

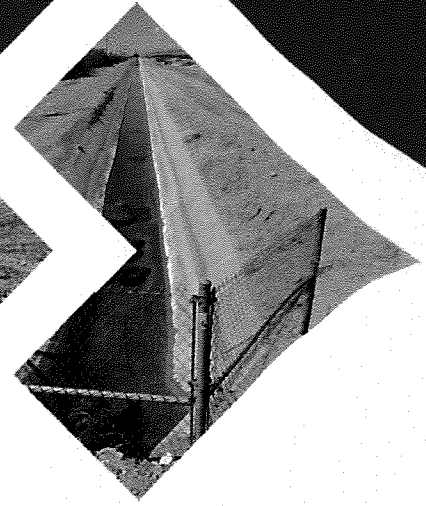


BUREAU OF RECLAMATION

APRIL

WaterSMART

SMALL-SCALE WATER EFFICIENCY PROJECTS
NOTICE OF FUNDING OPPORTUNITY NO. R22AS00195



SANTA ROSA CANAL LATERAL WC TURNOUT GATE REPLACEMENT PROJECT

PREPARED BY:

**MARICOPA-STANFIELD IRRIGATION
& DRAINAGE DISTRICT**
41630 WEST LOUIS JOHNSON DRIVE
MARICOPA, AZ 85138

PREPARED FOR: APR 28 '22 PM 12:56

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WATER RESOURCES
& PLANNING OFFICE

APR 28 '22 PM 12:57

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1. Technical Proposal and Evaluation Criteria

1.1 Executive Summary

This application is being submitted on 04/28/2022 by If NTP January 2023
Maricopa-Stanfield Irrigation & Drainage District – Category A Applicant Start January 2023
41630 W. Louis Johnson Dr., Maricopa, AZ 85138-5402 Pinal County End December 2023

The Maricopa-Stanfield Irrigation & Drainage District (MSIDD, District) is a political subdivision and municipal corporation of the State of Arizona which was formed in 1962. Its purpose is to provide irrigation water for agricultural use by the construction, operation, and maintenance of the irrigation facilities. The District is entirely within the boundaries of Pinal County which is in the southcentral portion of Arizona. The District is rural in nature and, at present, consists of approximately 82,000 acres of active irrigated agriculture. Irrigation water delivered within the district comes from two sources: groundwater pumped from wells and surface water conveyed from the Central Arizona Project (CAP). The canal system from the CAP received its first water in 1987, so the irrigation facilities are approximately 35 years old, and the original SCADA control system is approximately 30 years old done in-house and implemented on the Main Stem Santa Rosa Canal and the East Main in 1992 by MSIDD. The aging infrastructure is showing signs of degradation and failure as gates are beginning to leak and gate actuators fail due to increased resistance from corroded gate seals.

This proposed project would be the **second** USBR grant project for the MSIDD and part of the district's strategy to upgrade their aging facilities and SCADA system. The proposed improvements are to remove the existing Lateral WC turnout gate and install a **new 42" Rubicon SlipMeter gate**. A cofferdam or pipe plug will need to be installed as the Santa Rosa Canal (SRC) cannot be dewatered due to constant delivery to farmers and the Ak-Chin Indian Community (Ak-Chin) downstream of this SRC check structure and turnout, as well as required appurtenances to maintain and operate the new SlipMeter gate. The new SlipMeter gate will eliminate the spills due to the gate leaking and provide accurate flow measurement for future SRC Lateral WC turnout service.

This Small-Scale Water Efficiency project is a priority to MSIDD and was approved by our Board. We hope to leverage funding from the WaterSMART program to help us complete this multi-phase project, meeting both MSIDD's and USBR's goals to conserve and better manage our water resources and increase efficiency of our system. Stakeholders include farmers and customers in the District, the Central Arizona Irrigation and Drainage, Ak-Chin, and the USBR. In addition to Ak-Chin, the District borders the Gila River Indian Community (GRIC) to the northeast and the Tohono O'odham Nation to the south. The District would like to work with both Native American Communities to be good neighbors and stewards to protect the natural environment that we share along our borders.

MSIDD will accomplish the goals established for the WaterSMART program and President Biden's Executive Orders by leveraging funding to conserve and better manage our water resources and increase the efficiency of our system by slowly creating improved operations via an integrated network of automated Rubicon gates. The District plans to perform pre-construction and construction work anytime between **January 2023 and December 2023**, depending upon NTP.

1.2 Project Location

The project site is located southeast of the town of Stanfield and southwest of the city of Casa Grande in Pinal County, Arizona. It is one of the first laterals for the irrigation district on the Santa Rosa Canal, located in the southeast portion of the district.

Lateral WC Turnout Gate: Latitude: 32° 47' 32.82" N Longitude: 111° 51' 39.34" W

Figure 1 – Location Map



MSI-75 GATE LOCATION

1.3 Technical Project Description

The Maricopa-Stanfield Irrigation & Drainage District (MSIDD, District) is a political subdivision and municipal corporation of the State of Arizona which was formed in 1962. Its purpose is to provide irrigation water for agricultural use by the construction, operation, and maintenance of the irrigation facilities. The District is entirely within the boundaries of Pinal County which is in the southcentral portion of Arizona. The center of the District is located approximately 30 miles south of Phoenix and 12 miles northwest of Casa Grande. The District encompasses the Cities of Maricopa and Stanfield. The District is rural in nature and, at present, consists of approximately 82,000 acres of active irrigated agriculture. In the northern portion, the District surrounds the 21,840-acre Ak-Chin Indian Reservation (Ak-Chin) which an entity not included in the District. The economy of the District is almost entirely agricultural. Principal crops produced are cotton, grains, alfalfa, feed grain for dairies, nursery trees, and vegetables. Irrigation water delivered within the district comes from two sources: groundwater pumped from district operated wells, and surface water conveyed from the Central Arizona Project (CAP) facilities. The surface water from the CAP is delivered through a system of canals, pipelines and appurtenances beginning at the Santa Rosa Canal (SRC) turnout off the CAP East of the city of Eloy. The District operates and maintains the SRC, a joint works canal as part of its total District operations and is the main recipient of water delivered through the canal; however, it also serves as watermaster and delivers water to the Central Arizona Irrigation and Drainage District (CAIDD) and the Ak-Chin.

The canal system from the CAP received its first water in 1987, so the irrigation facilities are about 35 years or older, and the original SCADA control system was done in-house and implemented on the Main Stem SRC and the East Main in about 1992, thence the SCADA elements are about 30 years old. The District SCADA system is outdated, and replacement requires upgrade to modern control and communications. There is no off-line regulatory storage on the project to help regulate operational mismatched flows, emergencies, rain events, or other operational challenges. The aging infrastructure is showing signs of degradation and failure as gates leak and gate actuators fail due to increased resistance from corroded gate seals.

