

A G E N D A

UTAH BOARD OF WATER RESOURCES

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

May 12, 2016

1:00 p.m.

1. CALL TO ORDER
2. APPROVAL OF MINUTES - March 16, 2016
3. CHAIR'S REPORT
4. WATER SUPPLY REPORT Randy Julander
5. FEASIBILITY REPORT County
E362 Moon Lake Water Users Assoc. Duchesne
6. DAM SAFETY REPORTS
C045 Red Creek Irr. Co. (Red Creek Dam) Duchesne
C044 Kaysville Irr. Co. (Kaysville Dam) Davis
7. LAKE POWELL PIPELINE PROJECT REPORT
8. WATER CONSERVATION UPDATE
9. DIRECTOR'S REPORT
10. ADJOURNMENT

BRIEFING MEETING AGENDA

UTAH BOARD OF WATER RESOURCES

Division of Water Resources
Room 314
1594 W. North Temple
Salt Lake City, Utah

May 12, 2016

10:30 a.m.

- I. WELCOME/CHAIR'S REPORT Chairman Lemmon

- II. DISCUSSION OF PROJECTS

- III. OTHER ITEMS

BOARD OF WATER RESOURCES

REVOLVING CONSTRUCTION FUND

**Funding Status
May 12, 2016**

Funds Available for Projects This FY \$ 12,159,000

Projects Contracted This FY

1 Kaysville Irrigation Co (additional funds)	E044	**Grant	\$ 301,500	
2 New Escalante Irrigation Co (additional funds)	C035	**Grant	88,000	
3 North Utah County WCD (Silver Lake Flat)	C048	**Grant	1,481,000	
4 Red Creek Irrigation Co (additional funds)	C045	**	170,000	
5 Red Creek Irrigation Co (additional funds)	C045	**Grant	1,530,000	
6 Red Creek Irrigation Co	E356		493,000	
Total Funds Contracted				\$ 4,064,000
Funds Balance				\$ 8,095,000

Projects with Funds Committed

1 Bear River Canal Co	E377		\$ 659,000	
2 Daniel Irrigation Co	E370		240,000	
* 3 Kaysville Irrigation Co (additional funds)	C044	**Grant	166,500	
4 Marion Waterworks Co	E322		247,000	
5 North Utah County WCD (Tibble Fork)	C052	**Grant	1,512,000	
6 Ouray Park Irrigation Co (Cliff Lake)	C047	**Grant	968,000	
7 Ouray Park Irrigation Co (Cliff Lake)	C047	**	107,000	
* 8 Red Creek Irrigation Co (additional funds)	C045	**	54,500	
* 9 Red Creek Irrigation Co (additional funds)	C045	**Grant	490,500	
10 Rockville Town Ditch Co	E313		145,000	
Total Funds Committed				\$ 4,590,000
Funds Balance				\$ 3,505,000

Projects Authorized

1 Ephraim Irrigation Co	E361		\$ 497,000	
* 2 Moon Lake Water Users Association	E362		403,000	
3 Salem Pond Co	E329		93,000	
4 Settlement Canyon Irrigation Co	E240R2		552,500	
Total Funds Authorized				\$ 1,546,000
Remaining Funds Available				# \$ 1,959,000

* 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
May 12, 2016

Funds Available for Projects This FY \$ 10,203,000

Bonds Closed This FY

1 Weber-Box Elder WCD	E326	\$ 1,700,000	
Total Bonds Closed			\$ 1,700,000
Funds Balance			\$ 8,503,000

Projects with Funds Committed

1 NONE			
Total Funds Committed			\$ -
Funds Balance			\$ 8,503,000

Projects Authorized

1 Duchesne County WCD	E334	\$ 3,000,000	
2 Herriman City	E344	4,930,000	
Total Funds Authorized			\$ 7,930,000
Remaining Funds Available		#	\$ 573,000

