

CONVERTING
THE RIDGE CANAL HEADGATES
TO A SCADA-EQUIPPED SYSTEM FOR
AUTOMATED FLOW CONTROL

Funding Opportunity Announcement No. BOR-DO-20-F006

WaterSMART Grants: Small-Scale Water Efficiency Projects

APPLICANT:

KANSAS BOSTWICK IRRIGATION DISTRICT
528 MAIN STREET
COURTLAND, KS 66939

PROJECT MANAGER:

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TABLE OF CONTENTS	
Table of Contents	Page 2
Technical Proposal and Evaluation Criteria	Page 3
Executive Summary	Page 3
Background Data	Page 3
Project Location	Page 4
Technical Project Description and Milestones	Page 5
Evaluation Criteria	Page 8
Project Budget	Page 11
Funding Plan	Page 11
Budget Proposal	Page 12
Budget Narrative	Page 12
Environmental and Cultural Resources Compliance	Page 14

Technical Proposal and Evaluation Criteria

Executive summary

Date: Feb. 18th, 2020 **Applicant Name:** Kansas Bostwick Irrigation District

City: Courtland **County:** Republic **State:** Kansas

Through the activities outlined in this application, Kansas Bostwick Irrigation District (KBID) plans to convert the Ridge Canal headgates into a SCADA equipped system for automated flow control. If successful through this application, the funding awarded will be used to purchase materials needed to complete this project. This project accomplishes one of the specific goals outlined in the FOA through the implementation of Supervisory Control and Data Acquisition and Automation (SCADA).

If successful through this application, the project will begin as soon as possible following the 2020 irrigation season and will be completed, at the very latest, by the end of May 2021.

The proposed project takes place within and as part of KBID which is a Bureau of Reclamation Irrigation District. Since inception, KBID has had perpetual easements and right-of-way for its canal system which passes through private landowner property.

Background Data

Kansas Bostwick Irrigation District (KBID) is a Pick-Sloan Project headquartered in Courtland, Kansas. The district is served by flows of the Republican River and White Rock Creek. The district holds Water Rights #385 and #4673 with the State of Kansas and is strictly utilizes these rights for agricultural irrigation. As with most irrigation districts reliant on surface streamflow and subject to changing climactic conditions, the total quantity of water supply that is manageable varies from year to year. However, under water right #385 for flows of the Republican River, KBID is able to manage up to 102,521 acre-feet annually if it is available. Through water right #4673 for flows of White Rock Creek, KBID is able to manage up to 19,700 acre-feet annually.

KBID consists of approximately 100 miles of unlined open main canals, 50 miles of unlined open lateral canals and 100 miles of buried PVC pipeline providing service to 42,500 acres of cropland in Republic and Jewell Counties in Kansas. The three primary crops raised in the district are Corn, Soybeans and Alfalfa. There are approximately 350 landholders served by the district through approximately 675 field turnouts. KBID considers 15" per acre to be a full supply

for its irrigators, however, in most of the last 25 years, restrictions have been imposed on irrigators in the district due to short water supplies.

The Republican River Basin remained embroiled in controversy over groundwater depletion of river flows from the late 1990s until the latest Supreme Court Settlement on the issue that was delivered in 2015. That particular ruling stated that Nebraska had not delivered the prescribed amount of water to Kansas. For its overuse of allocation, the Court ordered Nebraska to pay Kansas \$5.5 million. While the ruling went in favor of Kansas, it didn't bring back the water that Nebraska overused in the past. While relations on the issue between the states have recently improved, the most recent Supreme Court action leaves compact compliance in the hands of the State of Nebraska. Kansas, and therefore KBID's supply in water-short years, is now based upon the State of Nebraska's forecast of water availability and ability to augment river flows by shutting off surface projects and ordering water released from reservoirs in Nebraska to deliver "Compact" water to Kansas, as well as pumping groundwater from two augmentation facilities. The only tool KBID has to answer the problems created by this controversy and to protect what supply is available annually, is to continue improving the district's efficiency and conserving water, primarily through projects like the one outlined in this application.