This proposed project would be the **second** USBR grant project for the MSIDD and part of the district's strategy to upgrade their aging facilities and SCADA system. The proposed improvements are to remove the existing Lateral WC turnout gate and install a **new 42" Rubicon SlipMeter gate**. A cofferdam or pipe plug will need to be installed as the Santa Rosa Canal (SRC) cannot be dewatered due to constant delivery to farmers and the Ak-Chin Indian Community (Ak-Chin) downstream of this SRC check structure and turnout, as well as required appurtenances to maintain and operate the new SlipMeter gate. The new SlipMeter gate will eliminate the spills due to the gate leaking and provide accurate flow measurement for future SRC Lateral WC turnout service.

Irrigation and agronomic cultural practices must evolve to meet resource limitations and production challenges to remain economically viable. It is critical that MSIDD irrigation water management improves and grows to match on-farm unit measurement accuracy, controls, and applications that are increasingly more sophisticated. This includes the conversion of irrigation systems from gravity flood irrigation to other forms of irrigation like micro-sprinklers, center

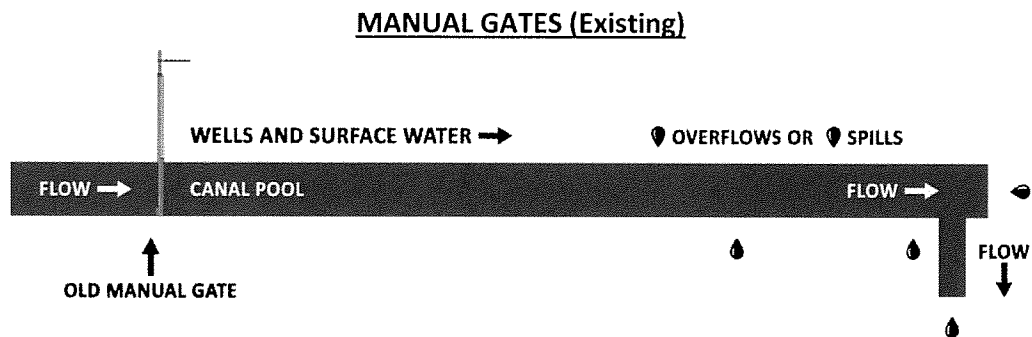
pivot, linear move systems, or drip irrigation. These modern methods tend to require more advanced sensing of inputs and operate most efficiently when water quantity parameters (flow rate, depth, duration) and controls (on demand and shut off) are accurate.

Two pages from the Rubicon Data sheets for the SlipMeter Gate System (in the Appendix Section) have been provided for reference in Section 1.4 Criteria C: Project Implementation and the complete information package from Rubicon has been provided in the Appendix. A schematic (Figure 2) has also been provided below that illustrates the conditions “Before and After” for the installation of the new automated SlipMeter gate system.

This Small-Scale Water Efficiency project is a priority to MSIDD and approved by our Board. We hope to leverage funding from the WaterSMART program to help us complete this multi-phase project, meeting both MSIDD’s and USBR’s goals to conserve and better manage our water resources and increase efficiency of our system. Stakeholders include farmers and customers in the District, CAIDD, Ak-Chin and the USBR. Further, the entire project area is within the Pinal Active Management Areas (AMA) and maintains the goals of the AMA. In addition to Ak-Chin, the District borders the GRIC to the northeast and the Tohono O’Odham Nation to the south. The District would like to work with both Native Communities to be good neighbors and stewards to protect the natural environment that we share along our borders. The District economy is primarily agricultural and the project will help us preserve this economy and local groundwater resources for future use.

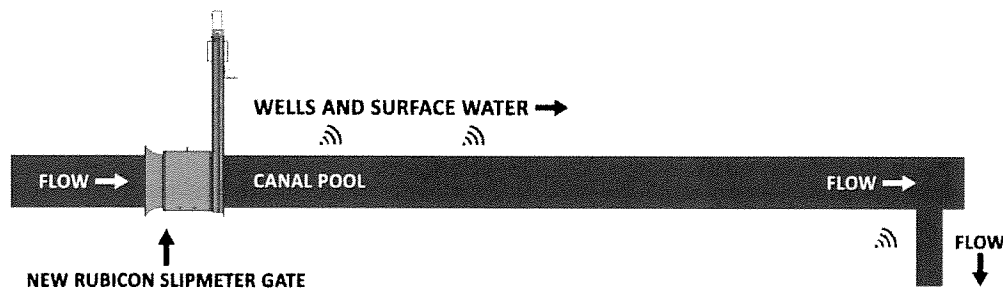
We will accomplish the goals established for the WaterSMART program and President Biden’s Executive Orders by leveraging funding to conserve and better manage our water resources and increase efficiency of our system by slowly improving operations via an integrated network of automated Rubicon gates. We plan to perform pre-construction and construction work anytime between **January 2023 and December 2023**, depending upon NTP.

Figure 2 – Schematic Design of Automated System Before and After New Installation



- Gate adjustment, ditch rider on-site full-time
- Try to maintain constant flow/elevation – fluctuation +/- 2FT, yields variable, inefficient deliveries
- Must anticipate when to stop pumps and adjust gates to match flows and provide water needed
- Close to soon → inadequate delivery
- Close too late → excess flows carry downstream can cause overflow/flooding or loss (downstream gates open to prevent flooding and system overflow)

AUTOMATED GATES (New Installation)



- Adjusts automatically, ditch rider uses integrated network controls
- Maintains delivery ditch pool constant delivery flow
- Gate adjusts precisely when needed to varying water levels on canal pool
- Yields steady deliveries

List of Materials:

Appurtenances and structures for new Rubicon SlipMeter Gate: Concrete repair, cofferdam or large diameter pipe plug, anchor bolts for new gate frame, epoxy for old bolt anchors, new steel grating, and safety features.

Safety Supplies: Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricades, COVID 19 Plan and PPE

List of Equipment:

Construction Equipment to be used for this project will include: Boom Truck, Front End Loader John Deere, Dump Truck, Rubber Tired Excavator Gradall, Water Truck, Project Manager Truck, GPS Survey Equipment, Angle Grinder, Torch, and Pressure Washer

Automation, Measurement Devices and Controls:

The SlipMeter includes the following items:

- The SlipMeter is a precision flow control and flow measurement gate that measures fully submerged flows (and partial-full flow in partial-full models) and mounts directly to a turnout headwall with no straight pipe requirements.
- The SlipMeter comes equipped with an internal and external frame complete with stainless steel anchor's, epoxy capsules, and polyurethane sealant.
- Each SlipMeter comes equipped with a separate standalone control pedestal which includes a display and keypad, solar panel power system and a 16-ft mast for mounting of communication antenna, RTUs, radio and antenna by others.
- The SlipMeter comes complete with an integrated power supply comprising of an 85W solar panel, a charge controller, and a 48Ah 12-volt deep cycling battery pack.
- Standard Rubicon local controller software, including automatic local/remote flow control mode, local/remote gate position mode and local manual mode.

