small flows into existing orchards and larger flows to the Evans Canyon debris basin where it is then piped through the city. The Evans

Canyon debris basin is only capable of holding approximately 3,000 cubic yards of material and not large debris flows or large storm events.

PROPOSED PROJECT:

The sponsor is requesting financial assistance from the board to construct earthen debris basins at the base of both Mathias and Evans canyons. The existing Evans Canyon debris basin will be expanded, while the Mathias Canyon debris basin will be constructed above the existing collection box. Engineering services will be provided by Jones and Associates and GeoStrata Engineering.

The project fits in Prioritization Category 1 (projects that involve public health problems, safety problems, or emergencies).

COST ESTIMATE:

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

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mathias Debris Basin	LS	\$441,000	\$ 441,000
2.	Evans Debris Basin	LS	336,000	<u>336,000</u>
	Construction Cost			\$ 777,000
	Contingencies			77,700
	Legal and Administrative			15,300
	Design and Construction Engineering			<u>140,000</u>
	TOTAL			\$1,010,000

COST SHARING & REPAYMENT:

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$ 660,000	65.3%
Sponsor	<u>350,000</u>	<u>34.7</u>
TOTAL	\$1,010,000	100%

If the board authorizes the project, it is suggested it be purchased at 3% interest over 20 years with annual payments of approximately \$47,000 (includes reserves).

ECONOMIC FEASIBILITY: As the sponsor will receive no direct economic benefit from the project, the benefit/cost ratio is assumed to be 1.0.

FINANCIAL FEASIBILITY: Benefits of the project are improved safety and property protection. The sponsor currently collects about \$72,300/year in property taxes from 2,133 properties. If the cost of the project is evenly distributed, it would be \$22.18 per year for each property.

BENEFITS: Construction of the project will make a safer environment for homes and farmlands in Perry City. Highway 89 will also have better protection.

PROJECT SPONSOR: The sponsor was formed in 1984 and has not received funding from the board previously. The sponsor has been managed by either the county or Perry City at various times. Greg Hansen from Hansen and Associates Engineering is currently the Chairman of the Board.

WATER RIGHTS & SUPPLY: The sponsor owns no water rights. However, Water Right #29-2676 is owned by two individuals and allows diversion of up to two cfs from Mathias and Evans canyon streams combined for irrigated acreage up to 10.8 acres. The sponsor's proposed project will not interfere with this water right.

EASEMENTS: The sponsor can get easements for the Mathias and Evans properties from the State of Utah.

ENVIRONMENTAL: The proposed project is not expected to have any detrimental effects on the environment beyond the usual dust and noise of the construction phase. Water quality entering the storm channel will be improved, which will be a benefit to the Bear River Bird Refuge.

WATER CONSERVATION: The project will not conserve water, but it will improve the quality of storm runoff water by isolating more debris.

SPONSOR'S RESPONSIBILITIES: The sponsor will be required to make all arrangements to sell the board a generic bond, as well as verify it has adequate rights-of-way to construct the project. If the project is authorized, a list of requirements and procedures necessary to close the loan will be furnished to the sponsor.

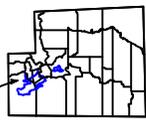
PROJECT CONTACT PEOPLE:	Chairman:	Greg Hansen 538 North Main Street Brigham City, UT 84302 Phone: 435-723-3491
	Secretary:	Susan O Bray 3005 South 1200 West Perry, UT 84302 Phone: 435-723-6461
	Engineer:	Brett Jones Jones and Associates 1716 East 5600 South South Ogden, UT 84403 Phone: 801-476-9767

Box Elder County and Perry City Flood Control District Proposed Flood Debris Basins