KBID has previously worked in conjunction with the Bureau of Reclamation on numerous Water Conservation Field Services Program opportunities the district has been awarded. Under a 2025 challenge grant applied for in 2006 and awarded in 2007, 9 miles of large laterals were buried by the fall of 2010. An estimated 26 miles of laterals have also been buried under Field Service Agreements in the last 18 years. In 2018, KBID completed the burial of 1.3 miles of small laterals using funding received through a WaterSMART Grants: Small-Scale Water Efficiency Projects for Fiscal Year 2017. In addition, the district has buried 71 miles of laterals without assistance from Reclamation. Currently the district is completing the burial of 3.38 miles of pipeline to eliminate 4.1 miles of lateral canals with assistance from a WaterSMART Grants: Water and Energy Efficiency Grant for Fiscal Year 2018. With the approval of this application, continuity may be maintained in the district's goal of continually making improvements to infrastructure to conserve water.

Project Location

The Ridge Canal headgates are located in Jewell County, Kansas and is approximately 3.8 miles east of Webber, KS. The project latitude is 39°56'N and longitude is 97°57'W.



Technical Project Description and Milestones

As KBID moves into the future, and with the completion of so many other water saving projects already accomplished, (such as the piping of a plethora of lateral canals) the next logical step in the District's advancement is the move towards canal automation projects implementing Supervisory Control and Data Acquisition and Automation (SCADA).

This particular project would be the first in a phase of what is hoped to be a multitude of canal automation projects district-wide throughout the next 10 to 20 years at KBID. The installation of two (2) Rubicon SlipMeters™ equipped with Rubicon's SCADAConnect Live Cloud-Based Gate Monitoring and Control option, would solve many problems the District currently experiences on the Ridge Canal.

Presently, the Ridge Canal headgates consist of two (2) 48" slide gates and a stilling basin, operating as a large Constant Head Orifice (CHO) for the discharge of water to the Ridge Canal.

A basic understanding of open canal delivery systems allows one to naturally deduce that even under normal and ideal conditions, more water than is actually required for irrigation deliveries, (not to mention seepage losses) is always obligatory to allow for canals to maintain designed water surface levels. This results in, at minimum, a constant and necessary degree of operational spills. Although not eliminating the operational spill component entirely, the installation of Rubicon SlipMeters™ at the headgate of the Ridge Canal would allow for more precise discharges than can be currently

maintained and therefore allow the District to realize higher efficiencies by minimizing the operational spill element.

Instances of over-delivery, and conversely, those of under-delivery, are always experienced at the extreme downstream reaches of the system. The results of over-delivery are realized by excess water wastefully exiting the system through a terminal waste-way. On the contrary, results of under-delivery are realized by the lack of needed water available to users on the tail-end of these systems. In other words, if less than the prescribed amount of water required is being discharged to the canal at the headgate, those irrigators on the tail-end of the system are the ones to suffer the consequences. With the capability to consistently deliver the prescribed amount of water to the entire canal by automation of the headgates, scenarios like the one mentioned above would be eliminated.

Additionally, when minor water surface level fluctuations occur on the main Courtland Canal, (which supplies water to the Ridge Canal) problems arise with erratic flow rates and discharge variances to the Ridge Canal. Having the ability to make accurate and precise releases to the Ridge Canal, regardless of the fluctuations in the main Courtland Canal's water surface level, would be a vital improvement over the current circumstances.

With the installation of Rubicon Slipmeters™ at the initiation point of the Ridge Canal, any periods of over-delivery or under-delivery will simply be eliminated. The ability of the SCADA technology to maintain constant discharge amounts regardless of varying water surface levels on the main Courtland Canal will result in the elimination of issues like the ones highlighted above. The Rubicon Slipmeters™ are capable of automatically and precisely controlling the flow of the water discharged to the Ridge Canal by varying the gate positions based on a desired set-point. The expected outcome of the installation of the Rubicon Slipmeters™ would be more accurate deliveries to all irrigators serviced by the Ridge Canal, the elimination of excessive operational spills, and an overall increase in canal efficiencies.

