Bureau of Reclamation

U.S. Department of Interior Policy and Administration Denver, Colorado

WaterSMART

Water and Energy Efficiency Grants for FY 2021 FOA No. BOR-DO-21-F001

Ashley Upper and Highline Canals Metering Project

Uintah Water Conservancy District

78 West 3300 North Vernal, UT 84078

Mr. William Merkley, General Manager

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September 16, 2020

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I. TECHNICAL PROPOSAL AND EVALUATION CRITERIA

(1) EXECUTIVE SUMMARY

General Information

Project Name:	Ashley Upper and Highline Canals Metering Project
Sponsor:	William Merkley, General Manager
	Uintah Water Conservancy District
	78 West 3300 North
	Vernal, Utah 84078

Background

The Vernal Unit of the Central Utah Project (Vernal Unit) was constructed by the Bureau of Reclamation (Reclamation) in the early 1960's. Vernal Unit irrigation water is delivered to irrigators throughout Ashley Valley from Steinaker Reservoir through the Steinaker Service Canal and private irrigation company canals (directly or by exchange), including the Ashley Upper and Highline Canals.

Rehabilitation of the Ashley Upper and Highline Canals is currently underway utilizing funds from Reclamation's Colorado River Basin Salinity Control Program. This "Ashley Upper and Highline Canals Rehabilitation Project" (FOA No. R15AS00037) consists of constructing a new diversion structure on Ashley Creek to divert water into the two canals and then replacing about 27 miles of unlined, earthen canals with pipelines. The piped canals will be pressurized systems controlled by four pressure reducing valve stations. Individual stockholder turnouts will be constructed with a tee from the main pipeline. Construction is anticipated to begin by October 1, 2020.

Proposed Project

The proposed project consists of installing electronic flow meters at each of the 180 shareholder turnouts. Digital displays at each meter location will enable company water masters to accurately monitor, control, and record water deliveries. In addition, it is proposed to install an electric actuator for control of a large radial gate on the Ashley Creek diversion. This is needed to ensure safety and ease of operation for the Ashley Creek River Commissioner and company personnel.

Project Cost

Cost of the project is estimated at \$844,342 with costs shared equally between Reclamation and the District.

Project Schedule

The project is ready to move forward with approval of the proposed funding. Construction is anticipated to begin following award approval and be completed by June 2022.

(2) PROJECT LOCATION

The proposed project is located along the western foothills of Vernal Utah as shown in Figure 1.

(3) TECHNICAL PROJECT DESCRIPTION

Description of Canal Facilities

Ashley Upper Canal Diversion

The Ashley Upper Canal Diversion is located on the west bank of Ashley Creek. This diversion structure, along with the Ashley Upper Canal, has provided flood irrigation flows to the Vernal valley for over 100 years. The State Engineer, Utah Division of Water Rights, regulates the diversion structure.

<u>Ashley Upper Canal</u> - The Ashley Upper Canal traverses approximately 13.1 miles along the west foothills and then through the southern part of Ashley Valley. Capacity of the canal is about 135 cfs at the head and diminishes as diversions are made along the reach of the canal. The Colton Ditch Irrigation Company water is also conveyed in the Ashley Upper Canal to the Colton Ditch turnout, located approximately two miles downstream of the Ashley Creek Diversion.

<u>Highline Canal</u> - The Highline Canal traverses approximately 16.2 miles along the west foothills of the Ashley Valley. The canal is earth-lined for most of its length. Capacity of the Highline Canal is approximately 80 cfs and diminishes as diversions are made along the length of the canal. Alta Ditch water is also carried in the Highline Canal to the areas served by the original Alta Ditch.

Background

Rehabilitation of the Ashley Upper and Highline Canals is currently under way with funding from Reclamation's Colorado River Basin Salinity Control Program (FOA No. R15AS00067). This project consists of constructing a new diversion structure on Ashley Creek to divert water into the two canals and then replacing about 27 miles of the existing unlined, earthen channels with pressurized pipe. The pipelines will range from 48"-12" HDPE. The piped canals will be pressurized systems controlled by four pressure reducing valve stations. Two piped interconnections will be constructed to allow the canals to function essentially as one system. Individual stockholder turnouts will be constructed with a tee from the main pipeline. Project construction is expected to begin October 1, 2020 and be complete by June 1, 2022.