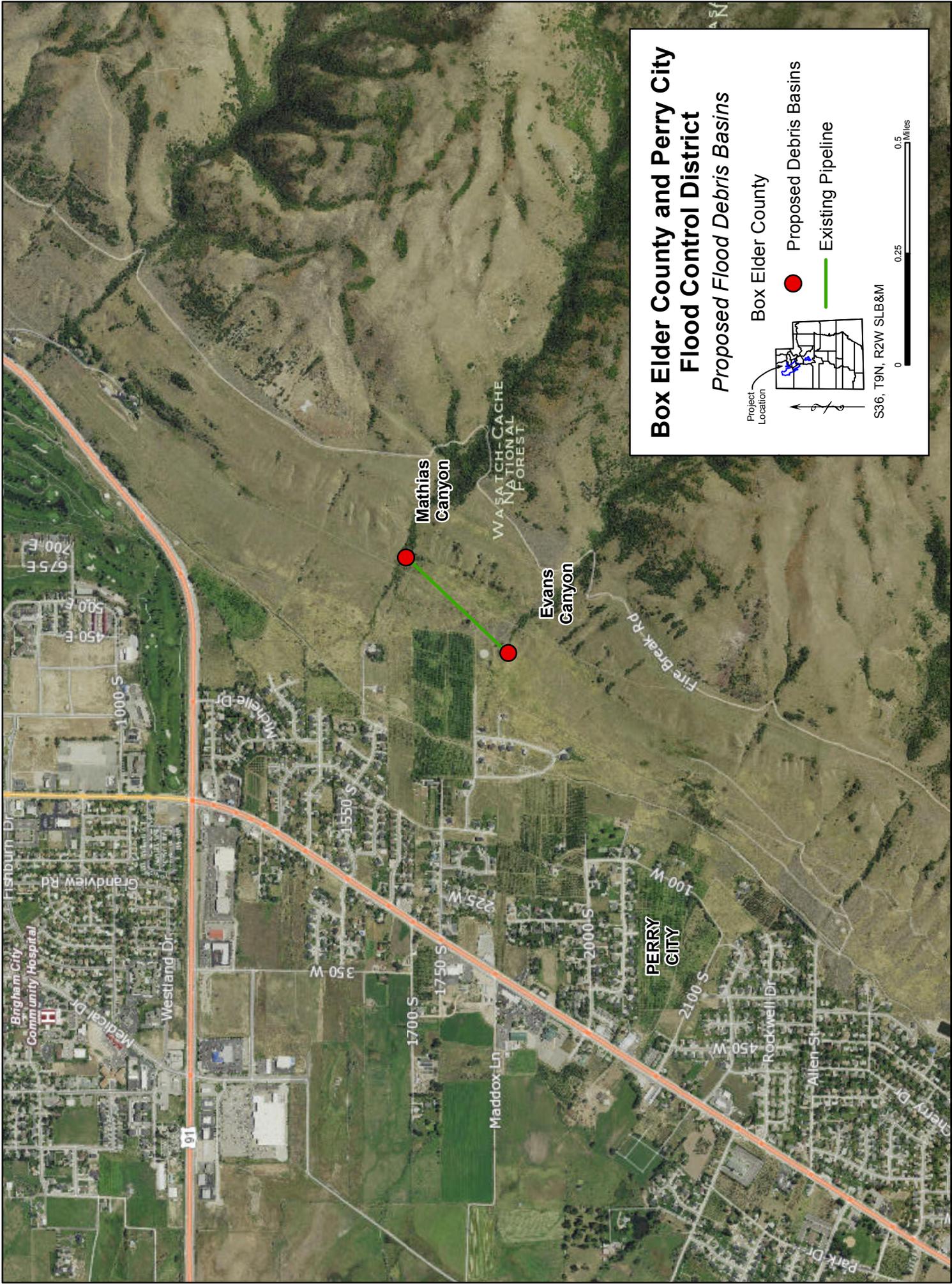
Box Elder County

- Proposed Debris Basins (Red Dot)
- Existing Pipeline (Green Line)

Project Location



S36, T9N, R2W SLB&M



BOARD OF WATER RESOURCES

Committal of Funds

Conservation and Development Funds

Appl. No.: **E-351**
Received: 4/9/14
Approved: 5/8/14
Authorized: 3/18/15

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **CACHE HIGHLINE WATER ASSOCIATION**

President: Keith Meikle
1285 East 4500 North
Hyde Park, UT 84318
Phone: 435-881-1070

LOCATION: The proposed project is located in North Logan and Hyde Park cities in Cache County.

