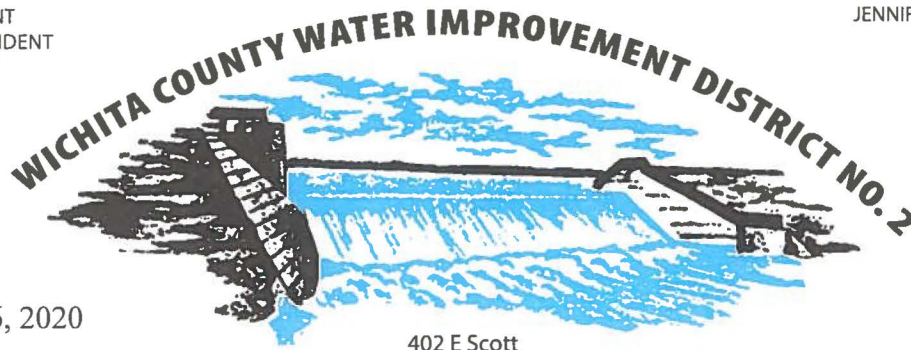


DIRECTORS
BOBBY ROWLAND, PRESIDENT
KEITH MEADOWS, VICE PRESIDENT
BOBBY BAUMER, SECRETARY
JOE TOM COLLINS
BEN KIRKLAND

KYLE W. MILLER, GENERAL MANAGER
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September 16, 2020

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Support Sections
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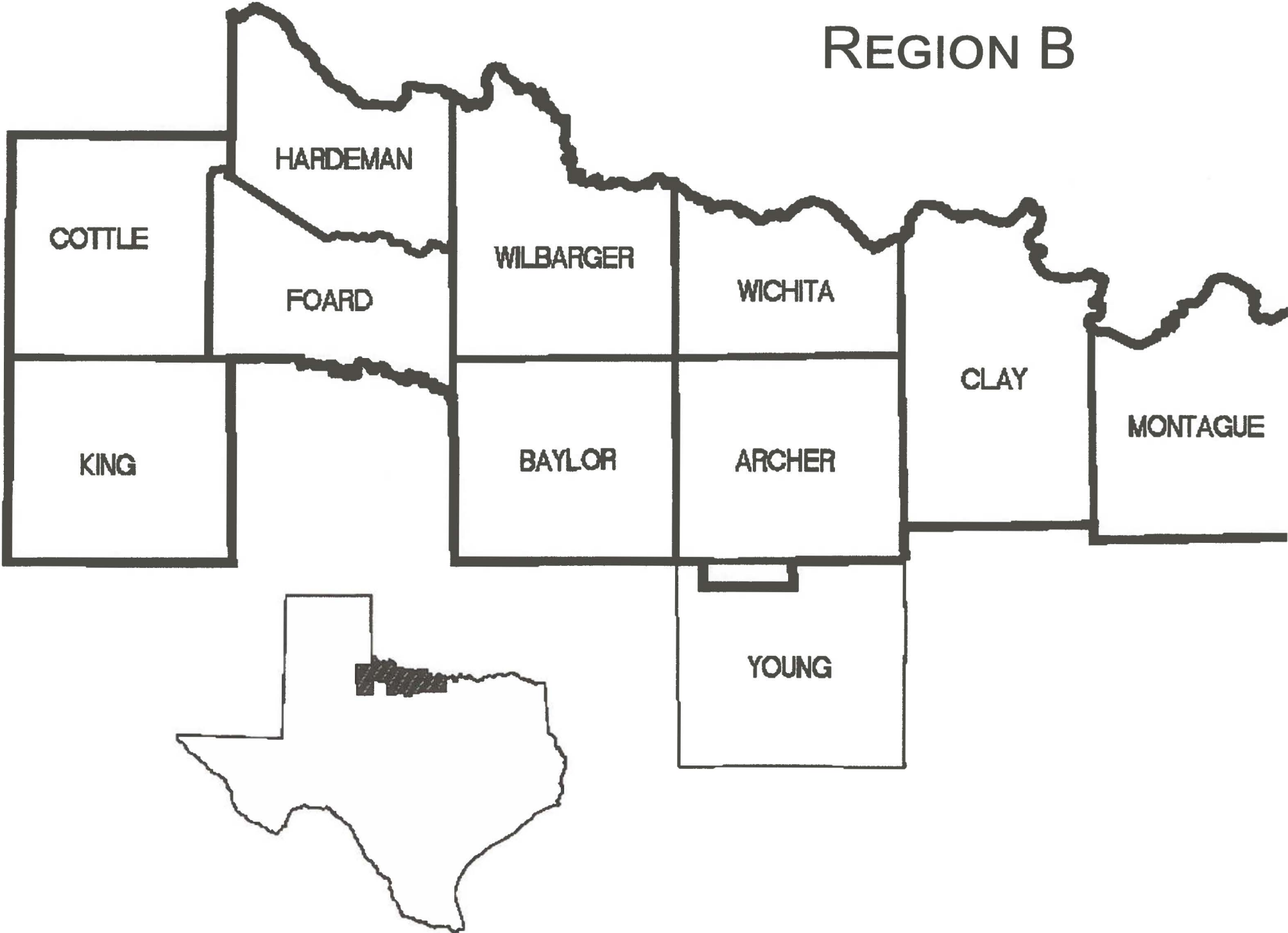
Dear Mr. Weakland,

Please find the grant proposal from the Wichita County Water Improvement District No.2 for FOA No. BOR-DO-21-F001, WaterSMART Grants: Water and Energy Efficiency Fiscal Year 2021.