1.4 Evaluation Criteria

A. Project Benefits

Description of Expected Benefits to Category A: MSIDD Water Systems:

- **Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.**

MSIDD's water delivery system faces challenges due to the drought affecting the southwestern United States. The **Tier 1 shortage** resulted in a substantial cut to Arizona's share of the Colorado River – about 30% of Central Arizona Project's normal supply; nearly 18% of Arizona's total Colorado River supply. Tier 1 is triggered if Lake Mead falls below 1,075 ft., therefore Arizona must cut its Colorado River water supply by 320,000 AF. Tier 2 is triggered if Lake Mead falls below 1,050 ft., in which case Arizona must cut 400,000 AF. In many ways the District and Central Arizona are like the spear for drought as reductions will fall largely to our agricultural users. Tier 2 cuts would be more widespread among users to shore up levels at Lake Mead. Again, the hardest hit, will be the agriculture industry in Pinal County including the MSIDD that needs to install infrastructure to help augment the loss of river water and optimize future water resources by installing new automated SCAD systems, wells, pipelines, interconnects, pumping stations, and regulation storage and address water quality issues. With the current state of the districts aging infrastructure and controls, it is difficult to precisely match water supply with demand to prevent mismatched flows and minimize operational spills. At the proposed improvement location, the existing gate is currently leaking through gate down Lateral WC. This project will help improve the **overall water management of the irrigation system by:**

- 1) Reducing Pumping and Energy Costs (Allowing more funding available for improvements)
- 2) Reducing operational losses from spills and overflows (est. 5,500 to 6,500 acre feet/year)
- 3) Reducing risk of crop damage from flooding, uncontrolled releases, or overtopping
- 4) Reducing manual operating costs (Allowing more funding for improvements)
- 5) Reducing delivery level fluctuations (Less water needed with optimum delivery/flow)
- 6) Enhancing the capability to provide on-demand water delivery to customers (Efficiency)
- 7) Enhancing the capability to provide remote monitoring and operation to MSIDD staff (Better resource/staff management)
- 8) Providing the ability to identify leaks, seepage, and unauthorized usage utilizing the precise flow rate measurement of the upgraded gate regulator (Timely preventative actions)
- 9) Providing full integration between flow regulation, gate structure, and groundwater pumps (Accurate water quantity delivery – no excess)
- 10) Improving on-farm water use efficiency and improving yields with reduction in fertilizer protecting the groundwater.
- 11) Providing constant supply levels to maintain more constant flow rates through turnouts to improve levels of service to water users (Less water needed with optimum elevation/flow)
- 12) Reducing "Order On" Lead Times to allow water delivery to be more precisely timed to crop needs (Less water needed)
- 13) Reducing "Order Off" Lead Times to allow precise volumes applied to farm (Less water)
- 14) Providing irrigation decision support tools, and digital monitoring of water usage and flow levels for water users (Efficient, timely and convenient)
- 15) Providing the ability to match water supply more precisely to crop (More accurate matching of need/demand with actual water quantity needed).

16) Reducing costs from reduction in water quantity delivered and person-hours (Items 1-16).

o ***Are customers not currently getting their full water right at certain times of year?***

YES, MSIDD currently had an annual shortfall of approximately 251,000 acre feet with more shortfalls anticipated due to drought. Shortage impacts usually occur during periods of above normal temperatures in the growing season when there is high demand, or at the end of the year when the mandated reduced allotment has been used (affected by climate change and drought). The District tries to schedule water deliveries to offset this problem. Unfortunately, MSIDD has to proportionally reduce the water delivery allocation for each farmer moving forward due to the District water shortage.

o ***Does this project have the potential to prevent lawsuits or water calls?***

YES, from incidents such as overflows/spills or incomplete insufficient delivery that could cause catastrophic crop damage or bacterial contamination on produce causing serious illness or death (*compounded by Climate Change*). In case of severe drought and state imposed mandates, this project's water savings could prevent an inability to provide for a water call (delivery request). Additionally, eliminating leaking gate spills has the potential to prevent a lawsuit from Ak-Chin, a water user downstream on the Santa Rosa Canal.

o ***What are the consequences of not making the improvement?***

The gate will continue to leak wasting a precious resource in this time of drought. There is also a great risk of lawsuit from the Ak-Chin as the districts allotment from the CAP continues to diminish and they become the primary user of the canal. Without the grant we would not be able to implement improvements identified to **better manage** and improve water delivery efficiency and improve our groundwater management for drought resiliency. As described above consequences could include catastrophic crop damage, serious illness or death, economic loss, lawsuits, increased costs to growers in the district, as well as a lack of water during severe drought conditions. Economic losses to growers from shortfalls are very high.

o ***Are customer water restrictions currently required?***

YES, due to drought, mandatory water restrictions have been imposed on MSIDD. MSIDD handles these shortfalls by proportionally reducing the water delivery allocation for each farmer moving forward due to the District water shortage.

o ***Other significant concerns that support the need for the project.***

Potential Shortfalls are a primary concern: If drought continues, surface water supply quantities from the CAP will be reduced so accurate measurement and control are highly important to managing the water efficiently. Most droughts occur after several years of little rainfall and produce a cumulative effect. Our strategy is to prioritize and complete step-wise yearly improvement projects to address these effects. This turnout serves an area with restricted groundwater pumping, making the surface water it delivers vital to the water users.

Broader Benefits: Description of Broader Benefits:

• **Will the project improve broader water supply reliability at sub-basin or basin scale?**

MSIDD is located in the Lower Colorado River Basin - Gila River Valley. The District is entirely within the boundaries of Pinal County which is a main area being highly affected by Tier 1

reductions. Stakeholders include farmers and customers in the District, CAIDD, Ak-Chin and the USBR. Local water conservation measures support the local groundwater basin and the larger Lower Colorado River basin. Improving efficiency of delivery to Ak-Chin will reduce stress on Lake Mead. Also, less pumping protects local groundwater and sustains ecosystems. Further, the entire District is within the Pinal AMA and maintains the goals of the AMA for groundwater. This project will provide a buffer against future state or federal mandated water quantity reductions improving reliability and sustainability of our system. It will allow us to save water through better management (automation) and reduction of groundwater removal by reducing pumping, thus improving drought resiliency and contributing to the overall health of these two basins and surrounding fragile desert ecosystem.

- **Will the proposed project increase collaboration and information sharing among water managers in the region?**

YES, this project demonstrates collaboration between the water district, Ak-Chin, BOR, and the agricultural users. Once tied into SCADA it will enhance collaboration and information sharing between the stakeholders. It can be used as an example to other water managers reflecting how assessment, planning, usage, need, coupled with automation and new technology can be used to benefit a district. Especially for districts operating under various conditions (distance from source, seasonal fluctuations in supply, drought and climate change).

- **Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area?**

The specific problem MSIDD faces regarding water supply are:

- 1) Costs from running the pumps and excess water loss from mismatch overflows and spillage.
- 2) Lack of effective water conservation measures: volume/flow controls (automation) and structures (gates) to precisely match supply and demand.
- 3) Dealing with water quality due to having to rely on mostly groundwater in the future.