The total cost of the Ashley Upper and Highline Canals Rehabilitation Project described above is \$19,968,315. Of this amount, \$3,514,847 (17.6%) comes from Reclamation's salinity program with the balance of \$16,453,468 (82.4%) coming from the other cost share partners. The proposed metering project supports and significantly improves the efficiency of this massive infrastructure investment.

Upper Ashley and Highline Canals Existing Irrigation Delivery System Legend Highline Canal Steinaker Service Canal Ashley Upper Canal ortho_1-1_1n_s_ut047_2011_1

Figure 1 – Existing Irrigation Delivery System

Uintah Water Conservancy District

Proposed Project

The proposed project consists of installing electronic flow meters at each of the 180 shareholder turnouts. Digital displays at each meter location will enable company water masters to accurately monitor, control, and record water deliveries. In addition, it is proposed to install an electric actuator for control of a large radial gate on the Ashley Creek diversion. This is needed to ensure safety and ease of operation for the Ashley Creek River Commissioner and company personnel. A list, showing type and size of each meter, is shown in Table 1 and the location of each meter is shown in Figure 2.

Schedule

The project is ready to move forward with approval of the proposed funding. Construction is anticipated to begin following award approval and be completed by June 2022.

Table 1												
List of Meters												
Ashley Upper and Highline Canals Metering Project												
Size			Ma	inline	Diame	ter		Subtotal	Total	Meter	Type ²	
5120	Type	12	24	30	36	48	Other	Subtotal	Total	McPropeller	Mc Mag3000	
2"	РС			13	10	10	3	36	36	Х		
۸"	РС	1		2	9	3		15	16		v	
4	PP				1			1	10		~	
	GD			2	1	1		4				
6"	GP			1		1		2	10		v	
0	PC			2	3	2		7	19		~	
	PP			3	2	1		6				
	GD		2	5	21	7		35				
0"	GP	1	1	1	2	2		7	60	60		v
0	PC		1		2	4		7	00		~	
	PP			3	4	4		11				
	GD				4	1		5				
10"	GP			1	1	3		5	77		v	
10	PC			1	1	2		4	27	27		~
	PP				6	7		13				
	GD			1	2			3				
12"	GP		2					2	14		Х	
	PP				6	3		9				
	GD				1			1				
18"	GP		1	2				3	5	Х		
	PC				1			1				
2//"	GD		1	1				2	3	x		
24	PC				1			1	3	^		
Totals									180			
¹ Type: G	D = Gra	wity to	Ditch,	GP = G	iravity	to Pip	eline, F	PC = Pipel	ine Capp	oed, PP = Pipeli	ne to	



(4) EVALUATION CRITERIA

Each of the eight "evaluation criteria" (A through H) listed in Section E of the WaterSMART 2021 FOA are presented below.

Evaluation Criterion A: Quantifiable Water Savings

Salinity Project

The Soil Conservation Service conducted Highline Canal seepage tests on two separate occasions in two test sections with lengths of over 7 miles. These two tests were conducted in the early spring and late fall. Total water losses in the canal were measured at 34% in one test and 36% in the other test. No tests have been performed on the Ashley Upper Canal, but similar losses can be expected based on water master records and the canal's similar location. Assuming a 35% seepage loss, water saved would average about 10,360 ac-ft per year (35% of 29,600). This saved water would be available to reduce shortages or could be stored in Steinaker Reservoir under authority of a recently executed Warren Act contract between Reclamation and the Uintah Water Conservancy District.

Proposed Project

The proposed project is expected to save an additional 936 ac-ft of water per year currently considered "operational water losses". An average of 31,220 ac-ft/yr of water (24,381 ac-ft/yr Upper Ashley and 6,839 ac-ft/yr for Highline) has historically been diverted from Ashley Creek into the two canals (see Appendix A). Current practice is to estimate the flow rate that is required to meet all water rights in the two canals and then set the gates at a flow rate that ensures the diversion of at least that amount of water. Water in excess of the amount beneficially used by the crops then flows downstream as "operational waste". With individual meters at each diversion point along both canals, a better and more-timely estimate can be made at the water user level with corresponding adjustments made at the diversion structure. The District estimates a savings of about 3 percent of the water currently diverted, or about 936 ac-ft/yr (3% of 31,220).