Thank you,

Kyle W. Miller
General Manager
WCWID No.2

REGION B



*Application to the U.S. Bureau of Reclamation
Under Funding Opportunity Announcement No. BOR-DO-21-F001*

*WaterSMART Grants:
Water and Energy Efficiency Grants for Fiscal Year 2021*

Wichita County Water Improvement District #2 Water Distribution Efficiency and Infrastructure Modernization Project



September 17, 2020

Wichita County Water Improvement District #2
Wichita Falls, Texas

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Technical Proposal

Executive Summary

This application for an FY-2021 Water Energy and Efficiency Program grant (Funding Opportunity Announcement No. BOR-DO-21-F001), under Reclamation’s WaterSMART Program, is submitted September 17, 2020 on behalf of the Wichita County Water Improvement District #2 (WCWID2 or District), which is located in Wichita County, west of Wichita Falls, Texas (Figure 1). WCWID2 is the region’s largest provider of irrigation water.

This project, which is part of a more comprehensive District water conservation initiative, seeks to replace a major portion of the PB Lateral Canal with pipe. This is anticipated to result in water savings of 1,270 acre-feet per year (AFY) through reduced evaporation and seepage/leakage. A direct

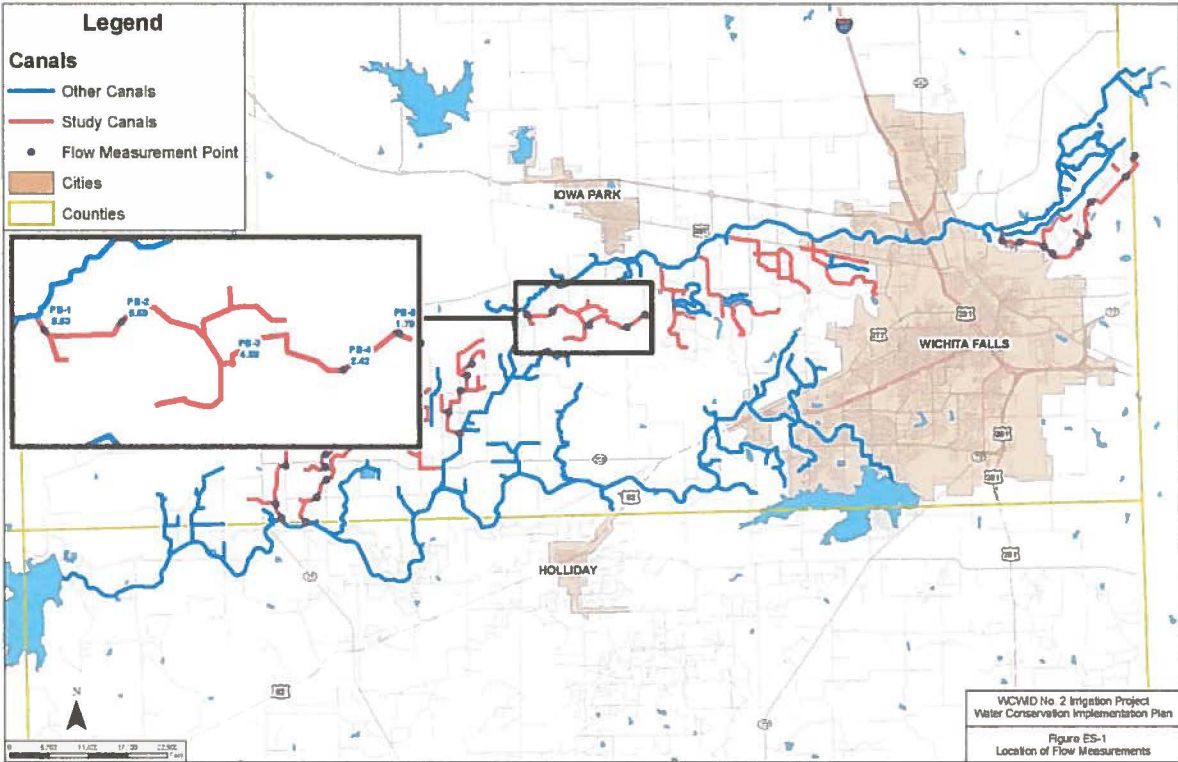


Figure 1: The location of Wichita County (above) as well as the Wichita County Water Improvement District canals west of Wichita Falls, Texas (below). The inset indicates the PB Lateral Canal, including flow measurement points.

benefit will be enhanced water reliability for District members—irrigators as well as the City of Wichita Falls, which has recently increased its dependence on District water to strengthen its resilience to drought, such as that suffered in 2011-15. The project—part of a priority recommendation of the Region B, Texas State Water Plan, to address anticipated irrigation water supply deficits in the region—will also reduce the District’s annual maintenance costs. Planning for the project, estimated to require three months, will begin on March 1, 2021. The estimated construction start date is October 1, 2021, which marks the conclusion of the normal irrigation season. The project, utilizing District labor and equipment, will require approximately seven months (demolition through installation) to complete, concluding by April 30, 2022. The project is not located on a federal facility.