Expected Geographic Scope Benefit: Reduction of ground water removal by reducing pumping, contributes to the overall health of the surrounding fragile desert ecosystem that will improve sustainability and help address drought and climate change issues. Local communities and labor pool will benefit from positive agri-business. Fallowing of less lands due to improved water management reduces dust and pollution affecting human health in Greater Maricopa County.

Specific Topics (Sectors and Areas) Positive Impacts/Benefits: Economic Positive Impacts/Benefits:

The specific problems MSIDD faces are:

Agricultural – economic (less water needed, less restriction on crop types, less danger of crop damage from overflows/flooding, reduce shortfalls, less energy needed for pumps, less danger of lawsuits, losses from bacterial contamination or flooding). Reduce O&M cost so funding can be used for other deteriorating structures. Enable implementation of On-Farm improvements.

Environmental – Less noxious/invasive weeds, less erosion, conservation support healthier ecosystem (Native plants, habitat, native species and migratory birds). Fallowing of less lands due to improved water management reduces dust and pollution affecting human health in Greater Maricopa County.

Recreational/Tourism – Gila River/Watershed, major washes (Santa Rosa Wash, Greene Wash, Vekol Wash, Santa Cruz Wash, etc.) – Improved camping/hiking/photography/bird watching.

Cultural – Protection and preservation of native gathering sites (plants and clay), ancient trails, village or ceremonial site.

Food Safety – Less danger of catastrophic crop disease or contamination due to better water elevation controls to prevent sedimentation in canals serving fields with food crops.

Public Safety – Less residual flooding from overflow and spillage resulting in unsafe driving conditions and erosion of road and ditch banks. Less dust pollution and airborne illnesses.

• **Will the project complement work being done in coordination with NRCS in the area?**

YES, this project would greatly enhance the local farmers ability to make “On-Farm” water efficiency improvements through the NRCS EQIP program, however, until MSIDD can provide better controlled water delivery systems (flow rate and elevation), it is difficult for them to make these improvements. The NRCS will help the district plan and develop projects that complement each other, improving the overall system from diversions to the farm. Especially in the Western states where drought, climate change and aging infrastructure are affected.

• **Will the project help address drought conditions at the sub-basin or basin scale?**

- 1) Preventing possible water-related crisis (shortfalls or flooding) – creating resiliency
- 2) Leveraging funding to conserve and better manage the districts water resources and increase efficiency of their system, thus reducing quantities delivered during drought.
- 3) Improving water conservation, efficiency, and effectiveness of water delivery system to reduce water quantities.
- 4) By reducing water quantities allowing water to be used by lower priority users that have shortfalls and mandatory water reductions during drought conditions.
- 5) Reduce groundwater pumping and improve drought resiliency and basin dependence.

B. Planning Efforts and Supporting the Project

• **Is the project identified specifically in the planning effort?**

Our “Water Conservation Plan” mandates that we periodically assess our water delivery system and identify problems or needs as we continue to mature and adapt to meet changing conditions as well as identifying new technologies and strategies. This Small-Scale Water Efficiency project is a priority to MSIDD and is in the final design stage done by George Cairo Engineering, Inc. (GCE) who specialize in irrigation district modernization improvements also receiving input from Rubicon Systems Australia Pty Ltd. We have already designed 4 of these Rubicon Automated Systems Gates along with 3 Fresno Gates with Remote Controlled Actuators in the process of being installed to reduce spills due to urbanization. MSIDD works diligently to improve our irrigation system with very little funding and resources. MSIDD has worked to develop a water delivery system plan to help us prioritize projects to modernize our aging infrastructure with state-of-the-art technology like “tried and tested” Rubicon Gates. The plan will be updated by George Cairo Engineering, Inc. and we will continue to update our plan annually. This project has been discussed and approved by our Board.

• **Explain whether the proposed project implements a goal or addresses a need or problem identified in the existing planning effort?**

Each year, the district identifies and prioritizes their system needs and problems, projects not addressed in the previous year are added. Their criteria include the following:

- 1) Is the project (components) listed as a priority on their Capital Improvement Plan and Water Conservation Plan. **YES**
- 2) Can the problem or need be remedied with existing resources and funds? **NO, need the USBR match**
- 3) What benefits will occur from the corrective action taken (water/monetary savings, efficiency, sustainability, annual maintenance, crop losses, shortfalls, acre foot savings). **ALL**
- 4) Are additional resources and funds available if the existing funds are not available? **NO**
- 5) Recommendations from SOR. **IN PROGRESS**

- **Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.**

Leaking gates on the Santa Rosa Canal that will primarily serve the Ak-Chin System are an identified priority in our plan. This Small-Scale Water Efficiency project has been identified as priority and approved by the MSIDD Board. The MSIDD General Manager and the board actively support new infrastructure projects. The board and the MSIDD Users are **100% supportive of this priority project** to slowly improve the irrigation system. See letters of support in the Appendix.

C. Implementation and Results

- **Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.**

Once the Categorical Exclusion is completed and the district receives the NTP, they will begin initial planning. An Action Plan will be developed that lists each task, scheduled interval, responsible party, comments/notes and when the activity or task is completed and by whom. A work plan will also be completed. Major phases will include:

Engineering/Design Work Required for Project (4 months) Allows for plenty of time for review.

This technical support will be performed by George Cairo Engineering, Inc. with input from Rubicon Systems Australia Pty Ltd – both have provided professional services for installation of automated Rubicon gates.

- Design and Fabrication of Rubicon SlipMeter Gate, Controls and Framework - Rubicon
- Design of Concrete and Structures Modifications and Appurtenances – GCE, Inc.
- Design of Cofferdam/Pipe Plug System to isolate flows from SRC for Gate Installation – GCE, Inc.
- Order Gate & Materials – MSIDD (Long Lead Item, may need 6 months lead time for fabrication)

Pre-Construction/Site Preparation for Project (1-2 Weeks) One site

- On-site support/final planning and safety/COVID 19 meetings – Cairo and Rubicon, concrete and civil works contractor.
- Mobilization of Employees and Equipment
- Disconnect existing electrical facilities for the existing gate

Construction and Installation (2-3 Weeks) One site

- Implementation of all safety measures and COVID 19 requirements

- Installation of cofferdam or pipe plug system to isolate flows from the SRC and any safety measures
- Removal of existing gate and demolition/removal of any required structure elements - MSIDD
- Continue to Coordinate/schedule with affected water user(s) – MSIDD
- Final Site Preparation - MSIDD Equipment Operator
- Installation of the SlipMeter Gate (mount to concrete structure) – MSIDD, GCE and Rubicon (Oversee)

Post-Construction (1 Week):

- Installation/testing of automation systems/controls (all activities not requiring dry-out)
- Commission gates and certify accurate measurement and operation
- Postmortem to discuss lessons learned

Closeout/Reports:

As required (Progress Reports - Quarterly or Semi-Annual).

Document final installation

Final report with documentation

SlipMeter Gate Specifications are provided in the Appendix

Table 1, the Tentative Milestone/Task Schedule is provided below.