PROJECT: The Logan & Northern Canal Company (LN) and the Logan,
SUMMARY: Hyde Park, Smithfield Canal Company (LHPS) merged to become the Cache Highline Water Association in order to facilitate a project connecting their two canals after a break rendered the LN Canal unusable.

The project included moving the LN point of diversion upstream 1.6 miles to the existing LHPS diversion point. The diversion structure was rebuilt and the LHPS canal enclosed from there to 1500 North in Logan, carrying the combined canal flows. At 1500 North the LHPS water continues in an open canal and the LN water is carried via pipe downhill to the LN canal.

The LHPS canal carries up to about 65 cfs of Logan River water north to Smithfield. About 2/3 of the canal's 4,000 shares are dedicated to secondary use, with the rest used for agriculture. Top shareholders include Smithfield City, Utah State University (USU), Logan City, Logan Golf & Country Club, and Smithfield Irrigation Company.

The LN canal carries up to 60 cfs north, with its final shareholder being Richmond Irrigation Company. About 2.6 miles of the LN canal were piped in the recent project, while the remaining 10.4 miles are mostly earthen, with seepage losses estimated to be approximately 30% in unlined areas.

The sponsor is authorized for financial assistance to make improvements to the LN canal by pressure piping and metering a 4.2 mile-long section of canal with 12 to 34-inch HDPE pipe. This project will be the second phase of a multi-phase project to pipe or line all of the sponsor's canals.

COST ESTIMATE
& SHARING:

The cost estimate and sharing remain as authorized:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$2,150,000	60.9%
WaterSMART Grant	1,000,000	28.3
Sponsor	<u>380,000</u>	<u>10.8</u>
TOTAL	\$3,530,000	100.0%

PURCHASE
AGREEMENT:

If the board commits funds to the project, it is suggested the loan terms provide 60.9% of the total project cost, up to a maximum of \$2,150,000, and that the project be purchased at 2% interest over approximately 20 years with annual payments of \$134,800.