To meet the capacity needs of the Ridge Canal the District must have the capability at the headgates to deliver at least 100 cubic-feet-per second (cfs) to the canal. Under ideal conditions, Rubicon's 4' SlipMeters™ have the ability to discharge up to 100 cfs, meaning that in most situations, one (1) 4' SlipMeter™ could handle the capacity demands of the Ridge Canal. However, after Rubicon engineers reviewed the existing Ridge Canal headgate structure there remained concern that if only one 4' SlipMeter™ was installed and the second 48" CHO slide-gate opening was simply blocked off, it could potentially create

too much of a restriction due to limited head. Therefore, installing a second 4' SlipMeter™ would not only alleviate any concerns of capacity issues but, it would also provide redundancy to the system should one of the SlipMeters™ ever malfunction. In most instances it is expected that only one SlipMeter™ would be in operation, however the ability for the two to work in tandem would still remain.

With the installation of the SlipMeters™ and the ability to operate the gates remotely using the Rubicon's SCADAConnect technology, the District would be able to provide much more accurate and precise flows to the Ridge Canal as well as the ability to make the adjustments remotely from a laptop or any other cellular-capable handheld device 24 hours a day.

Implementing the SCADAConnect Live technology making remote operation possible will offer a multitude of benefits to the District. Currently, any flow adjustments have to be made manually by a KBID ditchrider. Oftentimes adjustments are required after normal working hours, requiring the ditchrider to travel from his residence some 20 miles to the Ridge Canal headgates. With the capability to monitor and operate the SlipMeters™ remotely, not only will the District save money in overtime/after-hours labor costs, but it will also save in vehicle operation expenses due to less trips being needed to the Ridge Canal headgate location. This has the ancillary benefit of further reducing KBID's carbon footprint.

The installation of the required components to make this water-saving upgrade to the Ridge Canal would take place following the 2020 irrigation season and prior to the 2021 irrigation season. For KBID, this would mean the installation would occur at some point within the time-window of October 2020 to May 2021. The entire project, from delivery of the components to complete installation, is expected to take up to, but no more than five working days.

The installation process will involve site visits and supervision by one of Rubicon's certified Field Technicians. The certified Field Technician would supervise Rubicon and KBID's employees in the lifting of the meter into the frame, installation of the Control Pedestal, wiring of Control Pedestal to the meter, and the commissioning and training needed in the operation and maintenance of the components.

KBID would provide the in-kind services of pouring a concrete footing for the mounting of the Control Pedestal, supplying and operating an excavator for the lifting and installation of the meters and gates, and any needed dewatering of the site required for installation. To install the two 4' SlipMeters™ to the existing concrete structure an aluminum mounting plate will also be installed

and sealed to the existing concrete face and a piece of angled steel will be use to seal the SlipMeters™ to the existing concrete floor.

Included within Rubicon's quotes for all of the components needed would be the delivery of all hardware to the Ridge Canal headgate location by road transport.

Rubicon's standard 12-month warranty on all hardware guaranteeing it to be free of defects in material and workmanship, as well as spare parts needed, would apply.

Evaluation Criteria

E.1.1. Evaluation Criterion A—Project Benefits (35 points)

As stated earlier in this application, there are many reasons KBID would like to complete this project to automate the Ridge Canal headgate. The most recognizable expected objective of this project will be allowing for much more precise and accurate discharges to the Ridge Canal. An extra advantage from the project would be the ability to remotely control the system and ultimately minimize the need for manual readjustments throughout normal working hours as well as those currently taking place after hours.

Additionally, over the last several irrigation seasons we have experienced an average operational spill component of 212.2 AF annually at the Ridge Canal's terminal waste-way. With the completion of this project we expect significant water savings due to limited operational spills and higher canal efficiency percentages.

This project would also mitigate operations and maintenance costs for the district by limiting the number of trips made by the ditchrider to the Ridge Canal headgates for re-adjustment needs. Ancillary benefits to the environment would therefore be experienced by a reduced carbon footprint.

A benefit to KBID's water supply delivery system by the automation of the Ridge Canals headgate would be increased consistency and accuracy of discharge resulting in overall water savings to the District. Another benefit would be that through the implementation of Rubicon's SCADAConnect Live system, as the District moves forward in other future automation projects, the upcoming automation projects would be able to communicate as an entire system working in harmony with each other and maintaining continuity in upcoming improvements.