With the recently executed Warren Act contract between Reclamation and the Uintah Water Conservancy District, any Ashley Upper and Highline Canals water that is considered excess to current need can now be carried through Reclamation facilities and stored in Steinaker Reservoir for use later in the irrigation season.

Evaluation Criterion B: Water Supply Reliability

The proposed project would directly improve the operational efficiency of the Ashley Upper and Highline canal systems which would, due to the more accurate real-time flow measurement, indirectly improve operations of all other irrigation systems in the Ashley Valley. More efficient operations in Ashley Valley would yield benefits in the several areas.

<u>Increased Water Supply</u> – As described above, implementing the proposed project would result in an estimated 936 ac-ft of water saved per year. This saved water could be stored in Steinaker Reservoir for the benefit of the water users and/or other beneficiaries.

<u>Reduced selenium load carried to the Green River</u> – More efficient water management in Ashley Valley would improve the quality of water and levels of selenium contributed by return flows from Ashley Valley to downstream lakes and rivers. The Department of Interior implemented the National Irrigation Drainage Water Quality Program (NIWQP) in 1985 in response to increasing concern about the negative impacts irrigation drainage water quality had on the health of humans, fish, and wildlife in the area. While difficult to quantify, more efficient water management in Ashley Valley would reduce selenium levels carried downstream and thus have a positive effect on local fish and wildlife environment.

<u>Reduce salt load carried to the Colorado River.</u> The proposed improvements to the Ashley Upper and Highline Canals are anticipated to reduce the salinity contributions to the Colorado River by 2,713 tons annually.

<u>Facilitate completion of the Vernal Unit Efficiency Project (VUEP)</u> - VUEP was initiated by the District in 2014 and consists of several interrelated projects designed to improve the efficiency of the Vernal Unit. Enclosing the Ashley Upper and Highline Canals and improving their operational efficiency is one of these identified VUEP projects and will facilitate the completion of two other VUEP project components.

- <u>Uintah County Flood Control</u> Use of the abandoned open sections of the Ashley Upper and Highline Canals is a key component of Uintah County's flood control plan. Abandoned sections will be utilized to safely carry flood waters generated from intense summer storm events and thus reduce impacts in the valley.
- <u>Secondary Irrigation</u> As mentioned in Evaluation Criterion D below, the proposed project will help enable conversion of currently inefficient flood irrigation practices to more efficient systems.

<u>Reduce canal operation and maintenance costs</u> – The proposed metering project, together with the piping of the canals, will significantly reduce water user operation and maintenance costs.

Evaluation Criterion C: Implementing Hydropower

Implementing the proposed project would have no benefit to hydropower generation.

Evaluation Criterion D: Complementing On-Farm Irrigation Improvements

Fully enclosed Ashley Upper and Highline pressurized pipeline systems would improve potential for landowners to convert from their current flood irrigation practices to sprinkler irrigation. An "Estimate of Enabled On-Farm Acreage" table and a corresponding map are included in Appendix D.

Evaluation Criterion E: Department of Interior Priorities and Bureau of Reclamation Priorities

DOI Priorities

<u>DOI Priority 1 – Creating a conservation stewardship legacy second only to Teddy Roosevelt</u> Subsection (d). Review Department water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity

As mentioned in Evaluation Criterion B above, improving the Ashley Upper and Highline Canals is an integral part of the larger Vernal Unit Efficiency Project. This larger project is an attempt, in a relatively small area of Utah, to improve the efficient use of water throughout the area. Much of the framework has been completed – canal lining projects, increased utilization of Reclamation facilities through a now-signed Warren Act contract, working with Uintah County on flood control and secondary irrigation, etc. - and more are currently being planned.