* 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
May 12, 2016**

Funds Available for Projects This FY \$ 37,674,000

Projects Contracted/Bonds Closed This FY

1 Cache Highline Water Association	E351	\$ 2,150,000	
2 Green River Canal Co	E353	1,200,000	
3 Lake Creek Irrigation Co	E333	3,275,000	
4 Levan Irrigation Co (additional funds)	E314	128,000	
5 Newton Water Users Assoc (Reduction)	E280	(255,000)	
6 North Summit Pressurized Irr Co (add funds)	E297	230,000	
7 Richmond Irrigation Co	E347	4,350,000	
8 Wellsville-Mendon Conservation District	E376	850,000	
		<hr/>	
Total Funds Contracted/Closed			\$ 11,928,000
Funds Balance			\$ 25,746,000

Projects with Funds Committed

1 Ephraim Irrigation Co	E352	\$ 2,155,000	
2 Summit Creek Irrigation and Canal Co (Phase 3)	E308	502,000	
		<hr/>	
Total Funds Committed			\$ 2,657,000
Funds Balance			\$ 23,089,000

Projects Authorized

1 Box Elder Cnty & Perry City Flood Control Dist	E223	\$ 660,000	
2 Brooklyn Canal Co	E223	1,000,000	
3 Fremont Irrigation Co	E279	8,177,000	
4 Manti City Creek Water Users Mutal Assoc.	E342	1,606,000	
5 Marion Upper Ditch Company	E367	1,462,000	
6 Rock Point Canal Co	E368	615,000	
7 Settlement Canyon Irr Co (Phase 2)	E240R2	552,500	
8 Summit Creek Irrigation and Canal Co (Phase 4)	E308	1,200,000	
9 Uintah WCD	E316	36,550,000	
10 Weber Basin WCD (Phase 5+)	E225	7,000,000	
11 Whiterocks Irr Co	E375	1,785,000	
12 Woodruff Irrigating Co	E365	3,200,000	
		<hr/>	
Total Funds Authorized			\$ 63,808,000
Remaining Funds Available			# \$ (40,719,000)

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

End of year balance if all listed projects were fully paid

BOARD OF WATER RESOURCES

May 12, 2016

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 Kane County WCD	D828	C&D	1,500,000	2,000,000
3 Weber Basin WCD (Secondary, Ph 3-5)	E029R3+	C&D	21,639,000	25,816,000
4 Hooper Irr Co (Press Irr, Ph 3+)	E060R3+	C&D	11,033,000	12,980,000
5 East Juab County WCD	E071	C&D	425,000	500,000
6 Parowan City (Bond Ins Grant)	E121	C&D	34,000	2,034,000
7 Fremont Irr Co	E131	C&D	1,500,000	2,000,000
8 Fountain Green Irr Co (Flow Augment)	E186	RCF	75,000	100,000
9 Corinne City	E216	C&D	80,000	100,000
10 Weber Basin WCD	E312	C&D	85,000,000	100,000,000
11 South Willard Water Co	E317	C&D	1,700,000	2,000,000
12 Ferron Canal & Res Co	E320	C&D	2,720,000	3,200,000
13 Fountain Green Co-op Well	E328	RCF	255,000	300,000
14 Co-op Farm Irrigation Co	E340	RCF	159,000	187,000
15 La Sal Irrigation Co	E354	C&D	1,530,000	1,800,000
16 New Fayette Irrigation Co	E360	C&D	850,000	1,000,000
17 Wellsville-Mendon Conservation District	E364	C&D	680,000	800,000
18 Washington County Flood Control Authority	C049	RCF	970,000	3,077,000
19 Washington County Flood Control Authority	C050	RCF	582,000	1,847,000
20 Washington County Flood Control Authority	C051	RCF	473,000	1,500,000
21 Highline Canal Co	E372	C&D	3,087,000	13,942,000
22 Ashley Upper Irr Co	E373	C&D	5,255,000	13,942,000
23 Mosby Irr Co	E374	RCF	331,000	4,379,000
24 Benson Irr Co	E378	C&D	1,250,000	2,446,000
25 East Wanship Irr Co	E379	RCF	645,000	950,000
26 Blanding Irr Co	E380	RCF	374,000	440,000
27 Silver Creek Reservoir Co	E381	RCF	500,000	1,090,000
28 Spanish Fork South Irr Co	E382	RCF	885,000	1,185,000
29 O.T. Hicken Ditch Co	E383	RCF	430,000	990,000
30 Scipio Irr Co	E384	C&D	1,660,000	2,950,000
31 Woodruff Irr Co	E385	C&D	5,000,000	6,885,000
Subtotal			\$179,947,000	\$ 244,940,000