Cache Highline Water Association Canal Improvement Project



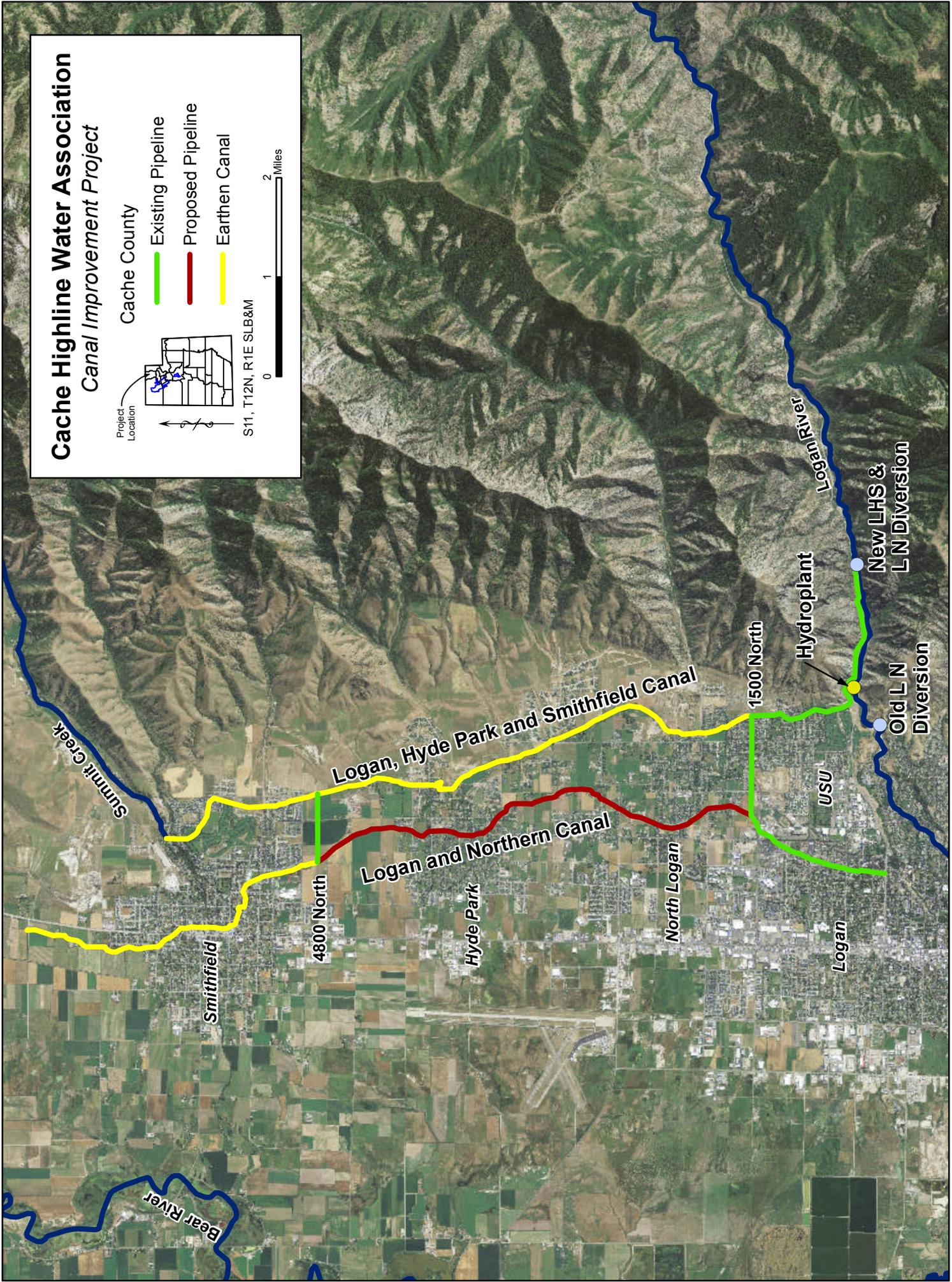
Cache County

Existing Pipeline

Proposed Pipeline

Earthen Canal

S11, T12N, R1E SLB&M



BOARD OF WATER RESOURCES

Special Item

Bond Amendment

Cities Water Loan Fund

Appl. No.: **E-277**
Received: 4/27/10
Authorized: 5/27/10
Committed: 5/27/10

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **KANE COUNTY WATER CONSERVANCY DISTRICT**

Executive Administrator: Michael E. Noel
190 West Center, Suite 200
Kanab, UT 84741
Phone: 435-644-3996

LOCATION: The project is located in Orderville in Kane County.

PROJECT SUMMARY: In May 2010 the board committed \$297,000 to a project to construct a booster pump station to provide adequate culinary water pressure to the Quarter Circle H Ranch development southeast of Orderville. The developer was supposed to install a complete water system but because of a slowing housing market did not have the funds to do so. It did, however, install the pipelines and a storage tank. The system is tied to Orderville Town's culinary water system and is a benefit to the town. At the time, the town had just completed a water system improvement project of its own and was not in a position to take on any more debt. The Kane County Water Conservancy District stepped in to be the project funding sponsor.

The developer and the district executed an agreement that stated the developer would make annual payments to the district which, in turn, would make the annual board bond payments. Three payments have been made to the board; however, the developer has only made one payment to the district and has since filed for

bankruptcy. The district is uncertain when it will be reimbursed by the developer and is requesting the board amend the bond terms reducing the current interest rate from 4% to 0%.