Technical Project

Background

WCWID2 and the City of Wichita Falls jointly own Lake Kemp, a project of the U.S. Army Corps of Engineers (USACE) located on the Wichita River immediately upstream of State Highway 183 in Baylor County (see Figure 2). Lake Kemp and Lake Diversion were completed in 1923 as a comprehensive water supply system for the region. WCWID2, a political subdivision of the State of Texas administered by a five-member Board of Directors, manages the lake and distribution system. Both WCWID2 and the City of Wichita Falls possess adjudicated water rights supplying

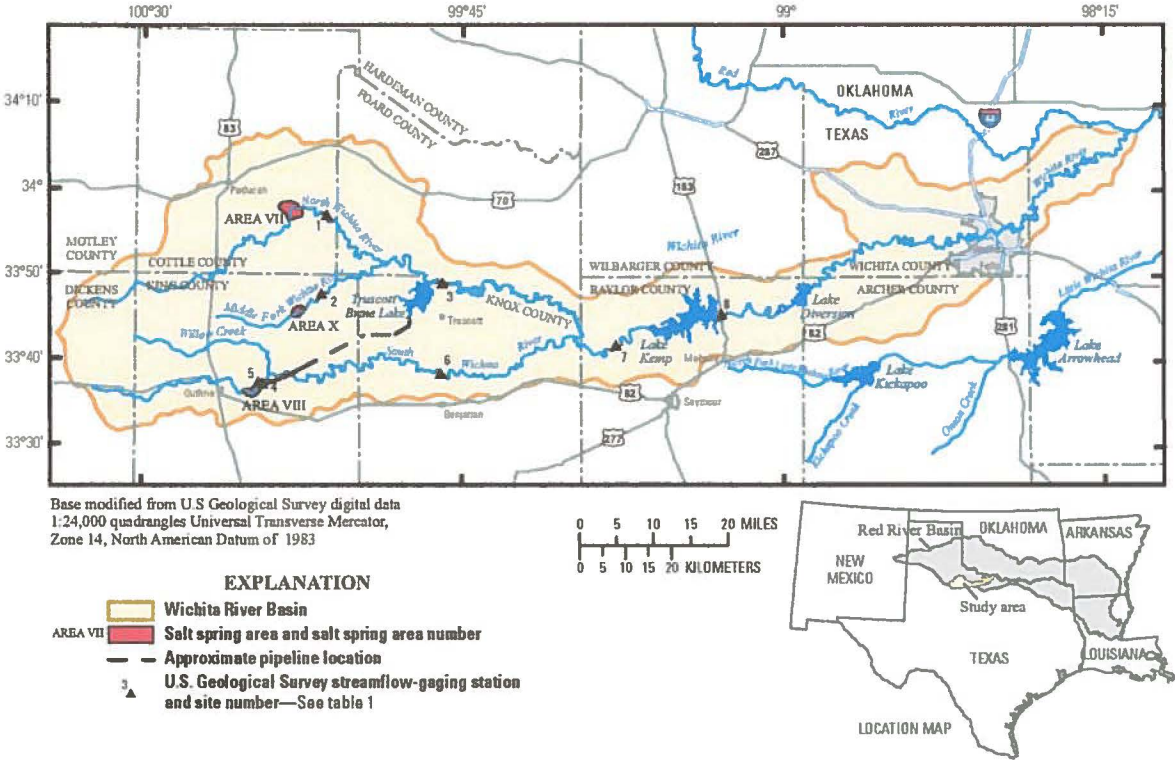


Figure 2: The Wichita River Basin, including both Lake Kemp and Lake Diversion upstream of the City of Wichita Falls. The Wichita River flows in a generally east/northeastward direction to its confluence with the Red River at Lake Texoma.

raw water to the City through the District’s primary distribution canal. The District currently maintains a staff of 12—11 full-time employees and one part-time employee.

Lake Diversion is operated in conjunction with Lake Kemp to provide water supply for municipal, industrial, irrigation, mining and recreational purposes. Irrigation water is diverted into canal systems that distribute water to customers in Archer, Clay and Wichita Counties. Water deliveries support a vibrant local agricultural economy, especially cotton. (Texas is the nation’s largest producer of cotton. In 2017, the state produced almost 46 percent of domestic cotton, according to the U.S. Department of Agriculture.) District water also irrigates corn, Bermuda grass, fruits and nuts as well as a local tree farm.

The District maintains all irrigation canals and drainage ditches in its jurisdiction. This includes more than 40 laterals supplied by three main canals—the South Side, North Side and Call Field Canals. Irrigation taxes are imposed on property within District boundaries that has been classified as irrigable. Taxes are used to fund maintenance and operations of the District. The tax rate is set annually by the Board of Directors at its August Meeting. The current tax rate is \$6.00 per acre.

Municipal water is diverted from the canal system to a pipeline for transmission to Wichita Falls, which possesses a municipal water right at Lake Kemp for 25,150 acre-feet per year (AFY). (Recent deliveries to the City are shown in Figure 3. The District Manager indicates that canal maintenance has impacted deliveries the last two years, and the annual amount should average about 1.6 billion gallons in normal years, such as 2016-17.) In addition, American Electric Power (AEP), the District’s largest customer, has a contract to divert up to 20,000 acre-feet per year (17.84 MGD) to operate the Oklaunion Power Plant in Wilbarger County; this water is diverted directly from Lake Diversion. Lake Diversion also provides water to the Dundee Fish Hatchery during the spring spawning season.