* New Application

INACTIVE PROJECTS

Long Term Large Water Conservation Projects

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

Revolving Construction Fund

Appl. No.: **E-362**
Received: 9/30/14
Approved: 10/9/14

To be Presented at the May 12, 2016 Board Meeting

SPONSOR: **MOON LAKE WATER USERS ASSOCIATION**

President: Shawn McConkie

LOCATION: The proposed project is located about 20 miles northwest of Roosevelt in Duchesne County.

EXISTING CONDITIONS & PROBLEMS: The Moon Lake Water Users Association delivers water from the Lake Fork and Yellowstone rivers and from Moon Lake, Big Sand Wash, and Browns Draw reservoirs to irrigate approximately 75,000 acres for eight private companies (about 625 shareholders) in Duchesne and Uintah counties.

The sponsor delivers water from the Yellowstone River through the Yellowstone Feeder Canal to about 14,500 acres in eastern Duchesne and western Uintah counties. The canal loses an estimated 30-40% of its flow to seepage and leaks. In the last few years the sponsor has had to make some patch repairs in the areas with the highest losses. Last year a significant leak was discovered and the sponsor is concerned about the integrity of the canal.

PROPOSED PROJECT: The sponsor is requesting financial assistance from the board to install a geomembrane liner with a shotcrete cover along approximately 5,100 feet of the Yellowstone Feeder Canal. Jones & DeMille, Inc. is providing design and construction engineering services.

The project fits in Prioritization Category 3 (agricultural project that will provide significant economic benefit to the area).

COST ESTIMATE: The following cost estimate was prepared by the engineer 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	\$30,000	\$ 30,000
2.	Cutoff Walls	LS	2,000	2,000
3.	Canal Liner	128,000 SF	1.00	128,000
4.	Install Liner	128,000 SF	0.25	32,000
5.	Install Shotcrete	1,500 SF	260	390,000
6.	Road Reconstruction	LS	10,000	<u>10,000</u>
Construction Cost				\$592,000
Contingencies				38,000
Environmental				20,000
Legal and Administrative				10,000
Design and Construction Engineering				<u>100,000</u>
TOTAL				\$760,000

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	\$403,000	53.0%
WaterSMART Grant	287,000	37.8
Sponsor	<u>70,000</u>	<u>9.2</u>
TOTAL	\$760,000	100%

If the board authorizes the project, it is suggested the board provide 53% of the project cost up to \$403,000, with the project to be purchased at 0% interest over approximately 15 years with annual payments of \$26,900.

FINANCIAL FEASIBILITY: There will be a significant reduction in recent operation and maintenance costs with the project, as well as significant water savings; however, the monetary benefit to the sponsor is difficult to quantify as the sponsor acts as a wholesale supplier and water is sold by shares not volume. A repayment period of 15 years is suggested, resulting in an annual repayment of \$26,900. This is equivalent to about \$1.85/share. The current assessment is \$8.50/share.

BENEFITS: The project will reduce seepage and leakage losses by as much as 3,000 acre-feet. It will also reduce recent operation and maintenance costs significantly and improve the integrity of the canal.

PROJECT SPONSOR: The Moon Lake Water Users Association was formed by eight private companies in 1910 and is currently registered in good standing with the state Department of Commerce. The delivery system was constructed in 1910-1911.

The board has funded six projects for the sponsor since 1963, which have included Big Sand Wash and Browns Draw dams, dam repairs, and dam safety upgrades. The project to build the Browns Draw Dam is currently being paid through 2031 with annual payments of about \$103,000. A project to install a pipeline connecting the Big Sand Wash Reservoir to Lake Fork River is being repaid through 2024 with annual payments of \$34,000.