- **Describe any permits that will be required, along with the process for obtaining such permits. NONE.**
- **Identify and describe any engineering or design work performed specifically in support of the proposed project.**

This will be performed by Rubicon and GCE for Design and Fabrication of SlipMeter Gates, Controls and Framework. Design of Cofferdam or Pipe Plug System, Concrete Repair, Aprons, Walkway Grating, Safety Handrails, Electrical Wiring, Lighting and Appurtenances by George Cairo Engineering, Inc. If environmental compliance work is required, GCE will work to meet the requirements.

- **Describe any new policies or administrative actions required to implement the project.**
None. No new policies or actions, MSIDD always gets prior approval from their board and coordinates improvement projects with the water users to minimize impact to their agricultural operations.
- **Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?**

YES, all work will comply with Federal environmental and cultural resource laws and other required regulations. Our engineer, GCE met with the local USBR Office Environmental and Cultural Resource staff to understand the potential requirements for this project. The facility is less than 50 years old. The project area is all within USBR ROW. All work and staging will stay within the already disturbed area within the USBR ROW with no new ground disturbance.

Table 1 – Tentative Milestone/Task Schedule

Milestone/Task	Planned Start Date	Planned Completion Date
USBR Notice of Award	01/01/23	01/01/23
USBR Notice to Proceed and Contract Execution <i>Can take up to 6 months for Rubicon to fabricate gate and ship gate from Australia. May order with USBR approval before contract execution.</i>	01/01/23	01/31/23
USBR Categorical Exclusion/Environmental Compliance Review MSIDD & GCE to work closely with USBR Environmental & Cultural Resources	02/01/23	03/31/23
Pre-Construction Contractor/Vendor Procurement: Engineering/Design, Concrete and Gates with associated structures, Concrete Subcontractor	02/01/23	10/31/23
Construction/Installation Coordinate/schedule with affected water user(s), Site Preparation, Installation of Cofferdam/Pipe Plug System, Concrete Structures, Installation of SlipMeter Gate, Cleanup and Debris Removal	11/01/23 ¹	11/30/23 ¹
Completion Closeout/Final Report	12/01/23	12/31/23

¹ Construction and Installation will take about 4 weeks but will take place in the late winter between these two dates. There is less demand (quantity and time), thus minimal impact to our producers/growers. MSIDD would schedule the work to accommodate them. Ideally, construction will start as soon as possible for design and procurement late 2022 or early 2023, but unless we receive the Award and NTP are received by December 2022 or January 2023 from USBR, this is unlikely.

D. Nexus to Reclamation

• **Is the proposed project connected to a Reclamation project or activity? If so, how?**

YES, this project is connected to the CAP and Lower Colorado River system and to the Reclamation vision and goals of improving efficiency and conservation of water systems for our district and supporting resiliency and basin drought water management.

○ **Does the applicant receive Reclamation project water?**

YES, the District and Ak-Chin receives Colorado River surface water from CAP. The surface water from the CAP is delivered through a system of canals, pipelines and appurtenances beginning at the Santa Rosa Canal turnout off the CAP Canal, East of the city of Eloy.

○ **Is the project on Reclamation project lands or involving Reclamation facilities?**

YES, it is owned by USBR. The easement is owned by USBR and the irrigation facilities were constructed by USBR. The District operates and maintains the Santa Rosa Canal as part of its District operations and along with Ak-Chin is a recipient of water delivered through the canal.

○ **Is the project in the same basin as a Reclamation project or activity?**

YES, it is a Reclamation Project and there is Reclamation activity since it is the tip of the spear of influence dealing with drought impacts in the Colorado River basin. In this area with

Reclamation is heavily involved in the application of the latest science and technology through competitive funding of construction projects and system optimization studies.

- o ***Will the proposed work contribute water to a basin where a Reclamation project is located?***

YES, Lower Colorado River Basin and it is a Reclamation Project.

E. Presidential and Department of the Interior Priorities

Sub-criterion No. E1. Climate Change

Combating the Climate Crisis

- **Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.**

MSIDD uses a “Best Practices” model by **conserving, protecting, and restoring** their natural resources (water and subsequent watersheds and habitats) by a variety of water conservation activities as previously discussed. The districts partnership with farmers/producers enables them to work together to develop strategies to address the climate crisis through new and innovative agricultural conservation activities. They are also identifying system components that can utilize solar energy. Regarding the 30 by 30 initiative, with NCRS and USDA they are identifying On-Farm projects to reduce carbon emissions and promote circular biodiversity, especially in the riparian and watersheds that border the district.

Reducing climate pollution: Agricultural Greenhouse Gas Emissions (10% of total released in US)

1) Reduce carbon emissions through use of solar powered SCADA units and reduced O&M time requiring on-site vehicles.

Protecting public health: According to the CDC effects from Climate Change include increased incidence of respiratory and cardiovascular disease, injury and death due to extreme weather events, heat wave, droughts and floods causing losses to property, crops and change in food distribution, water-borne illnesses and mental health (CDC). This is especially true in rural, underserved, low-income populations such as those in the District area. This project will:

- 1) Improve air quality by reducing carbon emissions through use of solar powered SCADA units and reduced O&M time requiring on-site vehicles and dust generated from dirt roads.
- 2) Reduce risk of biological contamination by automating controls to reduce incidence of spills, overflows and flooding.
- 3) Reduce cumulative effects from poor health (Type 2 Diabetes, Respiratory and Cardiovascular diseases) and reduce fugitive dust from fallowed lands.

Conserving our lands, waters, oceans, and biodiversity:

By conserving water, we promote biodiversity, endangered species in this desert habitat rely on the Lower Colorado River and its backwaters, riparian areas and natural lakes and the marshy habitat it supports for nesting, spawning and daily life. It also is part of the migration pathway for many bird species. Their habitat was greatly affected by the dams constructed along the Colorado River and then by the increased demand for water by towns and farming. During drought conditions this is intensified, and their critical habitat threatened. Particularly during the summer when water demands are increased. Numerous washes, riparian and marshy areas

form a perimeter between the agricultural fields and the canals, the Gila River (North) as well as the mountains (West, South and East) that divert runoff from rainfall into natural riparian areas.

- **Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?**

YES, it improves the integrity of the delivery system to prevent leakage/seepage, overflows/flooding/spills, constant/reliable water flow, improve quantity (water elevation) and water quality. This will help address any shortfalls, as well as helping with future adverse conditions caused by drought and climate changes. These improvements also will result in improved on-farm efficiency and crop production while introducing state of the art technology.

Any activity that helps conserve our natural resources, notably water, contributes to the overall resiliency of communities that share these limited resources to survive and thrive. Contributing to the overall well-being of their ecosystem. This project is in-line with President Biden and DOI objectives and drought mitigation for the Lower Colorado River Basin.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

- **Will the proposed project serve or benefit a disadvantaged or historically underserved community?**

YES, Western Pinal County is an historically underserved, rural, low-income, disadvantaged community (Town of Stanfield, Casa Grande, Ak-Chin, Maricopa, GRIC, and Tohono O’odham) because of its ethnic minorities, poverty level and rural location.