REPAYMENT:

The current bond terms require the district to repay the \$297,000 bond over 10 years at 4% interest with annual payments of approximately \$41,100. The district is current with its bond payments and the reserve account is fully funded. If the board agrees to amend the bond terms, it is suggested the \$228,000 bond balance will be returned at 0% interest over seven years with annual payments of \$32,000 for the next six years and \$36,000 the final year.

BOARD OF WATER RESOURCES

Special Item Report

Feasibility Report & Committal of Funds

Revolving Construction Fund

Appl. No.: **E-370**

Received: 4/8/15

Approved: 5/7/15

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **DANIEL IRRIGATION COMPANY**

President: Hugh Barker

LOCATION: The proposed project is located approximately 4.5 miles southeast of Heber City in Wasatch County.

EXISTING CONDITIONS & PROBLEMS: The sponsor delivers irrigation water from Daniels Creek to over 1,800 agricultural acres through 1.3 miles of open canal, three regulating ponds, and approximately 20 miles of buried pressurized pipe. The 1.3-mile open canal diverts water from Daniels Creek to the middle pond and is the last remaining section of the system that has not been piped. The open canal section is susceptible to high seepage losses and is a safety concern as homes have been built below the hillside where the canal runs.

PROPOSED PROJECT: The sponsor is requesting financial assistance from the board to pipe the 1.3-mile canal, thus reducing seepage losses, pumping costs, and improving public safety.

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

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

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Amount</u>
1.	Mobilization	LS	\$15,000	\$ 15,000
2.	30" ADS Pipe	6,900 LF	26	179,400
3.	Import Bedding	3,400 CY	20	68,000
4.	Installation	6,900 LF	15	103,500
5.	Grading & Seeding	96,000 SF	0.25	<u>24,000</u>
Construction Cost				\$ 389,900
Contingencies				39,000
Environmental				7,500
Legal and Administrative				8,600
Design and Construction Engineering				<u>80,000</u>
TOTAL				\$ 525,000

**COST SHARING
& REPAYMENT:**

The recommended cost sharing and repayment are:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$ 240,000	45.7%
WaterSMART Grant	224,318	42.7
Sponsor	<u>60,682</u>	<u>11.6</u>
TOTAL	\$ 525,000	100%

If the board authorizes the project, it is suggested it be purchased at 0% interest over 15 years with annual payments of approximately \$ 16,000.

**FINANCIAL
FEASIBILITY:**

The project is not expected to increase crop yields because the sponsor rarely experiences shortages. When flows are insufficient in Daniels Creek, water is pumped into the system from Jordanelle Reservoir by the Central Utah Water Conservancy District. Water conserved by piping the canal is expected to reduce pumping by the conservancy district, but will not financially benefit the sponsor. There may be potential for the sponsor to sell excess water to other users in the future, but there is insufficient information regarding viable buyers to assign a cost/benefit at this time.

A significant benefit of the project will be improved safety, but this is not a quantifiable financial benefit that can be used to set repayment terms. The sponsor plans to increase assessments to pay for the project. The suggested repayment terms of 0% interest over 15 years would result in an assessment

increase of \$2.22/share. Current assessments are \$9/share.

BENEFITS: The proposed project will reduce seepage and evaporation losses along the 1.3-mile canal to be piped. This will reduce the amount water needing to be pumped from Jordanelle Reservoir. The project will enhance public safety by enclosing the canal and preventing seepage near adjacent homes.

PROJECT SPONSOR: The Daniel Irrigation Company has been operating for well over 100 years and the main water right goes back to 1879. The sponsor currently serves 327 shareholders owning 7,200 shares and irrigating over 1,800 acres, and is in good standing with the state Department of Commerce.

The board has funded three previous projects for the sponsor in 1953, 1968, and 1977. All assistance has all been returned.

WATER RIGHTS & SUPPLY: The sponsor's water right associated with the canal is WR#55-9665 for 54 cfs from Daniels Creek.

EASEMENTS: The proposed pipeline will be installed in the existing canal alignment and it is anticipated that no additional easements will be necessary.