Historically, most of the water use from Lake Kemp has been limited to irrigation and industrial purposes due to high salinity loads in tributaries. In 2008, the City of Wichita Falls completed a reverse osmosis (RO) system at the Cypress Water Treatment Plant (WTP) and associated infrastructure to more fully utilize the water. To improve the water quality of the Wichita River, the Red River Authority sponsors a chloride control project that diverts saline water from the South Wichita River above Lake Kemp to

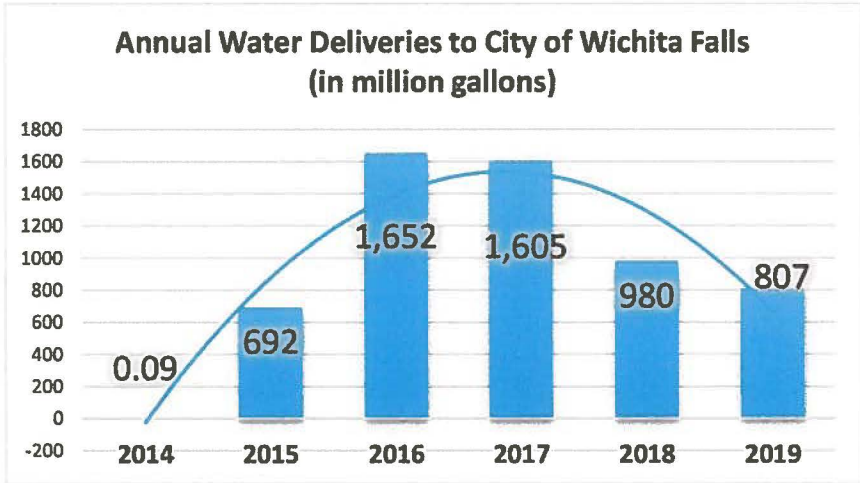


Figure 3: District water deliveries to the City of Wichita Falls, 2014-18.

Truscott Brine Reservoir in Knox County. Evaluations indicate that these diversions reduce the total chloride load to Lake Kemp by approximately 25 percent. However, a significant chloride load is contributed to the reservoir system from the North and Middle Wichita Rivers. During low-flow periods, the quality of the water diminishes as salts become concentrated due to evaporation, which further limits municipal use of Lake Kemp water. The low-water content and high salinity levels have also impacted the water's use for irrigation.

In 2019, WCWID2 launched the Water Distribution Efficiency and Infrastructure Modernization Project, which seeks to replace selected open canals and laterals by more efficient closed, underground pipelines throughout the District's 40,000-acre service area. The project was developed to implement the WCWID2 Water Conservation Implementation Plan, itself developed to carry out water conservation-related recommendations for the District included in the Region B, Texas State Water Plan. Many District canals and laterals are more than a half-a-century-old.

Project Description

The proposed project is a component of the ongoing WCWID2 Water Distribution Efficiency and Infrastructure Modernization Project. BOR funds would specifically address the Northside Canal's PB Lateral, which has been identified in the 2009 WCWID2 Water Conservation Implementation Plan as one of nine "priority" laterals requiring replacement. This project, as well as the more comprehensive Modernization Project, serves to implement part of the 2006 Region B Water Plan in which the Regional Water Planning Group adopted a recommendation to enclose WCWID2 laterals in pipe by 2040. With effects of the most recent drought fresh on the minds of area water users and recognizing the inevitability of similar regional water emergencies in the near future—not to mention a looming irrigation water supply deficit—District officials are committed to replacing as many of the inefficient priority laterals as resources and available funding opportunities allow.

Specifically, the Water Distribution Efficiency and Infrastructure Modernization Project seeks to address the Region B Water Plan's projected 2060 irrigation water supply deficit of 25,460 acre-feet per year (AFY) while increasing overall reliability for local municipal, agricultural and power customers. The first phase of the project—initiated in 2019 with replacement of the SK-9 lateral, which was funded by a BOR FY-2019 Small-Scale Water Efficiency Project grant—has already resulted in the installation of approximately 3,800 feet of mostly 24-inch plastic irrigation pipe within an inefficient portion of the District's SK lateral. Considerable water savings are expected but have yet to be quantified.

The District has selected a major portion of the PB Lateral, which is several miles long, for replacement in 2021-22. Most of this lateral is earthen and flows through sandy loam soils which greatly increase seepage. As a result, the lateral experiences significant water loss that is exacerbated by evaporation. In recent years, District personnel have installed new pipe in some sections of the lateral. However, larger segments of this priority canal system, three of which have been identified as "high water loss segments" in the WCWID2 Water Conservation Implementation Plan, remain in urgent need of replacement.

This project will include demolition and removal of the existing concrete structure in the three high-loss segments of the PB Lateral Canal, and subsequent installation of approximately 5,200 linear feet of new 27-inch plastic irrigation pipe, including fittings, gates, concrete and related materials. The District Manager estimates that the project will save 1,251 acre-feet (AF) of water each year. As part of its in-kind contribution to the project, WCWID2 personnel will conduct all labor utilizing District equipment.

This project will be funded through the requested FY-2021 Water Energy and Efficiency Program funds of \$160,864.00 in combination with District in-kind services and materials amounting to \$160,880.50, for an estimated project cost of \$321,744.50.

Evaluation Criteria

E.1.1. Evaluation Criterion A—Quantifiable Water Savings (30 pts)

Up to 30 points may be awarded for this criterion. This criterion prioritizes projects that will conserve water and improve water use efficiency by modernizing existing infrastructure. Points will be allocated based on the quantifiable water savings expected as a result of the project. Points will be allocated to give greater consideration to projects that are expected to result in more significant water savings.

The purpose of the Water Distribution Efficiency and Infrastructure Modernization Project is to facilitate the implementation of recommendations contained in the 2006 Texas Region B Regional Water Plan with respect to WCWID2's specific role in meeting the region's irrigation needs. The subsequent Water Conservation Implementation Plan, which evaluated the results of a comprehensive study of the District's conveyance system, offered a feasible, detailed approach to system improvements that will increase efficiency and thus help mitigate a significant portion of the region's projected 2060 irrigation water supply deficit of 25,460 acre-feet per year.