<u>DOI Priority 3 - Restoring Trust with Local Communities</u> – The proposed metering project will provide real-time flow data and make it available to all interested parties. This transparency will help improve/restore trust among Reclamation, the District, local government, water users, and the public.

<u>DOI Priority 5 – Modernizing our Infrastructure</u> – These two canals were constructed as earthen, unlined canals over 100 years ago – Ashley Upper Canal in 1879 and Highline Canal in 1915. The proposed project will help modernize these two canals.

Reclamation Priorities

<u>Reclamation Priority 1 - Increase Water Supplies, Storage, and Reliability under WIIN and other</u> <u>Authorities</u> – The proposed metering project is expected to conserve an estimated 936 ac-ft/yr of water which would be used to reduce irrigation shortages and/or storage in Steinaker Reservoir under the Warren Act.

<u>Reclamation 4 – Address Ongoing Drought</u> – The "saved" and "better-managed" water would be utilized to address the ongoing drought experienced in the Vernal area.

Evaluation Criterion F: Implementation and Results

<u>Subcriterion F.1 – Project Planning</u> - The District prepared a Water Management and Conservation Plan in March 2013. The plan identified thirteen water conservation measures that the District selected for implementation. The proposed project addresses two of the thirteen measures:

• <u>Candidate Measure 3 – Support conveyance system efficiency improvement projects</u> – The proposed project is a clear example of the District supporting the local water users in improving their systems. • <u>Candidate Measure 5 – Implement the Vernal Unit Efficiency Project (VUEP)</u> – Enclosing these two canals, and others in the Ashley Valley, is a critical step in implementing VUEP.

<u>Subcriterion F.2 – Performance Measures</u> – The primary purpose of the proposed project is to save and better manage water. The primary performance measure, therefore, is to improve the accuracy of water measurement in order to better manage the water supply. The District currently computes water losses using flow measurement stations and water balance analysis. Canal losses are recorded on a daily basis. Improving the number of measuring stations and their accuracy is critical to meeting the project objective.

<u>Subcriterion F.3 – Readiness to Proceed</u> – All environmental work has been completed and funding secured for a construction start within 30 days of the execution date of the Financial Assistance Contract.

Evaluation Criterion G: Nexus to Reclamation Project Activities

Vernal Unit Project water is delivered through the Ashley Upper and Highline Canals.

Evaluation Criterion H: Additional Non-Federal Funding (4 points)

The proposal is for the District and Reclamation to equally share project costs as shown in Table 2.

II. PROJECT BUDGET

(1) FUNDING PLAN

The estimated cost of the project is \$844,342 with funding shared equally between Reclamation and the District as shown in Table 2.

Table 2

Summary of Project Funding Sources								
Funding Sources	Funding Amount							
Non-Federal Entities								
Uintah Water Conservancy District	\$422,171							
Requested Reclamation Funding	\$422,171							
Total Project Funding	\$844,342							

(2) BUDGET PROPOSAL

The project cost estimate is shown in Table 3. Total project costs and funding plan are summarized in Table 4.