WATER RIGHTS & SUPPLY: The sponsor has the following water rights related to the project: 43-3027, -3028, -3031, -3117, and -387.

EASEMENTS: No new easements and/or rights-of-way will be required for the project, as the existing canal will be upgraded.

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 CONSERVATION: The project will conserve as much as 3,000 acre-feet currently lost to seepage and leaks.

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.

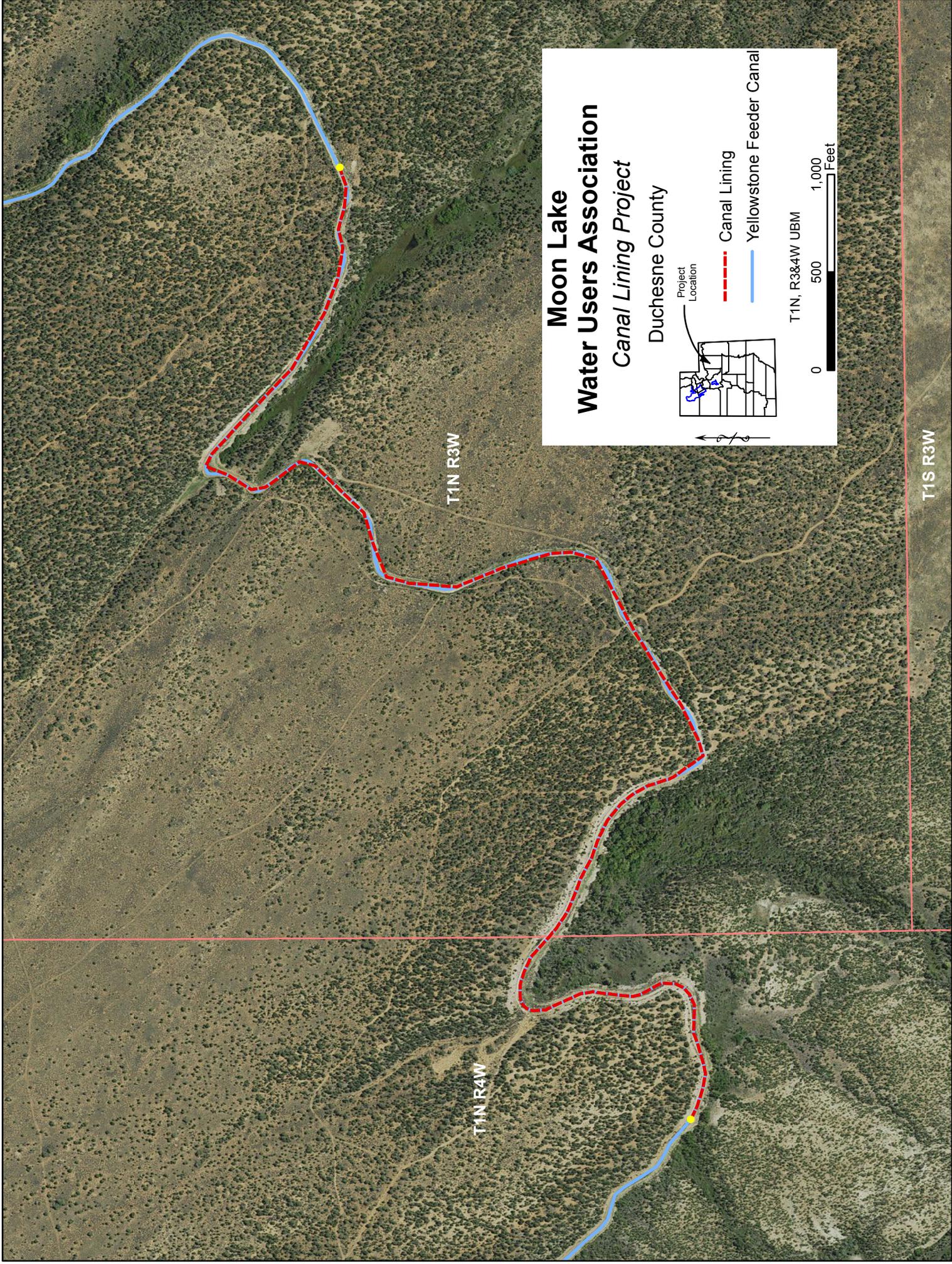
5. Prepare a water management and conservation plan for its service area, and obtain approval of it from the Division of Water Resources.