Goals of the water conveyance study performed for the Water Conservation Implementation Plan were to identify and evaluate candidate laterals for conservation improvements, estimate potential water savings, and develop preliminary cost estimates and a plan of action (including prioritization of segments) for converting the District's original earthen laterals to pipelines. The study—conducted by three engineering firms with assistance from District personnel—evaluated the condition of both the canals and smaller laterals, then estimated seepage losses experienced throughout the lengthy distribution system. Three factors were utilized to identify priority laterals experiencing the highest losses due to seepage: 1) soil type and permeability, 2) lateral condition, and 3) vegetation condition.

In preparation for the conservation study, District staff identified 10 laterals known to have higher water loss. These laterals were then placed in two priority groups. Group 1—consisting of five laterals, including the PB Lateral, which is the focus of this BOR funding request—was estimated to have the most significant water losses. Therefore, these laterals were selected for the study's field water measurement phase so that specific losses could be quantified.

Participating in the study were staff from the District, Red River Authority of Texas (RRA), and Alan Plummer Associates, Inc. (APAI). RRA provided GIS maps as well as field support and

equipment for obtaining lateral flow measurements. District staff coordinated the measurements, regulated flow into the laterals (as needed), and performed lateral condition and vegetation evaluations.

A direct inflow-outflow measurement technique was applied to assess losses (i.e., seepage and spills) within each identified segment of the Group 1 laterals. Flows were measured at the upstream and downstream ends of each lateral segment with respective losses being the difference between the two numbers. This method was selected over indirect methods or other direct methods, such as ponding tests, that could have yielded more accurate data, but would have required interruption of district operations as well as significantly more construction/setup. Figure 1 highlights the locations of measurement points for the PB Lateral.

Flow measurements were obtained utilizing a Marsh-McBirney Flo-Mate portable velocity meter and procedures established by the Texas Commission on Environmental Quality (TCEQ) in the Surface Water Quality Monitoring (SWQM) Procedures Manual (2003). Flow was measured at each point by taking multiple depth and instantaneous velocity measurements for a number of intervals, based on lateral width. The flow for each interval is the product of the interval width, depth and velocity. The total flow at the location is the sum of the individual interval flows. In other locations, where the flow was controlled through a pipe, the flow was taken at the midpoint of the submerged pipe.

Flow measurements on the PB Lateral were initiated on September 27, 2007 and completed in April 2009. Analysis of the results identified three individual segments of the lateral as good candidates for future improvements. Seasonal water losses for each, derived from the Water Conservation Implementation Plan, are presented in Table 1.

Table 1: PB Lateral High Water Loss Segments included in the WCWID No. 2 Water Conservation Implementation Plan.

Lateral Name	Segment	Length	Seasonal Water Loss		
			ac-ft/1,000 feet	ac-ft/mile	ac-ft/year
PB	15,450 - 15,950	500	120	634	153
PB	15,950 - 18,050	2,100	110	581	231
PB	20,450 - 21,300	850	525	2,772	446
Totals		3,450	755	3,987	830

From this data, District staff have estimated that the total water lost from the additional 1,750 feet of the PB Lateral identified as needing replacement is 421 AFY. This results in a total estimated water loss of 1,251 AFY for the entire 5,200 feet of lateral considered under the potential BOR project.

Overall, the WCWID2 Water Conservation Implementation Plan determined that 13,034 AFY of water—almost half of the projected 2040 water supply shortfall—could be saved by converting all identified “high water loss segments” (including the three PB Lateral segments) to underground pipe systems. Furthermore, the Plan determined that, in addition to increased water conservation and efficiency, conversion of slightly more than 15 miles of lateral to pipeline would reduce District maintenance costs by about \$26,000 per year.

Individual laterals identified for replacement with pipeline were ranked and prioritized based upon a matrix of factors, including the unit cost for conserved water, urbanization and

frequency of use. To facilitate full Water Conservation Plan implementation—originally estimated at \$7,658,469—laterals were divided into three priority groups and corresponding project phases staged at 10-year intervals or longer depending upon water needs and the availability of funds. An alternative to implementing the entire project at one time is to phase the project in three steps corresponding to the identified priority groups. This approach would require three separate funding and construction efforts.

The 2016 Region B Water Plan updated cost estimates for the conservation project to \$8,538,000 with optional project phases ranging from about \$2 to \$3 million each. Unfortunately, the District currently generates insufficient revenue to finance either the entire project or any one of the three optional project phases. According to the funding analysis included in the Water Conservation Implementation Plan, WCWID2 derives about \$250,000 per year of total operating revenue from District taxes. A three-percent increase in the tax rate, which the District has enacted in the past to fund pipeline installation (utilizing District staff and resources), increases annual revenue by only about \$6,000. Other district revenues are set by long-term contracts and are not a viable source for increasing additional revenue.

This phase of the Water Distribution Efficiency and Infrastructure Modernization Project, for which the District is soliciting BOR WaterSMART funding, proposes the replacement of 5,200 feet of the PB Lateral. In addition to the 3,450 feet of inefficient lateral segments identified in the Conservation Plan, the District has identified another 1,750 feet of that lateral as needing replacement. Utilizing the study's findings, District staff estimated that replacement of this additional portion of the lateral will save 421 AFY, bringing the total estimated water savings to 1,251 AFY. This equates to approximately 4.3 percent of the water currently distributed by the District to users.

E.1.2. Evaluation Criterion B—Water Supply Reliability (18 pts)

Up to 18 points may be awarded under this criterion. This criterion prioritizes projects that address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflicts in the region. Note that an agreement will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to the terms of Section 9504(a)(3)(B) of Public Law 111-11.