While the projected annual water savings of 212.2 acre-feet is not a colossal amount in the big scheme of things within the basin, every bit of

conservation effort does have a positive long-term cumulative effect on the available water supply for all water users reliant on flows of the Republican River. Bostwick Irrigation District in Nebraska (NBID) is also reliant on the same source of water as KBID. Therefore, any savings realized by one irrigation district is potentially realized by the other as an increase in overall water supply year in and year out with a higher degree of annual reliability. The positive impacts from projects like this one can be felt throughout the local and sub-basin area of South-Central Nebraska and North-Central Kansas.

Obviously, the water savings experienced through this project, in a cumulative effect with the plethora of other water-saving projects completed by KBID over the years, has in essence, extended each irrigation season. Therefore, in years of short supply, the amount of water available to irrigate crops with, goes further. This has the effect of increasing crop yields which subsequently helps the local economy which is almost solely reliant on agriculture.

Along with the positive benefits to the local economy reliant on agriculture, projects like this one will allow for more water to be stored in KBID's supply reservoirs later into each summer allowing for increased recreational opportunities like water skiing and fishing.

E.1.2 Evaluation Criterion B—Planning Efforts Supporting the Project (35 points)

With the approval of this application, continuity may be maintained in KBID's goal of completing projects to further the objective of conserving water. As stated earlier in this application, KBID has previously worked in conjunction with the Bureau of Reclamation on numerous awards for converting canals to pipelines. KBID has been awarded Water Conservation Field Services Program grants, a 2025 challenge grants, as well as more recently awarded WaterSMART grants which have all aided in allowing KBID to continue making positive and water-conserving improvements to our infrastructure. A good exhibit of how devoted to this goal KBID is, one must only look to the 71 miles of pipe the district has buried without any outside assistance.

The award available through this FOA will allow KBID to maintain continuity in the goal of saving water and increasing our efficiencies.

The project outlined in this application has been determined as a priority in KBID's existing planning efforts due to the Ridge Canal's troublesome nature in its ability to maintain consistent delivery volumes as well as unnecessary and excessive wasteful operational spills.

E.1.3. Evaluation Criterion C—Project Implementation (10 points)

Task 1 - Site Preparation - will begin whenever able after October 1st, 2020

Task 2 – Installation of Slipmeters™ and hardware - when able following Task 1

Task 3 - Concluding tasks of the Rubicon certified Field Technician's training of KBID employees on the operation and maintenance of the SlipMeters™.

The duration of each portion of the project is estimated in the following manner: Task 1 represents 10% of the project, Task 2, 80%, and Task 3, 10% of the project.

In Task 1, supervised by Rubicon's certified Field Technician, KBID employees will pour a concrete mount for the Control Pedestal and trench in the required wiring to connect the cellular hardware within the Control Pedestal to the SlipMeter™ itself. This portion of the project is expected to take no longer than one working day.

Task 2 will be the most labor-intensive part of the process and will involve the installation of the SlipMeters™ and other required hardware. KBID and Rubicon employees, with the supervision of Rubicon's certified Field Technician, will first install the aluminum mounting plate to the existing concrete face of the structure and the piece of angled steel that will be used to seal the SlipMeters™ to the existing concrete floor of the structure. If any dewatering of the site is required for installation, KBID employees will also complete that component of the project. Following the installation of the mounting plates, KBID will be supplying and operating an excavator to lift and install the meters and gates. This portion of the project is expected to take no longer than 3 working days.

Finally, in Task 3, Rubicon's certified Field Technician's will train and instruct KBID's employees on the operation and maintenance of the SlipMeters™. This portion of the project is expected to take no longer than one working day.

No permits have been identified to be needed for this project.

Rubicon's in-house professional engineers have reviewed the project and the SlipMeters™ shall be installed following their design criteria.

No new polices or administrative actions were required to implement this project.

All environmental compliance estimates and costs were discussed and developed with the help of employees of the Nebraska Kansas Area Office of the Bureau of Reclamation.

E.1.4. Evaluation Criterion D— Nexus to Reclamation (10 points)

Kansas Bostwick Irrigation District (KBID) is a Pick-Sloan Project headquartered in Courtland, Kansas. KBID is a Bureau of Reclamation irrigation district served by and lying within the Bureau of Reclamation's Nebraska-Kansas Project Area headquartered in McCook, Nebraska. Water storage for the district is within the Corps of Engineers Harlan County Reservoir in Nebraska and in the Bureau of Reclamation's Lovewell Reservoir in Kansas, both of which are in the same basin of the Republican River.