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.

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

PROJECT
CONTACT
PEOPLE:

President:	Shawn McConkie P.O. Box 235 Roosevelt, UT 84066 Phone: 435-722-2002
Secretary:	Dex Winterton P.O. Box 235 Roosevelt, UT 84066 Phone: 435-722-2002
Engineer:	Eric Major Jones & DeMille, Inc. 45 South 200 West Roosevelt, UT 84066 Phone: 435-722-8267
Attorney:	Shawn Draney Snow, Christensen & Martineau 10 Exchange Place, 11 th Floor Salt Lake City, UT 84111 Phone: 801-521-9000



**Moon Lake
Water Users Association
Canal Lining Project**

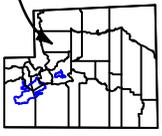
Duchesne County

Project Location

- - - Canal Lining
- Yellowstone Feeder Canal

0 500 1,000 Feet

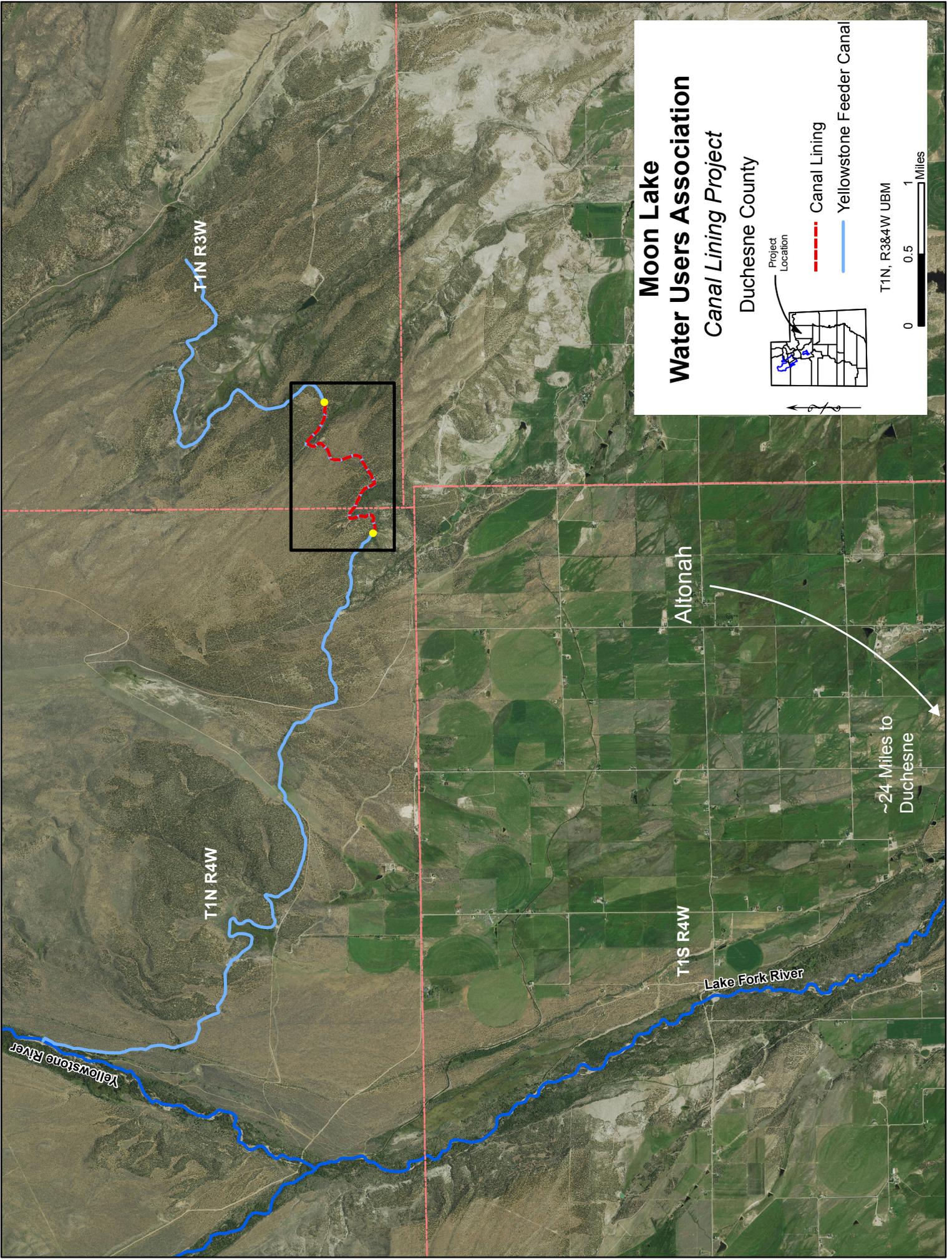
T1N, R3&4W UBM



T1N R3W

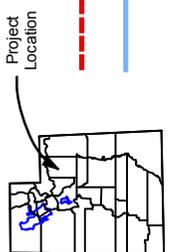
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Moon Lake Water Users Association Canal Lining Project

Duchesne County



- Canal Lining
- Yellowstone Feeder Canal

T1N, R3&4W UBM



Altonah

~24 Miles to
Duchesne

T1N R3W

T1N R4W

T1S R4W

Lake Fork River

Yellowstone River

BOARD OF WATER RESOURCES

Dam Safety Report

Additional Funds

Revolving Construction Fund

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

To be Presented at the May 12, 2016 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: Dam safety funding was authorized and committed by the board in August 2013 to repair sinkholes that developed near the spillway and seepage along the toe at Red Creek Dam. Since that time additional problems have been discovered on-site during final stages of construction. Additional filter sand, riprap, embankment fill, work on a stabilization cap for the bentonite cutoff wall, fencing, and corresponding increases in engineering time were required, resulting in costs increasing by almost \$545,000. The total cost has increased from \$5,521,000 to \$6,066,000. The sponsor is requesting additional dam safety grant and loan funds to pay these costs.