Entering its second century in supplying both irrigation and municipal water to area farmers and the City of Wichita Falls (home to Sheppard Air Force Base), WCWID2 today faces numerous challenges in maintaining its essential role as one of the region's primary water providers. The District's extensive system of canals, laterals and drainage ditches—fed by Lake Kemp and Lake Diversion—is showing its age. Users long dependent upon this water for their economic livelihoods are now experiencing decreased reliability of supply sources due to increased seepage and leaks throughout much of this complex infrastructure network.

Complicating matters is drought. While northwest Texas is an historically dry region, the unprecedented 2011-15 drought was a game-changer. For a time, the District was forced to suspend irrigation deliveries, and the Fish Hatchery was forced to close due to insufficient flows of water. Particularly low volumes in 2014 and 2015, during which Lake Kemp was down to 18-percent full, prompted Wichita Falls to take its primary treatment facility offline and instead rely upon the City's direct potable reuse system, implemented in 2014 to establish a

dependable water supply blend of 50-percent treated wastewater and 50-percent lake water. There is mounting evidence that the 2011-15 drought was less an abnormal event and more an indicator that the climate in the Great Plains region may, in fact, be returning to a drier “normal.” According to the results of a 2016 climate study conducted for the Choctaw and Chickasaw Nations in Oklahoma, models suggest that future droughts in this region of the Red River Basin (which extends from its headwaters near the Texas-New Mexico border to the Mississippi River) may be longer and more severe.

1. Will the project address a specific water reliability concern?

Water reliability—which is predicated on the condition that supply must be available in sufficient amounts and of adequate quality wherever and whenever it is required—is of utmost concern to the District and surrounding region. Seepage and leaks reduce the efficiency of WCWID2’s water delivery infrastructure, thereby reducing reliability for District farmers, citizens and businesses in and around the City of Wichita Falls as well as other users. Such preventable water losses also leave users much more vulnerable to all-too-frequent regional drought episodes, as evidenced during the 2011-2015 drought. This event led to extremely low lake levels at Lake Kemp, as well as at Lakes Arrowhead and Kickapoo, the two other water sources for Wichita Falls.

As its existing water rights and supplies are generally sufficient (considering the region’s typically semi-arid climate), the District has determined that the most feasible way to ensure current and future water reliability, as well as drought resiliency, is by maximizing water efficiency through implementation of the WCWID2 Water Conservation Implementation Plan and Water Distribution Efficiency and Infrastructure Modernization Project. The requested BOR funds will be utilized to implement a vital phase of the Modernization Project, resulting in estimated water savings of 1,251 AFY.

2. Will the project make water available to achieve multiple benefits or to benefit multiple water users?

Benefits of the proposed project, in addition to general infrastructure modernization, include augmented supply and thus increased reliability for District customers, especially irrigation users and related agricultural interests. Municipal (i.e., the City of Wichita Falls), industrial, power (i.e., the Oklaunion facility) and fish/wildlife (i.e., the fish hatchery) users will also benefit as water savings will directly mitigate a portion of Region B’s anticipated irrigation water supply deficit of approximately 29,000 AFY. “Creating” additional supply through the mitigation of seepage and leaks, such as in the PB Lateral Canal, also enhances fishing and other popular tourism/recreational activities at both Lake Kemp and Lake Diversion, further extending this project’s considerable economic benefits.

3. Does the project promote and encourage collaboration among parties in a way that helps increase the reliability of the water supply?

In the wake of the 2011-15 drought, the District and its water user group partners have revitalized relationships through collaborative efforts to strengthen the water system’s

drought resiliency and enhance both individual and regional water reliability. This project, as well as its subsequent implementation of the larger Water Distribution Efficiency and Infrastructure Modernization Project over the coming years, will further broaden collaboration essential to addressing future challenges posed by frequent drought and the region's projected water supply/demand gaps.

The proposed project is also consistent with local Natural Resource Conservation Service (NRCS) conservation initiatives. While no related formal partnerships are currently active, in the recent past WCWID2 has worked with NRCS in assisting District farmers with the installation of more efficient pipeline irrigation systems on their personal properties. These systems have helped to stretch the District's sometimes limited water supplies.

There is explicit support for this project from several area stakeholders, including the City of Wichita Falls, Area B Texas Regional Water Planning Group, Texas Parks and Wildlife, and Red River Authority of Texas. Letters of support from these entities are included in the Appendix of this application.

4. Will the project address water supply reliability in other ways not described above?

The estimated 1,251 AFY of water saved will mitigate 4.3 percent of Region B's estimated irrigation water supply deficit (29,000 AFY) projected by 2060. This project also bolsters continued momentum for full implementation of the District's Water Distribution Efficiency and Infrastructure Modernization Project for which the BOR awarded associated funding in 2019.

As an irrigation water provider, WCWID2 will comply with the terms of Section 9504(a)(3)(B) of Public Law 111-11, Requirements for Agricultural Operations. Specifically, the District will 1) not use any associated water savings to increase the District's total irrigated acreage; and 2) not otherwise increase the consumptive use of water in the District's operations.

E.1.3. Evaluation Criterion C—Implementing Hydropower (18 pts)

This project will not involve the installation of new hydropower capacity.

E.1.4. Evaluation Criterion D—Complementing On-Farm Irrigation Improvements (10 pts)

This project is not envisioned to directly complement on-farm irrigation improvements eligible for NRCS financial or technical assistance. However, the intent of this project is consistent with the District's overall strategy to maximize the conservation of District water from distribution through delivery to individual farming members.