Public Health and Safety as related to:

Water Quality: Improve due to more efficient groundwater use since community rely on wells. See page 13, 3rd paragraph.

Economic Growth Opportunities – reduced farming costs allow for more employment and help create 2nd tier producers (value added products).

- **Please describe in detail how the community is disadvantaged based on a combination of variables.**

Without these improvements the district would not be able to **better manage and improve water delivery efficiency**. Consequences include: shortfalls during severe drought conditions adversely effecting Tribal income from farming and land leases as well as tourism and recreation, additional groundwater pumping and energy consumption, and loss or riparian or watershed areas for traditional gathering and as habitat for native species.

Table 2 – MSIDD Disadvantaged Community Variables

MSIDD Irrigation and Drainage District Disadvantaged Community Variables		
Variable	Maricopa-Stanfield	Ak-Chin Indian Reservation
Population	59,915	1,555
Median Household Income	MHI ¹ \$27,358	MHI ¹ \$24,896
Poverty Rate	52%	41%
Racial and ethnic distribution	71% Hispanic 29% Native American	88% Native American 16% Hispanic
Linguistic Spoken	English/Spanish/	English/Spanish/

	O’odham/local Native speaking	O’odham/local Native speaking
High housing cost burden and substandard housing	\$211,300	\$75,000
High transportation cost burden and/or low transportation access	Limited Public Transportation	Limited Public/Tribal Transportation
Disproportionate environmental stressor burden and high cumulative impacts	Poverty Level Magnify	Poverty Level Magnify 50% Type 2 Diabetes
Water Quality	Treated & Tested Regularly	Archaic System
Disproportionate impacts from climate change	Poverty Level Magnify	Poverty Level Magnify
High energy cost burden and low energy access	Utility Rates High	Utility Rates High
Access to healthcare	Limited, 2 hospitals	IHS for BIA registered

- **If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985.**

See Table 2. Population includes majority of Hispanics and Native American, they reside in a sparsely populated rural area, with little or no tax base to support their infrastructure. They are isolated by historically being considered less than equal as agricultural workers. The nearby Indian Reservations are also an underserved community and share the water resources.

Sub-criterion No. E3. Tribal Benefits

- **Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?**

YES, this project will help Reclamation meet their trust responsibilities to the three local Indian Tribes. Any water conservation measures that support the Lower Colorado River Basin and other small tributaries in this network system (Gila River) will help directly conserve water that the Ak-Chin receive, and indirectly the GRIC, and Tohono O’odham need for their native wetland and riparian areas and water resources for residential, municipal and agricultural use.

- **Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?**

Since these three Tribes reside in a similar area the answers to these questions are the same as on pages 13 and 14. This project will provide a small buffer against possible future state or federal mandated water quantity reduction because of drought or climate change by saving water through better management (automation). It will improve the integrity of the delivery system to prevent leakage/seepage, overflows/flooding/spills, constant/reliable water flow, improve quantity (water elevation) and water quality. This will help address any shortfalls, as well as helping with future adverse conditions caused by drought and climate changes. These improvements also will result in improved on-farm efficiency and crop production.

2. Project Budget

2.1 Funding Plan and Letters of Funding Commitment

The **Federal share** is **48.37%** and the **Non-Federal share** is **51.63%**.

MSIDD Staff will be utilized for specific tasks during the approximate one-year project duration (including a 4 week construction phase (November – December)). For In-Kind, MSIDD will utilize our labor resources and staff, equipment/vehicles. The installation and commissioning will be overseen by a Rubicon representative and GCE, but MSIDD’s responsibilities will include project management, site preparation, some demolition, fill/compaction, concrete work, gate installation, dust control, cleanup and removal of debris and material at completion. By using District staff costs will be greatly reduced because less hours will be required, and District equipment will be used.

MSIDD Staff will include 7 personnel to assist with the project, preconstruction, construction, and close out activities. Their responsibilities and duties are provided on the following page.

Costs incurred before start date: None (May need to place order for Rubicon Slip Meter Gates since they take 6 months of lead time to fabricate and are shipped from Australia).

2.2 Budget Proposal

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal Funding	\$89,000.00
Costs to be paid by the Applicant	\$95,005.90
Value of third-party contributions	\$0.00
TOTAL PROJECT COSTS	\$184,005.90

Project Costs Breakdown:

Federal Funding

BUDGET ITEM DESCRIPTION	AMOUNT
Materials: 1 Rubicon SlipMeter Gate @ \$35,915 Each	\$35,915.00
Construction: Rubicon Installation & Commissioning 1 Gate @ \$ 1,500 Each	\$1,500.00
Construction: Contractor Civil Work & Gate Installation (Partial)	\$51,585.00
TOTAL FEDERAL FUNDING	\$89,000.00

Non-Federal Funding (MSIDD) – In Kind and Cash

BUDGET ITEM DESCRIPTION	AMOUNT
Salaries and Wages: <i>In Kind</i>	\$34,506.74
Fringe: <i>In Kind</i>	\$19,630.60
Equipment: <i>In Kind or Cash</i> if rented	\$12,488.56
Contractual: Engineering GCE	\$19,980.00
Construction: Contractor Civil Work & Gate Installation (Partial)	\$900.00
Environmental Compliance	\$7,500.00
In Direct Costs – De Minimis In-Kind	\$0.00
TOTAL NON-FEDERAL FUNDING	\$95,005.90

BUDGET ITEM DESCRIPTION	COMPUTATION		UNIT	TOTAL COST
	Rates	Quantity		
Salaries and Wages (MSIDD)				
Project Manager/Director of Water Ops.	\$81.31	186	HR	\$15,123.66
Water Master	\$60.95	88	HR	\$5,363.60
Irrigation Accountant	\$27.32	134	HR	\$3,660.88
System Operator	\$22.92	108	HR	\$2,475.36
Equipment Operator I	\$19.37	148	HR	\$2,866.76
Equipment Operator II / Fabricator	\$19.73	168	HR	\$3,314.64
Equipment Operator III	\$20.26	84	HR	\$1,701.84
Total		1244	HR	\$34,506.74
Fringe Benefits (MSIDD)				
Project Manager/Director of Water Ops.	\$38.63	186	HR	\$7,185.18
Water Master	\$24.82	88	HR	\$2,184.16
Irrigation Accountant	\$15.37	134	HR	\$2,059.58
System Operator	\$16.78	108	HR	\$1,812.24
Equipment Operator I	\$15.52	148	HR	\$2,296.96
Equipment Operator II / Fabricator	\$15.56	168	HR	\$2,614.08
Equipment Operator III	\$17.60	84	HR	\$1,478.40
Total		1244	HR	\$19,630.60
Equipment (MSIDD)				
Caterpillar Loader 996E	\$120.15	24	HR	\$2,883.60
Excavator Gradall G660E	\$143.19	8	HR	\$1,145.52
Crane Hydraulic with Boom	\$94.99	24	HR	\$2,279.76
Water Tanker Trailer 5,000 Gal	\$160.19	24	HR	\$3,844.56
Crew Truck 1/2 Ton 2000 Ford	\$48.94	8	HR	\$ 391.52
Project Manager Pickup Truck	\$48.59	40	HR	\$1,943.60
Total		124	HR	\$12,488.56
Materials and Supplies				
Rubicon SlipMeter Gate	\$35,915.00	1	LS	\$35,915.00
Total				\$35,915.00
Contractual				
Engineering and Design (Pipe Plug System & Structure)	\$19,980.00	1	LS	\$19,980.00
Total				\$19,980.00
Construction				
Contractor	\$52,485.00	1	LS	\$52,485.00
Installation Supervision & Commissioning	\$1,500.00	1	LS	\$1,500.00
Total				\$53,985.00
Environmental and Regulatory Compliance				
Environmental Compliance	\$7,500.00	1	LS	\$7,500.00
Total				\$7,500.00
TOTAL DIRECT COSTS				\$184,005.90
Indirect Costs – De-Minimis Fixed	\$0.00	0	%	\$0.00
TOTAL ESTIMATED PROJECT COSTS				\$184,005.90