	Project Cost Estimate														
Materials and Installation															
Sizo	Tuno ¹		Ma	inline	Diame	ter		Subtotal	Total	Meter	[•] Type ²		Init Cost	Total Cost	
5120	туре	12	24	30	36	48	Other	Subtotal	Total	MP	MM	,		Total Cost	
2"	РС			13	10	10	3	36	36	Х		\$	3,353.62	\$ 120,730.32	
4"	PC	1		2	9	3		15	16		x	Ś	3 913 84	\$ 62 621 44	
	PP				1			1	10			Ŷ	0,010.01	<i>v</i> 02,022.111	
	GD			2	1	1	ļ	4							
6"	GP			1		1		2	19		x	Ś	4.154.41	\$ 78,933,79	
	PC			2	3	2		7				Ŧ	.,	<i> </i>	
	PP			3	2	1		6							
	GD		2	5	21	7		35							
8"	GP	1	1	1	2	2		7	60		x	Ś	\$ 4,529.40	\$ 271,764.00	
Ũ	PC		1		2	4		7	00		~	Ŷ			
	PP			3	4	4		11							
	GD				4	1		5	27		x			\$ 137,290.95	
10"	GP			1	1	3	ļ	5				Ś	5 084 85		
10	PC			1	1	2		4				Ť	+ -,		
	PP				6	7		13							
	GD			1	2			3	14						
12"	GP		2			ļ		2			Х	\$ 5	5,648.26	\$ 79,075.64	
	PP				6	3	<u> </u>	9							
	GD				1			1	_						
18"	GP		1	2				3	5	Х	Ş	Ş	\$ 5,922.50	\$ 29,612.50	
	PC				1		<u> </u>	1							
24"	GD		1	1				2	3	х		\$	11,537.74	\$ 34,613.22	
Cubtoto	PC				1			1	100					¢ 01 4 C 41 0C	
Subtota	i (mete	ers)							180					\$ 814,641.86	
Electric	Actuato	or												\$ 17,000.00	
	ation													\$ 12,700.00	
Total Pr	oject													\$ 844,341.86	
	1									2					
	¹ Connection Type							<u> ²Mete</u>	r Type						
	GD = Gravity to Ditch			h						MP = I	McProp	elle	er		
	GP = G	iravity	to Pipe	eline						MM -	Mc Ma	g300	00		
	PC = P	ipeline	e Cappo	ed											
	PP = Pipeline to Pipeline			peline											

Table 3 Project Cost Estimate

r roposcu Duuget and Funding Flan											
	Computation		Desiniant								
Budget Item Description	\$ Per Unit	Quantity	Cost Share	Reclamation Funding	Total Cost						
Construction											
Purchase and Install Meters		180	\$413,671	\$413,671	\$827,342						
Purchase and Install Actuator		1	\$8,500	\$8,500	\$17,000						
TOTAL PROJECT COST			\$422,171	\$422,171	\$844,342						

 Table 4

 Proposed Budget and Funding Plan

(3) BUDGET NARRATIVE

Project design, environmental compliance, and other work necessary to implement the project has already been completed so the only cost is purchase and installation of the meters.

Purchase and Install Meters

The \$827,342 cost estimate is from an actual bid received from BHI in Vernal, as shown below. More detail can be provided upon request.

Purchase and Install Electric Actuator on the Ashley Creek Diversion Radial Gate

The \$17,000 cost estimate for the electric actuator was taken from a similar project recently completed by the Burns Bench Irrigation Company. A large radial gate was installed on Brush Creek at the diversion point for the Burns Bench, Murray Ditch, and Burton Ditch systems. Waterman Valve LLC charged the project \$5,000 for the actuator and associated materials. Monty Pratt, Burns Bench Irrigation Company President, indicated that actuator installation and electrical work cost approximately \$12,000. This project was completed in the Spring of 2020.

NDUSTRY EXCELLENCE BUILDING RELATIONSHIPS, ONE PROJECT AT A TIME.

826 S 1500 E VERNAL, UT 84078 435.789.5252 WWW.BHICO.COM

To: Addres	s:	CIvco Engineering Vernal, UT		Contact: Phone: Fax:		
Project Project	Name: Location:	Ashley Upper And Highline Canal Project Metering		Bid Number: Bid Date:	095025-01-02 9/4/2020	
Line #	Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
	1	Mobilization	1.00	EACH	\$12,700.00	\$12,700.00
	2	2" Meters	36.00	EACH	\$3,353.62	\$120,730.32
	3	4" Meters	16.00	EACH	\$3,913.84	\$62,621.44
	4	6" Meters	19.00	EACH	\$4,154.41	\$78,933.79
	5	8" Meters	60.00	EACH	\$4,529.40	\$271,764.00
	6	10" Meters	27.00	EACH	\$5,084.85	\$137,290.95
	7	12" Meters	14.00	EACH	\$5,648.26	\$79,075.64
	8	18" Meters	5.00	EACH	\$5,922.50	\$29,612.50
	9	24" Meters	3.00	EACH	\$11,537.74	\$34,613.22
			То	tal Price for al	bove Items:	\$827,341.86

Total Bid Price: \$827,341.86

Notes:

Pricing doesn't include inflation
Payment Terms:

Payment Terms:

Payment due within 30 days of date of invoice, regardless of when payment is made by Owner.