ENVIRONMENTAL: The proposed project is expected to cause minimal impact to the surrounding environment because the pipeline will be installed in the existing canal alignment. A detailed environmental study will be completed in preparation for the design.

WATER CONSERVATION: The project is estimated to conserve approximately 2,000 acre-feet due to reduced seepage and evaporation losses by piping the canal.

SPONSOR'S RESPONSIBILITIES: If the board authorizes the proposed project, the sponsor must do the following before construction can begin:

1. Obtain all easements, rights-of-way, and permits required to construct, operate, and maintain the project.
2. Pass a resolution by the appropriate (as defined in the company's Articles of Incorporation and Bylaws) majority of company stock 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 Section 73-10-33, Section 10-9a-211, and Section 17-27a-211 of the Utah Code.

4. Obtain approval of final plans and specifications from the Division of Water Resources.

5. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

6. Be in compliance with Section 73-10-33, Section 10-9a-211, and Section 17-27a-211 of the Utah Code governing canal safety.

STAFF COMMENTS: The sponsor has been awarded a WaterSMART grant and plans to start construction before the next board meeting in August. Staff therefore recommends that, if the board authorizes the project, it also consider committing funds.

PROJECT CONTACT PEOPLE:	President:	Hugh Barker 80 East Little Sweden Road Heber City, UT 84032 Phone: 435-654-0520
	Secretary:	Darlene Luke 2370 South Daniel Road Heber City, UT 84032 Phone: 435-654-2996
	Engineer:	Ryan Taylor, Epic Engineering 50 East 100 South Heber City, UT 84032 Phone: 435-602-2896



Daniel Irrigation Company

Canal Ripping Project

Wasatch County

Middle Pond

Daniel Creek

Proposed Pipeline



S22 & 27, T4S, R5E SLB&M



BOARD OF WATER RESOURCES

Special Item

Change in Repayment Terms

Conservation and Development Fund

Appl. No.: **E-280**
Received: 5/11/10
Authorized: 6/7/12
Committed: 8/14/14

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **NEWTON WATER USERS ASSOCIATION**

President: Val Jay Rigby
Box 81
Newton, UT 84327
Phone: 435-563-9293

LOCATION: The proposed project is located around Newton Town in Cache County.

SUMMARY: The sponsor requested financial assistance from the board to pipe about 8.6 miles of open canals with 48-inch to 6-inch HDPE pipe. Water is supplied by Newton Reservoir.

Approximately 3,708 acres of agricultural land and the lawns and gardens of 260 homes are served, represented by 4,640 total shares of company stock.

The cost estimate and sharing were committed as follows:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$3,060,000	85%
Sponsor	<u>540,000</u>	<u>15</u>
TOTAL	\$3,600,000	100%

The purchase agreement states the project is to be purchased at 2% interest over 20 years with annual

payments of approximately \$188,000. This repayment is equal to about \$40.52/share or about \$47.38/acre. The sponsor states there would also be a \$4/share assessment to cover operation and maintenance of the system.

The sponsor is requesting its repayment terms be changed to 1% interest over 25 years. The sponsor was recently awarded a WaterSMART grant of \$300,000 towards the project. This grant reduces both the board's cost share and the sponsor's share proportionally. Therefore, the cost estimate and sharing would be as follows:

<u>Agency</u>	<u>Cost Sharing</u>	<u>% of Total</u>
Board of Water Resources	\$2,805,000	77.9%
WaterSMART Grant	300,000	8.3
Sponsor	<u>495,000</u>	<u>13.8</u>
TOTAL	\$3,600,000	100%

STAFF'S
RECOMMENDATION:

Based on the fact that the lawn and garden secondary shares are relatively few compared to agricultural shares, the interest rate has been re-calculated as the weighted average of the amount of secondary shares (at 3% interest) and the amount of agricultural shares (at 1% interest), yielding an interest rate of 1.1%.

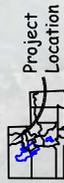
If the board amends the repayment terms, it is suggested the project to be purchased at 1.1% interest over 25 years with annual payments of approximately \$129,000. This repayment is equal to about \$31.80/share or about \$36.51/acre (including the \$4.00 O&M assessment).