2.3 Budget Narrative

Salaries and Wages:

MSIDD Employee Hours Explanation

MSIDD Employee	Grant Compliance & Bid Procurement Process & Reporting (~ 12 months)	Pre-constr. Activities: Environmental Compliance, Contractor/Vendor, Procurement, Engineering/Design, Concrete & Gate, Concrete Work, etc. (~ 9 Months)	Constr./ Installation: Coord. & Sched. w/ affected Water Users, Site Prep., Concrete Struct. & Foundation Work, Gate Installation, Cleanup & Debris Removal (~ 1 Month)	Post- Construction: Installation & Testing of Automation & Controls, Commissioning Work, Grant Close-Out Work (~ 1 Month)	Sub-Total
Project Manager/Director of Water Operations: Overall project management, coordination with Engineers, Manufacturer, and Contractor Installation of Rubicon Gate/Associated Controls/Structures, Scheduling of Staff and Equipment, etc.	Assume 12 months, Approx. 4 hr/month = 48 hrs	Assume 6 months, Approx. 8 hr/month = 48 hrs	Assume 1 month, Approx. 50 hr/month = 50 hrs	Assume 1 month, Approx. 40 hr/month = 40 hrs	= 186 hrs
Water Master: Assist Project Manager – supervise MSIDD field staff, etc.	0 hr	Assume 2 months, Approx. 16 hr/month = 32 hrs	Assume 1 month, Approx. 40hr/month = 40 hrs	Assume 1 month, Approx. 16 hr/month = 16 hrs	= 88 hrs
Irrigation Accountant: Assist Project Manager and help with managing project financials and reporting	Assume 2 months, Approx. 8 hr/month = 16 hrs	Assume 6 months, Approx. 8 hr/month = 48 hrs	Assume 1 month, Approx. 20 hr/month = 20 hrs	Assume 1 month, Approx. 50 hr/month = 50 hrs	= 134 hrs
System Operator	0 hr	Assume 2 months,	Assume 1	Assume 1	=108

Coordination on water scheduling and coordination with water users, site initiation work, manage and handle all equipment during construction activities, etc.		Approx. 16 hr/month = 32 hrs	month, Approx. 60 hr/month = 60 hrs	month, Approx. 16 hr/month = 16 hrs	hrs
Equipment Operator I: Site initiation work, handle all equipment during construction activities, construction activities, etc.	0 hr	Assume 2 months, Approx. 40 hr/month = 80 hrs	Assume 1 month, Approx. 60 hr/month = 60 hrs	Assume 1 month, Approx. 8 hr/month = 8 hrs	= 148 hrs
Equipment Operator II: Site initiation work, handle all equipment during construction activities, construction activities, fabrication, etc.	0 hr	Assume 2 months, Approx. 40 hr/month = 80 hrs	Assume 1 month, Approx. 80 hr/month = 80 hrs	Assume 1 month, Approx. 8 hr/month = 8 hrs	= 168 hrs
Equipment Operator III: Site initiation work, handle all equipment during construction activities, construction activities, fabrication, etc.	0 hr	Assume 2 months, Approx. 20 hr/month = 40 hrs	Assume 1 month, Approx. 40 hr/month = 40 hrs	Assume 1 month, Approx. 4 hr/month = 4 hrs	= 84 hrs

MSIDD certifies that the labor rates included in the budget proposal represent the actual labor rates of the identified personnel.

Equipment: Will use USACDOE equipment (EP 1110-1-8 30 November 2018)
 Rate = (Average Hourly Rate + Fuel) * 10% → Multiple by 10% since USACE rates are from 2018

Caterpillar Loader 996E – Site preparation, cofferdam/pipe plug and gate removal and installation and final cleanup

Excavator Gradall G660E – Site preparation, cofferdam/pipe plug and gate removal and installation and final cleanup
 Crane Hydraulic with Boom– Site preparation, cofferdam/pipe plug and gate removal and installation and final cleanup
 Water Truck – Dust Control
 Service Truck – Used in support of MSIDD Crew on-site
 Project Manager Truck – Project management at site

Materials and Supplies:

Safety (Level D) and Construction:
 Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricades
 One 42” Rubicon SlipMeter Gate System for lateral turnout - the costs for each gate were quoted and provided by Rubicon System America, Inc., which includes furnishes and installation. Gate commissioning costs will be under Construction.

Gate No.	Gate Location ID	Rubicon Gate Model	Sub-Total
Gate 1	Lateral WC Turnout	SMB-1050-4200	\$35,915.00
		Total	\$35,915.00

Contractual:

Engineering and Design of Concrete support structures. Refer to GCE’s Quote.
 The engineering cost proposal provided by George Cairo Engineering, Inc. for the design and survey of the 3 gates. The scope of work includes the following:

- Periodic project coordination meetings with MSIDD and Contractor, inclusive of project kick-off meeting
- Data collection and field design and hydraulic survey work
- Design site plan and structural sheets for the 42” Gate and cofferdam/pipe plug system
- 60% submittal and Final submittal for construction
- Post design, services during construction activities, and gate installation and commissioning supervision
- USBR Environmental Compliance and support services

Construction:

Refer to Innova’s Quote and Rubicon’s Quote.
 Gate Installation: This work will be performed by the Contractor and Rubicon staff and augmented by MSIDD Personnel & Equipment inclusive of mobilization, cofferdam or pipe plug type system to isolate flows from the Santa Rosa Canal and to seal work areas, remove existing gate, prepare for concrete work, install new gate, commission gate support, clean-up, and demobilization. Include Safety (Level D) and Construction: Shade, Coolers, Water/Electrolytes, Gloves, Safety Glasses, Reflective Vests, Hard Hats, Steel-Toed Boots, Signage, Cones, Barricade, concrete support structure, etc.