E.1.5. Evaluation Criterion E—Department of the Interior and Bureau of Reclamation Priorities (10 pts)

Up to 10 points may be awarded based on the extent that the proposal demonstrates that the project supports Department and Reclamation priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the

project supports one or more of the priorities listed, and whether the connection to the priority(ies) is well supported in the proposal.

The proposed project directly supports Department of Interior priorities related to modernization of the nation’s infrastructure. And this project is the essential first step—initially targeting laterals identified as having the highest water losses—in a long-range District plan to replace the most vulnerable components of its archaic, open distribution system that is subject to substantial seepage and evaporative water losses. Replacing aging canals and laterals with pipeline 1) maximizes efficiency in the delivery of municipal, agricultural and power water supplies; 2) creates additional supply that will contribute to the mitigation of forecasted water supply gaps in the region; 3) delays the impacts of impending drought episodes; and 4) reduces maintenance costs. More generally, it establishes a robust infrastructure that will enable the District to provide reliable water supply to its customers for decades to come.

Specifically related to Reclamation priorities, this project will increase water supplies and reliability while leveraging available science and technology—for example, through the detailed study of District’s distribution system conducted as part of the WCWID2 Water Conservation Implementation Plan. The project will also help mitigate frequent drought episodes that impact water use and reliability in the region.

E.1.6. Evaluation Criterion F—Implementation and Results (6 pts)

E.1.6.1. Subcriterion F.1— Project Planning

Points may be awarded for proposals with planning efforts that provide support for the proposed project.

This proposed project is a component of a larger, multi-phase project originally recommended in the Region B [Texas] Regional Water Plan (January 2006; updated in December 2015) and later evaluated in detail in the Region B WCWID2 Water Conservation Implementation Plan (April 2009); see Figure 4. WCWID2 is a member of the Texas Water Plan Region B Water Planning Group. Both plans are available upon request.

To address the projected irrigation water shortage, the Region B Water Plan (and Planning Group) recommended development of 8,577 AFY through the conservation of water by enclosing WCWID2 laterals in pipe by 2040. The subsequent Water Conservation Implementation Plan identified three priority groups of canals/laterals for replacement; this exercise also divided the larger project

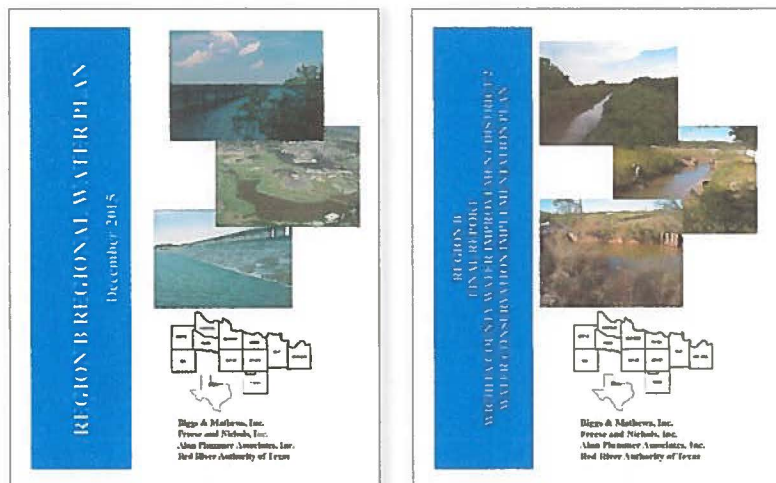


Figure 4: The proposed project is expressly supported by the Region B Regional Water Plan (left) and WCWID2 Water Conservation Implementation Plan (right).