E.1.5. Evaluation Criterion E— Department of the Interior Priorities (10 points)

As it pertains to Department of the Interior (DOI) Priorities, this project is an opportunity to update and improve KBID's distribution system and infrastructure. Federal assistance through this funding opportunity is essential and necessary to aid KBID in its' plan to maintain continuity in the District's overall conservation efforts and to reach contracted goals for improved efficiency. Failure to receive this funding potentially puts this contract commitment at risk.

As stated earlier, controversy surrounded the Republican River Basin in the past. Forward thinking conservation projects like this one help restore trust between the various states that are part of the Republican River Compact and all of their respective users. For other users to see an entity like KBID continuing to further implement water conservation measures like canal automation projects, it can only aid in strengthening the bonds of trust between all water users in the basin and encourage them to follow suit.

The modernization of KBID's infrastructure through the implementation and installation of SCADA technology aligns with DOI priorities that concentrate on the general modernization and construction of improved and new infrastructure.

Project Budget

Funding Plan

Kansas Bostwick's contribution to the project funding will come from the irrigation district's conservation reserve funds as well as O&M funds raised on annual basis through assessments

If successful, Kansas Bostwick will contribute \$37,518.93 to the project by way of providing capital, equipment and labor and will utilize award funding in the amount of \$36,047.29 to cover the remaining cost of materials needed. Therefore, total project costs would come to \$73,566.52, with KBID providing 51.0% of the total, and award funding comprising the remaining 49.0%.

Budget Proposal

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$36,047.59
Costs to be paid by the applicant	\$32,775.31
Value of KBID in-kind contributions	\$4,743.62
TOTAL PROJECT COST	\$73,566.52

BUDGET ITEM DESCRIPTION	COMPUTATION		QUANTITY TYPE	TOTAL COST
	\$/UNIT	QUANTITY		
Salaries and Wages				
Foreman (BM)	\$20.11	40.00	HOURS	\$804.40
Excav. Optr (DD)	\$18.36	40.00	HOURS	\$734.40
Laborer (GK)	\$16.00	40.00	HOURS	\$640.00
Laborer (CL)	\$14.70	40.00	HOURS	\$588.00
Fringe Benefits				
Foreman (BM)	\$10.46	40.00	HOURS	\$418.40
Excav. Optr (DD)	\$10.65	40.00	HOURS	\$425.85
Laborer (GK)	\$13.23	40.00	HOURS	\$529.34
Laborer (CL)	\$5.80	40.00	HOURS	\$231.87
Equipment				
CAT 320C Excavator (Equivalent - 47,400#, 153 HP)	\$46.42	8.00	HOURS	\$371.36
Supplies and Materials				
10 bags of concrete	\$14.29	10	BAGS	\$142.90
4' X 4' SlipMeter Undershot Gate - 8'	\$29,840.00	2	SLIPMETERS	\$59,680.00
5' Mounting Plates / 4' Opening	\$1,500.00	2	HARDWARE	\$3,000.00
SCADA Connect Live	\$1,750.00	2	HARDWARE	\$3,500.00
Other				
Rubicon Gate Installation Commissioning				\$1,500.00
Environmental-Reg. Compliance				\$1,000.00
TOTAL DIRECT COSTS				\$73,566.52

Budget Narrative

Jared "Pete" Gile is the Superintendent of KBID and will be the Project Manager. He will be in charge of the day to day operations of the project and will be assisted by on-site foreman. Office Manager, Ashleigh Brandenburgh will be in charge of tracking specific figures and costs as the project unfolds. Both individual's roles are considered normal day to day costs for KBID and within their regular daily scope of duties as employees of the district, so their salaries, specifically applicable to this project will not be included as a project costs and the same goes for executing compliance and reporting requirements.

Field crew hours and the subsequent associated salary and fringe benefit figures were calculated using figures estimated by Rubicon for KBID staff needs throughout the project.

The labor rates included for all personnel is certified to be the actual labor rates of each individual identified in this application. Also included in the tables below are the actual fringe benefit rates for each individual which includes Health coverage, FICA, and KPERs retirement.