Staff reviewed numerous other agricultural projects the board has recently funded and payments within the \$35-40/acre range appear to be reasonable.

NEWTON WATER USERS ASSOCIATION

Proposed Pressurized Pipeline Irrigation System Cache County

- Proposed Pipeline
- Existing Pipeline
- Newton Creek
- Canals

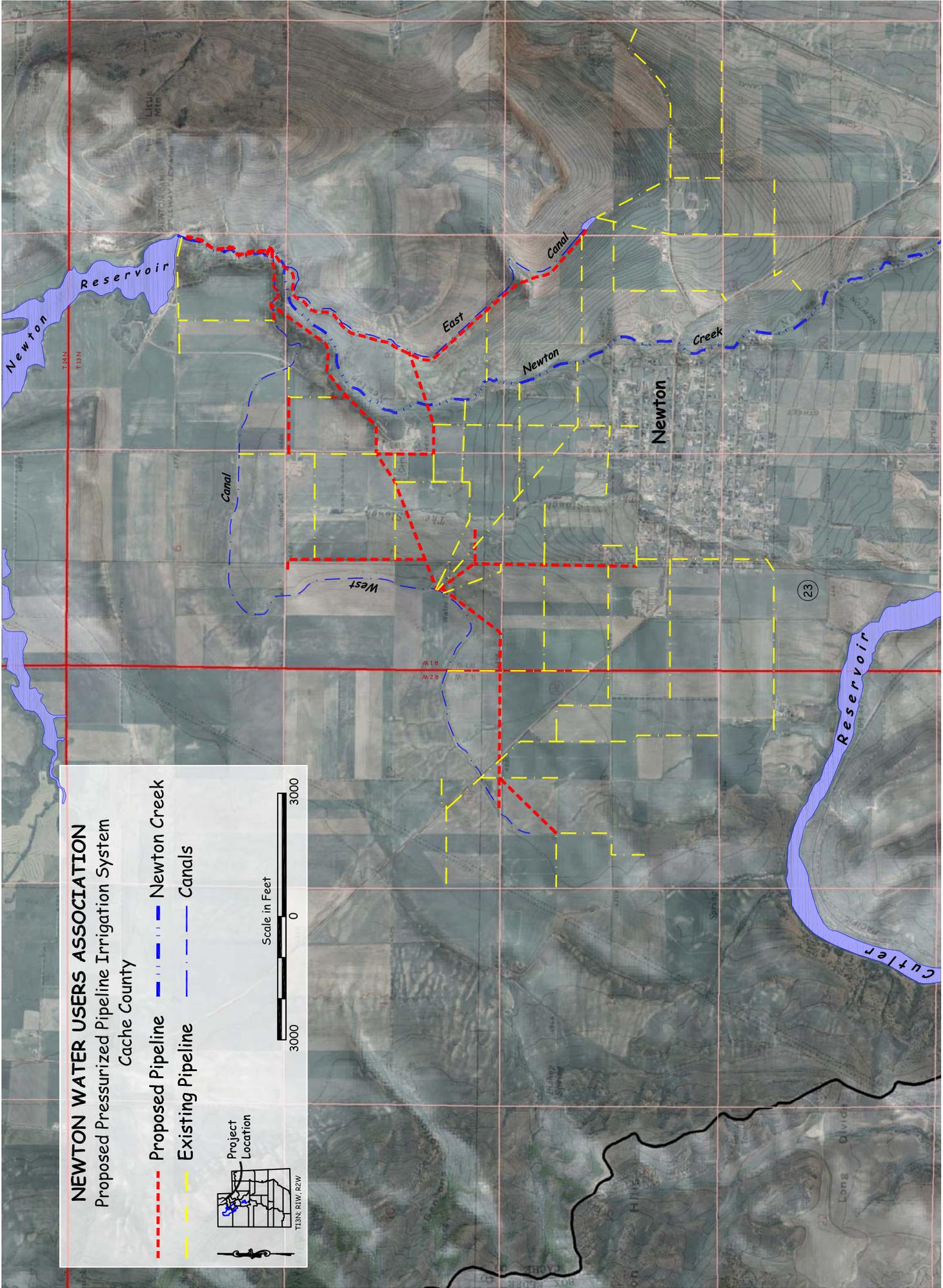


Project Location

Scale in Feet



T13N; R1W; R2W



BOARD OF WATER RESOURCES

Dam Safety Report

Additional Funds

Appl. No.: **C-044**

Committed: 3/20/13

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: ***KAYSVILLE IRRIGATION COMPANY***

President: Michael Roueche
23 East Center Street
Kaysville, UT 84037
Phone: 801-544-8873

LOCATION: Kaysville Dam is located in Kaysville City in Davis County.

SUMMARY: In March 2013 the board committed dam safety grant funds for upgrades to Kaysville Dam. The cutoff trench, spillway, and embankment have been constructed but during the excavation additional work was required to remove unsuitable soils and replace with suitable material. This extended the work an estimated 33 days in addition to other change orders. The contractor plans to resume construction soon to install the upstream liner and it is anticipated that \$301,500 in additional dam safety funds will be needed to complete the project.

COST SHARING & REPAYMENT: The committed and proposed cost sharing and repayment are:

	Committed	% of	Proposed	% of
<u>Agency</u>	<u>Cost Sharing</u>	<u>Total</u>	<u>Cost Sharing</u>	<u>Total</u>
BWRe Grant	\$ 2,250,000	90%	\$ 2,551,500	90%
Sponsor	250,000	10	283,500	10
TOTAL	\$ 2,500,000	100%	\$ 2,835,000	100%

If the board commits the additional \$301,500, it is proposed the board increase the dam safety grant to \$2,551,500.

BOARD OF WATER RESOURCES

Dam Safety Report

Additional Funds

Appl. No.: **C-045**
Received: 5/30/13