ACCEPTED:	CONFIRMED:
The above prices, specifications and conditions are satisfactory and are hereby accepted.	BHI
Buyer:	
Signature:	Authorized Signature:
Date of Acceptance:	Estimator: Jordan Galetka
	jgaletka@bhico.com

III. ENVIRONMENTAL AND CULTURAL RESOURCE COMPLIANCE

Preparation of an Environmental Assessment (EA) has been completed and the public comment period ended on September 9, 2020. A Finding of No Significant Impact (FONSI) document has been drafted and was forwarded to Reclamation leadership on September 13, 2020. A Notice to Proceed is expected by month's end. Endangered Species Act (ESA) Section 7 Consultation has also been completed with the U.S. Fish and Wildlife Service with a conclusion's memorandum issued May 20, 2020. The District will ensure that compliance with all environmental commitments in the EA and other applicable environmental laws will be met prior to or during project construction.

- 1. <u>Will the proposed project impact the surrounding environment?</u> No significant impacts to the surrounding environment will occur with construction of the proposed Project.
- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? – The endangered Ute-ladies'-tresses orchid was identified for potential impact in the recently completed EA. The proposed project will have no further impact on this species.
- 3. <u>Are there wetlands or other surface waters inside the project boundaries that potentially</u> <u>fall under the CWA jurisdiction as "Waters of the United States"?</u> There are minimal wetlands along the canals that would be impacted with the canal lining project, however, none will be impacted by the proposed metering project.
- 4. <u>When was the water delivery system constructed?</u> Highline Canal 1915, Ashley Upper Canal 1879
- 5. <u>Will the proposed project result in any modifications or effects to individual features of an</u> <u>irrigation system (e.g., headgates, canals, or flumes)?</u> No.
- 6. <u>Are any buildings, structures, or features in the irrigation district listed or eligible for listing</u> <u>on the National Register of Historic Places?</u> – The two existing canals were constructed over 50 years ago but they will not be impacted by the proposed metering project.
- 7. <u>Are there any known archeological sites in the proposed project area?</u> No, as per State Department of Natural Resources letter dated February 5, 2020, Attachment I to Draft EA.
- 8. <u>Will the proposed project have a disproportionately high and adverse effect on low income</u> <u>or minority populations?</u> – No
- 9. <u>Will the proposed project limit access to any ceremonial use of Indian sacred sites or result</u> <u>in other impacts on tribal lands?</u> - No
- 10. <u>Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?</u> No

IV. REQUIRED PERMITS OR APPROVALS

Compliance with NEPA, as described above, has been completed and a FONSI is expected to be issued at any time. No other permits or approvals are anticipated. The District will coordinate closely with Reclamation, the State of Utah, and Uintah County to ensure that any necessary permits and approvals are acquired.

V. BOARD RESOLUTION

RESOLUTION

Resolution No: 20200908A

UINTAH WATER CONSERVANCY DISTRICT

APPROVING THE APPLICATION FOR BUREAU OF RECLAMATION WATERSMART GRANT FUNDS FOR THE ASHLEY UPPER AND HIGHLINE CANALS METERING PROJECT

WHEREAS, the Bureau of Reclamation is requesting proposals for "WaterSMART: Water and Energy Efficiency Grants for FY 2021" under Funding Opportunity Announcement No. BOR-DO-21-F001 to assist Eligible Applicants; and

WHEREAS, the Uintah Water Conservancy District (District) is an Eligible Applicant by virtue of being the sponsoring entity for the Vernal and Jensen Units of the Central Utah Project and the sponsor of other projects funded by or receiving water under contracts with Reclamation; and

WHEREAS, the District desires funding to assist in the completion of a significant project titled "Ashley Upper and Highline Canals Metering Project" with the desire to complete the project within the next 2 years;

NOW, THEREFORE, BE IT RESOLVED that the District Board of Trustees:

- 1. Has reviewed and approves the filing of the grant proposal herein submitted; and
- Certifies that the District has sufficient funds, both cash and in-kind contributions, specified in the Funding Plan portion of the proposal to implement the project, and has adequate financial and technical resources to operate and maintain the project when completed; and
- Certifies that if selected for the WaterSMART Grant, the District will work with Reclamation to meet established deadlines for entering into a cooperative agreement.