2020 KBID SALARIES	
EMPLOYEE	HOURLY WAGE
Foreman (BM)	\$20.11
Trencher Optr. (DD)	\$18.36
Dozer Optr. (GK)	\$16.00
Laborer (CL)	\$14.70

2020 KBID PERSONNEL - BENEFITS PAID BY EMPLOYER									
EMPLOYEE	MEDICARE		FICA		KPERs		HEALTH INSURANCE		BENEFIT HOURLY WAGE TOTAL
	Monthly	Hourly	Monthly	Hourly	Monthly	Hourly	Monthly	Hourly	
Foreman (BM)	\$47.90	\$0.27	\$204.83	\$1.16	\$299.20	\$1.70	\$1,289.04	\$7.32	\$10.46
Trencher Optr. (DD)	\$45.21	\$0.26	\$193.31	\$1.10	\$273.16	\$1.55	\$1,362.04	\$7.74	\$10.65
Dozer Optr. (GK)	\$37.26	\$0.21	\$159.30	\$0.91	\$238.05	\$1.35	\$1,894.48	\$10.76	\$13.23
Laborer (CL)	\$38.18	\$0.22	\$163.27	\$0.93	\$218.71	\$1.24	\$600.09	\$3.41	\$5.80

ESTIMATED LABORS HOURS PER TASK - RIDGE HEAGATES						
EMPLOYEE	TASK 1	TASK 2	TASK 3	TOTAL HOURS	TOTAL HOURLY WAGE	TOTAL COST
Foreman (BM)	8.00	24.00	8.00	40.00	\$30.57	\$1,222.80
Excav. Optr (DD)	8.00	24.00	8.00	40.00	\$29.01	\$1,160.25
Laborer (GK)	8.00	24.00	8.00	40.00	\$29.23	\$1,169.34
Laborer (CL)	8.00	24.00	8.00	40.00	\$20.50	\$819.87
TOTALS	32	96	32	160.00	\$109.31	\$4,372.26

As KBID owns all the necessary equipment and machinery that will be required for this project, none will have to be rented. KBID established hourly rates for this application by using rates established by the United States Army Corps of Engineers within their Construction Equipment Ownership and Operating Expense Schedule. Estimates on the number of hours required for the excavator were provided by Rubicon.

All of the materials and supplies needed for the project are listed above in the Budget Proposal Table. The supplies are itemized by major category, unit price, quantity and purpose. All items are those that will be used in the field for accomplishing the goals of this project. All costs were derived from actual

product costs or by quotes received by KBID on each product within the last 365 days.

The only work done on this project by sub recipients, consultants, or contractors is the \$1500 labeled for Rubicon's Installation and Commissioning of the SlipMeters™.

An estimate of \$1000 was provided by staff at the Bureau of Reclamation's Nebraska-Kansas Area Office in regards to activities undertaken by Reclamation for environmental and regulatory compliance. This has been included as a line item within the project budget.

No other expenses or indirect costs have been identified.

The total cost of the project is \$73,566.52.

Kansas Bostwick will contribute \$37,518.93 to the project by way of providing capital, equipment and labor and will utilize award funding in the amount of \$36,047.29 to cover the remaining cost of materials needed. Therefore, total project costs would come to \$73,566.52, with KBID providing 51.0% of the total, and award funding comprising the remaining 49.0%.

Environmental and Cultural Resources Compliance

Construction of Kansas Bostwick Irrigation District was done in several phases. The first phase of the project, or Block I, was completed in 1957. The final phase of the project, or Block IV, was completed in 1969. As one can imagine, the construction of approximately 250 miles of canals and water delivery structures through previously unirrigated land caused a significant impact to the local environments where the construction originally took place.

The proposed project should have minimal impact on the surrounding environment. The earth-disturbing work that will occur through the project will be to excavate a trench to connect the wiring needed from the Control Pedestal to the SlipMeter™. The only way in which air quality should be affected during the project is through any dust that may be kicked up by the tracks of the excavator while it is in operation.

The Summary of the Final Environmental Impact Statement for the Republican River Basin in conjunction with the Repayment and Long-Term Water Service Contract Renewals that was published in June of 2000 didn't identify any Threatened or Endangered Species in our area of the basin and to this day there are none known to exist.

There are no wetlands or surface waters inside the project boundaries that fall under the Clean Water Act jurisdiction as "Waters of the United States" that would potentially be impacted by this project.