Authorized: 8/8/13
Committed: 8/8/13
Amended: 9/15/14

To be Presented at the June 18, 2015 Board Meeting

SPONSOR: **RED CREEK IRRIGATION COMPANY**

President: Nathan Robinson
Box 270034
Fruitland, UT 84027
Phone: 435-790-4741

LOCATION: The project is located at Red Creek Dam, about seven miles north of Fruitland in Duchesne County.

SUMMARY: In September 2014 the board amended its agreement with the sponsor to provide a total of \$3,122,000 in dam safety grant funds and \$647,000 in loan funds. In October 2014 construction bids came in significantly higher than expected, the winning bid being over \$5 million. The contract price has since been reduced to \$4.6 million, but after including engineering costs, administrative costs, and a contingency, the total project cost is estimated to be \$5,521,000. The dam safety upgrades include a new spillway, seepage collection, raising the dam, seismic protection, installing a downstream berm, and installing a cutoff wall. Construction is moving along and the project is approximately 60% complete. The sponsor is requesting an additional \$1,700,000 in dam safety funding from the board to complete the project.

COST ESTIMATE
& SHARING:

The contracted and proposed cost sharing are:

<u>Agency</u>	<u>Contracted Cost Sharing</u>	<u>% of Total</u>	<u>Proposed Cost Sharing</u>	<u>% of Total</u>
BWRe Loan	\$ 647,000	16.9%	\$ 817,000	14.8%
BWRe DS Grant	3,122,000	81.7	4,562,000	84.3
Sponsor	52,000	1.4	52,000	0.9
TOTAL	\$3,821,000	100%	\$5,521,000	100%

Current terms for the \$647,000 board loan are 0% interest over 35 years with annual payments of approximately \$18,500. If the board commits the additional \$1,700,000, it is proposed the dam safety grant be increased to \$4,562,000 and the loan to \$817,000, to be repaid at 0% interest over 35 years with annual payments of approximately \$23,400.