Other:

Environmental Regulatory Compliance Costs: Potentially an assessment of potential affect will be needed for the new gate, and we've accounted for some costs to coordinate and support the environmental compliance. GCE met with the local USBR Office Environmental and Cultural Resource staff ahead of the grant submittal to understand the potential requirements for this project. The facility is less than 50 years old. The project area is within USBR Easement. All work and staging will stay within already disturbed areas within the USBR Easement and there will be no earth disturbing activities and no demolition of existing structures. The new gate to be installed is on existing concrete structure.

See responses to Environmental Compliance Questions on page 19 to determine what may be needed and preparation of Environmental compliance documents as required.

3. Environmental and Cultural Compliance

- 3.1 Impact to Surrounding Environment** **NONE**
No significant impact, all earth-disturbing work will occur within existing canal O&M road and existing easement. Canal is at higher elevation and was created with imported fill.
- 3.2 Threatened or Endangered Species, or Designated Critical Habitat** **NONE**
This area is greatly disturbed and in constant agricultural use. There are no threatened or endangered species present or critical habitat. *See page 14 last paragraph for description of surrounding biomes.*
- 3.3 Wetlands or Other Surface Waters (CWA) – Waters of the United States** **NONE**
There are no wetlands within the project boundary.
- 3.4 Water Deliver System Date of Construction**
The Santa Rosa Canal was constructed in 1987.
- 3.5 Modifications or Effects to Individual Features of a Delivery System (i.e., head gates, canals, or flumes)** **YES - ONE**
One manual canal gate will be replaced with a single Rubicon SlipMeter gate.
- 3.6 Features in the Maricopa-Stanfield Irrigation and Drainage District Listed or Eligible for Listing on the National Register of Historic Places** **NONE**
There are some that are 5 to 30 miles away. City of Casa Grande to the Southeast (Buildings/structures) and Maricopa Wells to the Northwest.
- 3.7 Archaeological Sites in Proposed Project Area** **NONE**
There are no archaeological sites in the project area.
- 3.8 Disproportionately High or Adverse Effects on Low Income or Minority Populations** **NONE**
No disproportionally high or adverse effects on low income or minority populations. If anything, this will have the opposite effect economically.
- 3.9 Limit Access to and Ceremonial Use of Indian Sacred Sites or Impact on Tribal Lands** **NO**
Not limit access to and ceremonial use of sacred sites or impact Tribal lands.

3.10 Contribution to Introduction, Continued Existence, or Spread of Noxious Weeds or Non-Native Invasive Species *NO*

If anything, this project will have the opposite effect, reducing noxious weeds and non-native invasive species, including aquatic vegetation by reducing spills.

4. Required Permits or Approvals

There are no permits or approval required for this project.

5. Letters of Support or Approvals

See attachment for Letters of Support on this project.

6. Official Resolution

We've attached an authorization letter approved by Board, no third party financial support. Resolution will be provided after the next Board Meeting.

7. Appendices

- a. Rubicon SlipMeter Data Sheets and Quote
- b. George Cairo Engineering, Inc. Quote
- c. Innova Water Construction Quote
- d. Photographs of Gate
- e. MSIDD Summary, Description, Background and History
- f. Letters of Support
- g. Commitment Letter

Mr. Rob Knorr
Knorr Farms
P.O. Box 1260
Maricopa, AZ 85139

April 10, 2022

**RE: United States Bureau of Reclamation Funding No. R22AS00195
WaterSMART Small-Scale Water Efficiency Projects
MSIDD – Lateral WC Turnout Gate Replacement Project**

To Whom It May Concern,

This letter is provided to strongly endorse and provide support for the Maricopa-Stanfield Irrigation and Drainage District (MSIDD) – Lateral WC Turnout Gate Replacement Project application to the USBR for the Funding Opportunity No. R22AS00195 WaterSMART Small-Scale Water Efficiency Projects. As a farmer in the District, I support the District's application for this grant to obtain funding to replace the existing Lateral WC turnout gate with an automated gate. This is a great step toward the District's water conservation goal to reduce spills, lower pumping costs, and help prevent over watering. As the District is able to optimize and modernize their system, they will be able to provide more reliable water supplies.

Thank you for accepting this letter of support for the grant consideration.

Sincerely,



Rob Knorr
Phone: (520) 424-3600

Mr. Craig Zinke
3190 N. White & Parker Road
Maricopa, AZ 85172

April 13, 2022

**RE: United States Bureau of Reclamation Funding No. R22AS00195
WaterSMART Small-Scale Water Efficiency Projects
MSIDD – Lateral WC Turnout Gate Replacement Project**

To Whom It May Concern,

This letter is provided to strongly endorse and provide support for the Maricopa-Stanfield Irrigation and Drainage District (MSIDD) – Lateral WC Turnout Gate Replacement Project application to the USBR for the Funding Opportunity No. R22AS00195 WaterSMART Small-Scale Water Efficiency Projects. As a farmer in the District, I support the District's application for this grant to obtain funding to replace the existing Lateral WC turnout gate with an automated gate. This is a great step toward the District's water conservation goal to reduce spills, lower pumping costs, and help prevent over watering. As the District is able to optimize and modernize their system, they will be able to provide more reliable water supplies.

Thank you for accepting this letter of support for the grant consideration.

Sincerely,



Craig Zinke
Phone: (480) 695-8675

MARICOPA-STANFIELD IRRIGATION & DRAINAGE DISTRICT

OFFICERS
Bryan M. Hartman, President
Daniel W. Thelander, Vice-President
Kelly Anderson, Secretary

GENERAL COUNSEL
Paul R. Orme

DIVISION 1 DIRECTORS
Kelly Anderson
Jacob Feenstra
Bryan M. Hartman

DIVISION 2 DIRECTORS
Siebe Hamstra
James P. Whitehurst
Craig Zinke

DIVISION 3 DIRECTORS
Daniel W. Thelander
Tony Dugan
Larry Hart

April 14, 2022

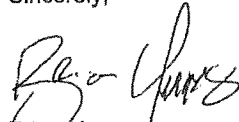
**RE: United States Bureau of Reclamation Funding No. R22AS00195
WaterSMART Small-Scale Water Efficiency Projects
MSIDD – Lateral WC Turnout Gate Replacement Project**

The Maricopa-Stanfield Irrigation and Drainage District (MSIDD, District) is applying for a grant from the Bureau of Reclamation WaterSmart Small Scale Water Efficiency Projects to assist with a turnout gate replacement for Lateral WC. The MSIDD Board of Directors met on Wednesday April 13, 2022, to discuss the grant application and subsequently authorized a submission for this round of funding. The board also authorized the appropriate match requirement as required by the grant program.

The funding would replace the existing Lateral WC turnout gate with an automated gate. The project will help with water conservation to reduce spills, lower pumping costs, and help prevent over watering.

We appreciate the opportunity to apply for funding and enthusiastically support our grant application and look forward to your review and comment. If you require any additional information, please feel free to reach out to our team.

Sincerely,


Brian Yerges
General Manager