There are no known archaeological sites in the proposed project area.

The proposed project will have no effect on low income or minority populations.

The proposed project will not limit access to any ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.



ALERT: SAM.gov will be down for scheduled maintenance Saturday, 02/15/2020 from 8:00 AM to 3:00 PM

Entity Dashboard

KANSAS BOSTWICK IRRIGATION DISTRICT 2
 DUNS: 060765484 CAGE Code: 4VUGo
 Status: Active
 Expiration Date: 06/04/2020
 Purpose of Registration: Federal Assistance Awards Only

528 MAIN ST
 COURTLAND, KS, 66939-3013,
 UNITED STATES

- ▶ [Entity Overview](#)
- ▶ [Entity Registration](#)
 - ▶ [Core Data](#)
 - ▶ [Assertions](#)
 - ▶ [Reps & Certs](#)
 - ▶ [POCs](#)
- ▶ [Reports](#)
 - ▶ [Service Contract Report](#)
 - ▶ [BioPreferred Report](#)
- ▶ [Exclusions](#)
 - ▶ [Active Exclusions](#)
 - ▶ [Inactive Exclusions](#)
 - ▶ [Excluded Family Members](#)

Entity Overview

Entity Registration Summary

DUNS: 060765484
Name: KANSAS BOSTWICK IRRIGATION DISTRICT 2
Business Type: US Local Government
Last Updated By: Jared Gile
Registration Status: Active
Activation Date: 06/05/2019
Expiration Date: 06/04/2020

Exclusion Summary

Active Exclusion Records? No

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KANASAS BOSTWICK IRRIGATION DISTRICT NO. 2

RESOLUTION NO. 2020-001

Whereas the Republican River Basin is frequented by drought,

Whereas water is the lifeblood of the agricultural community,

Whereas WaterSMART grants provide a source of funding for capital improvements of the District,

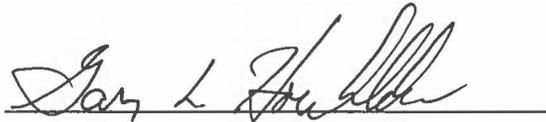
Whereas the installation of canal automation products and technology to increase efficiencies within the District are necessary for the District's future viability,

Whereas funding is needed to maintain continuity in the District's efforts to improve efficiency,

Now therefore be it resolved that the Kansas Bostwick Irrigation District No. 2 Board of Directors agrees and authorizes that this application be submitted to the Bureau of Reclamation for the consideration under the **WaterSMART Grants: Small-Scale Water Efficiency Grants Funding Opportunity Number BOR-DO-20-F006** grant program for the installation of SlipMeter gates on the Ridge Canal. If selected, the Board of Directors agree to provide in-kind funding to the project and will work closely with Reclamation to meet all established deadlines.

The foregoing Resolution was considered by the Board of Directors of the Kansas Bostwick Irrigation District No. 2 at a meeting held on 7 February 2020, and unanimously adopted.

BOARD OF DIRECTORS



Gary L. Housholder – President



Brad D. Peterson - Secretary



Monty D. Dahl - Treasurer

February 13, 2020

To whom it may concern,

My name is Monty Dahl and I'm an irrigator with several farms that are served by the Ridge canal within the Kansas Bostwick Irrigation District.

Some of my turnouts along this canal are in its middle sections and others are on its extreme tail end section.

The downstream turnouts are the most troublesome for me. During the times when I experience trouble on these downstream turnouts it's most often because of a lack of water.

Whenever there's a lack of water, whether it be due to ditchrider error or any other issues that occur at the top end of the canal, my pivot on the tail end gets starved for water. If my automatic shut-off switches fail to work properly, my pump continues to run without water. Situations like these can be costly for me when it comes to pump breakdowns, not to mention falling behind on my irrigation schedules and potentially costing me yield.

As Pete explains it to me, with the automation of the headgates, there should never be an issue again due to lack of water on this tail end stretch of the system.

Therefore, I'm highly supportive of Kansas Bostwick's plans to turn this canal into an automated system.

Sincerely,

A handwritten signature in cursive script that reads "Monty Dahl".

Monty Dahl

Irrigator on the Ridge Canal