COST ESTIMATE & SHARING: The contracted and proposed cost sharing are:

<u>Agency</u>	<u>Contracted Cost Sharing</u>	<u>Proposed Cost Sharing</u>
BWRe Loan	\$ 817,000	\$ 871,500
BWRe DS Grant	4,652,000	5,142,500
Sponsor	52,000	52,000
TOTAL	<u>\$5,521,000</u>	<u>\$6,066,000</u>

PURCHASE
AGREEMENT:

Current terms for the \$817,000 board loan are 0% interest over 35 years with annual payments of approximately \$23,400. If the board commits the additional \$545,000, it is proposed the dam safety grant be increased to \$5,142,500 and the loan to \$871,500, which will be returned at 0% interest over approximately 35 years with annual payments of \$24,900.

BOARD OF WATER RESOURCES

Dam Safety Report

Additional Funds

Appl. No.: **C-044**
Committed: 3/20/13
Amended: 6/18/15

To be Presented at the May 12, 2016 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. Work on the dam has been completed and the State Engineer's office has given official notice of acceptance of the project. Due to change orders and agreed upon construction modifications, project costs have increased by about \$185,000. The sponsor is requesting \$166,500 in additional dam safety funds to make final payments to the engineer and contractor.

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

<u>Agency</u>	<u>Committed Cost Sharing</u>	<u>% of Total</u>	<u>Proposed Cost Sharing</u>	<u>% of Total</u>
BWRe Grant	\$ 2,551,500	90%	\$ 2,718,000	90%
Sponsor	283,500	10	302,000	10
TOTAL	\$ 2,835,000	100%	\$ 3,020,000	100%

If the board commits \$166,500 in additional dam safety grant funds, it is proposed the board increase the dam safety grant to \$2,718,000.