2020 DATED Authorized Signature

kairman Title

ATTEST: Secretary measurer

VI. LETTERS OF SUPPORT

ASHLEY CREEK RIVER COMMISSIONER

Bart Batty 3235 North 250 West Vernal, Utah 84078

September 9, 2020

TO WHOM IT MAY CONCERN

In regards to the metering of the Highline and Ashley Upper Canals, it is imperative that the River Commissioner and the Ditch Masters have meters in place in order to accurately fulfill their responsibilities in said positions. Again, that an accurate accounting may be made. It will also resolve any disputes that may arise concerning amounts given. Having a meter device in place that can be easily read by all is the best possible solution to accomplish these concerns. Otherwise, it is impossible to accomplish it accurately.

As to the diversion for the Ashley Upper and Highline Canal Companies water from Ashley Creek, an upgraded system is desperately needed, as it is now an extreme safety liability. To set or remove the boards and lay down the stands the individual often has to get into the fast-moving water, or work from a suspended swinging bridge. An actuated gate with an electric lift would solve this problem and greatly lessen the liability of this situation.

Ashley Creek River Commissioner

Ashley Upper Irrigation Company Highline Canal Company Combined Pipeline Project 44 West 100 North Vernal, UT 84078

September 14, 2020

Uintah Water Conservancy District William Merkley, Manager 78 West 3325 North Vernal, UT 84078

Mr. Merkley,

This letter is in support of a metering project for the new pipeline we are currently planning for the Ashley Upper and Highline Canals. We had originally planned for meters but due to the scope of the project and cost constraints for the mainline and turnouts, meters were cut to make the project viable under contracts currently in place.

We understand the intended benefits of enclosing the canal cannot be fully realized without a way to accurately monitor and record water deliveries. We support and appreciate The Uintah Water Conservancy District in their efforts to sponsor a WaterSMART application for grant assistance for the installation of meters.

Sincerely,

Billy F Cook, President Ashley Upper Irrigation Company

urt

Curt Smuin, President Highline Canal Company

APPENDIX A – HISTORIC CANAL DIVERSIONS

	Ashley Upper Canal												
Summary (Acre-feet)													
Year	April	May	June	July	Aug	Sept	Oct	Total					
2003	144	5,049	5,865	5,825	4,869	2,623	-	24,374					
2004	-	5,313	3,878	4,476	4,771	2,650	780	21,867					
2005	113	5,286	5,742	7,001	5,930	3,351	1,306	28,727					
2006	-	6,424	5,583	4,781	4,365	1,832	622	23,607					
2007	1,357	4,821	4,583	3,971	3,872	3,043	174	21,819					
2008	-	5,130	4,999	5,510	5,087	2,944	560	24,228					
2009	122	5,731	3,866	5,915	5,514	3,111	771	25,029					
2010	-	4,566	5,141	5,716	4,855	3,727	-	24,004					
2011	-	3,338	5,884	5,725	5,560	3,997	1,272	25,776					
Total	1,735	45,657	45,540	48,918	44,822	27,277	5,485	219,432					
Average	193	5,073	5,060	5,435	4,980	3,031	609	24,381					

For period of record (2003 to 2011) used in the VUEP Water Model

Highline Canal												
Summary (Acre-feet)												
Year	April	May	June	July	Aug	Sept	Oct	Total				
2003	-	2,025	2,450	1,040	1,036	469	-	7,019				
2004	-	1,988	548	1,005	900	314	-	4,753				
2005	50	2,449	2,098	1,747	1,114	538	110	8,106				
2006	-	3,446	1,017	1,376	719	-	-	6,557				
2007	44	888	1,054	705	1,083	346	-	4,120				
2008	-	1,317	2,151	1,230	1,154	504	70	6,425				
2009	-	2,221	1,908	1,849	1,781	119	-	7,878				
2010	-	722	3,725	1,706	1,202	-	-	7,355				
2011	-	875	2,670	2,327	2,042	1,286	136	9,335				
Total	94	15,929	17,620	12,985	11,028	3,574	316	61,547				
Average	10	1,770	1,958	1,443	1,225	397	35	6,839				

APPENDIX B – ON-FARM ENABLE TABLE AND MAP

Name of Canal/Lateral/Ditch: ____Ashley Upper - Highline Canals

]		Date:	7/2/2015
Delivery	Landowner	Existing	Irrigated 2 of last	Existing	Proposed Irrigation	Design Application	Adequate Irrigation	Adequate Inlet	Claimable
ID	name	acreage	5 years	improvements	Method	Efficiency	Stream	Conditions	acreage
(Corresponding	<u></u>		(see note 1)	(see note 1)	(see note 2)	(see note 3)	(see note 4)	(see note 5)	40.0490
to man)		(acres)	(ves/no)	[ves (acres)/no]	(000 11010 2)	(000 11010 0)	(ves/no)	(ves/no)	
1		15	Y	No	Sprinkler	65.0	Yes	Yes	15
2	E McClean	20	Ý	No	Sprinkler	65.0	Yes	Yes	20
3	E. Mooloun	37	Ý	No	Sprinkler	65.0	Yes	Yes	37
4	Cody Jenkins	8	Ý	No	Sprinkler	65.0	Yes	Yes	8
5	Loren Merkley	10	Ý	No	Sprinkler	65.0	Yes	Yes	10
6	Loren Merkley	13	Ý	No	Sprinkler	65.0	Yes	Yes	13
7	Loronnion	12	Ý	No	Sprinkler	65.0	Yes	Yes	12
8	Roger Decker	11	Ý	No	Sprinkler	65.0	Yes	Yes	11
9		18	Ý	No	Sprinkler	65.0	Yes	Yes	18
10		20	Y	No	Sprinkler	65.0	Yes	Yes	20
11		4	Y	No	Sprinkler	65.0	Yes	Yes	4
12	Cody Jenkins	32	Y	No	Sprinkler	65.0	Yes	Yes	32
13	Glen Keel	12	Y	No	Sprinkler	65.0	Yes	Yes	12
14	Steve Oldrovd	14	Y	No	Sprinkler	65.0	Yes	Yes	14
15		22	Y	No	Sprinkler	65.0	Yes	Yes	22
16		2	Y	No	Sprinkler	65.0	Yes	Yes	2
17	Gayle McKeachnie	128	Y	No	Sprinkler	65.0	Yes	Yes	128
18	Jay Alexander	41	Y	No	Sprinkler	65.0	Yes	Yes	41
19	Kent Workman	15	Y	No	Sprinkler	65.0	Yes	Yes	15
20	Chris Bentley	10	Y	No	Sprinkler	65.0	Yes	Yes	10
21	Kent Workman	22	Y	No	Sprinkler	65.0	Yes	Yes	22
22	Von Whiting	5	Y	No	Sprinkler	65.0	Yes	Yes	5
23		2	Y	No	Sprinkler	65.0	Yes	Yes	2
24		2	Y	No	Sprinkler	65.0	Yes	Yes	2
25		2	Y	No	Sprinkler	65.0	Yes	Yes	2
26		4	Y	No	Sprinkler	65.0	Yes	Yes	4
27	Chester Gardiner	33	Y	No	Sprinkler	65.0	Yes	Yes	33
28	Eleanor Scott	19	Y	No	Sprinkler	65.0	Yes	Yes	19
29	Barabra Hall	16	Y	No	Sprinkler	65.0	Yes	Yes	16
30	Cody Jenkins	15	Y	No	Sprinkler	65.0	Yes	Yes	15
31	Ronald Trogstad	22	Y	No	Sprinkler	65.0	Yes	Yes	22
32		9	Y	No	Sprinkler	65.0	Yes	Yes	9
33	Curt Smuin	22	Y	No	Sprinkler	65.0	Yes	Yes	22
34	Benny Holmes	2	Y	No	Sprinkler	65.0	Yes	Yes	2
						Claimable acreage total:		619	



Uintah Water Conservancy District

WaterSMART Grant Application