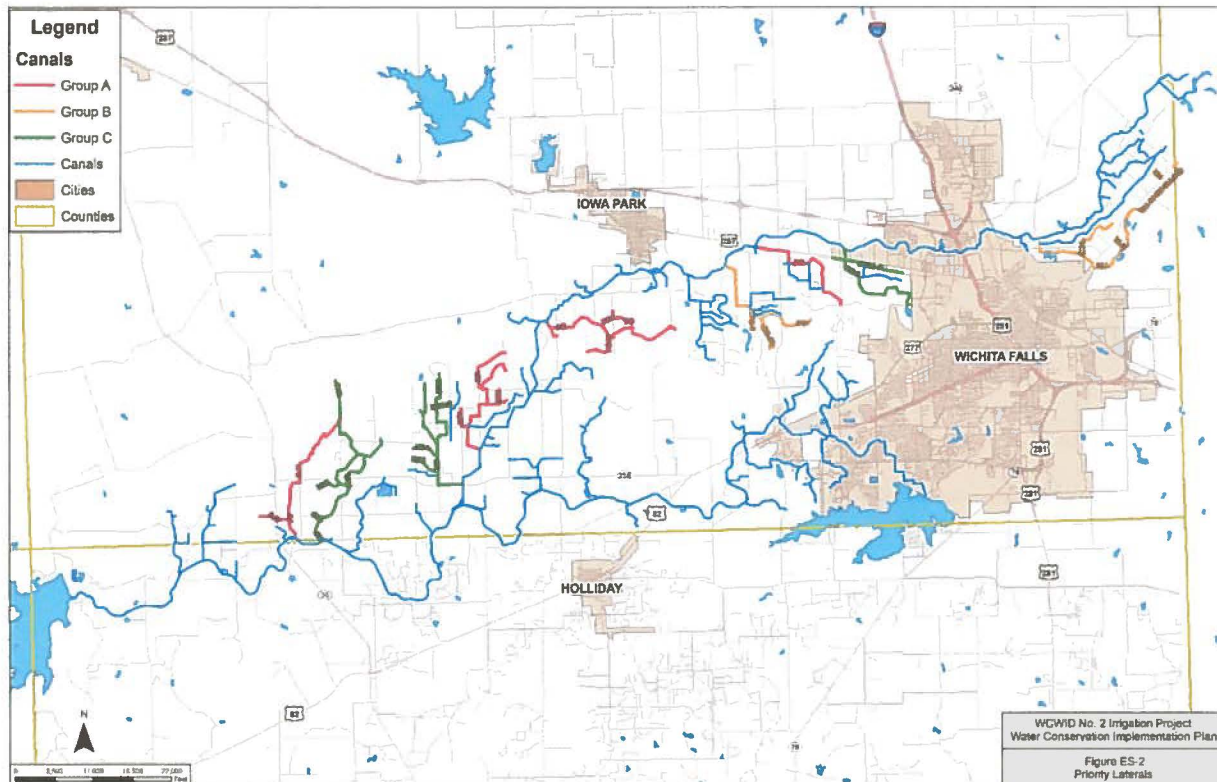


Figure 5: District laterals identified in the conservation study. This includes the PB Lateral Canal, which is the focus of this proposed Small-Scale Water Efficiency Project. (From WCWID2 Water Conservation Implementation Plan.)

into three phases to better facilitate the significant cost associated with full implementation. Specifically, the Water Conservation Plan recommends conversion of the PB Lateral Canal, a “high water loss” segment also recommended for replacement in the WCWID2 Water Distribution Efficiency and Infrastructure Modernization Project, partially funded through the anticipated WaterSMART funds; priority canals/groups are shown in Figure 5. The estimated 1,251 AFY savings resulting from replacement of the PB Lateral will significantly reduce the region’s projected irrigation water shortage.

The proposed project also compliments the WCWID2 drought contingency plan, originally developed in August 1999 and last updated in 2011. The Plan includes rules governing the equitable and efficient allocation of limited District water supplies during times of shortage. A copy of the Plan (“Water Conservation Policy, Drought Contingency and Water Allocation Policy, Rules and Regulations for Water Deliveries”) is available upon request.

E.1.6.2. Subcriterion F.2— Performance Measures:

Points may be awarded based on the description and development of performance measures to quantify actual project benefits upon completion of the project.

Conversion of the PB Lateral from open canal to closed pipe essentially eliminates both evaporative water loss and seepage in that section of the distribution system. The entire amount of the current estimated water lost (1,251 AFY) in the open earthen canals of the PB

Lateral targeted for replacement—calculated as part of the detailed Water Conservation Implementation Plan study—is anticipated to be equal to realized water savings. In addition to current regular accounting of the distribution system, upon completion of this project District personnel will monitor flow, as well as potential leaks, in the new pipeline segments to ensure and verify project success. The District Manager anticipates zero water loss in the new pipeline segments.

E.1.6.3. Subcriterion F.3— Readiness to Proceed

Points may be awarded based upon the extent to which the proposed project is capable of proceeding upon entering into a financial assistance agreement.

WCWID2 possesses the necessary staff, expertise and matching funding to implement the PB Lateral Canal Project upon award of the WaterSMART grant. Minimal planning will be required in advance of the demolition/removal and construction/installation phases of the project. The project, the majority of which will take place during the non-irrigation period, will require approximately 16 months to complete from planning through installation, depending upon unforeseen weather issues that could possibly delay construction.

The pipeline will be installed in the exact location of the existing PB Lateral Canal, which was constructed in the 1950s and 1960s, utilizing existing District easements. As a result, no new easements, permits or approvals are required. Similarly, no environmental, cultural or historical compliance is necessary. An estimated project schedule/timeline, including major tasks, is presented in Table 2.

Table 2: Estimated project schedule

Estimated Schedule														
BOR PB Lateral Canal Water Energy and Efficiency Project (WCWID2 Water Distribution Efficiency and Infrastructure Modernization Project)														
	2021											2022		
	M	A	M	J	J	A	S	O	N	D	J	F	M	A
Planning														
Demolition/Removal														
Construction/Installation														

E.1.7. Evaluation Criterion G—Nexus to Reclamation Project Activities (4 pts)

Up to 4 points may be awarded if the proposed project is in a basin with connections to Reclamation project activities. No points will be awarded for proposals without connection to a Reclamation project or Reclamation activity.

While neither WCWID2 nor Lakes Kemp or Diversion is a project of the Bureau of Reclamation, the water system’s function mirrors that of Reclamation priorities in that it serves to provide essential irrigation water supply and related economic benefits in the western U.S.

WCWID2 lies less than 80 miles southeast of Lugert-Altus Irrigation District (LAID), which is centered around the City of Altus in southwestern Oklahoma. Constructed by the Bureau of Reclamation in the 1940s, LAID includes Lugert-Altus Reservoir and a 221-mile lateral distribution system that irrigates some 48,000 acres of privately-owned land. Combined, LAID and WCWID2 are responsible for most of the cotton production in this region of the U.S., and both lie in the Red River Basin where the WCWID2 Water Distribution Efficiency and Infrastructure Modernization Project is seeking to augment and enhance the efficiency of existing water supply. Tom Steed Reservoir, another Reclamation project in Oklahoma, exists on a tributary of the North Fork of the Red River. In addition, Sanford Dam impounds Lake Meredith, which was constructed by Reclamation in the adjacent Canadian River Basin northeast of Amarillo in the Texas Panhandle.

The WCWID2/BOR PB Lateral Canal Water Energy and Efficiency Project (Water Distribution Efficiency and Infrastructure Modernization Project) will not provide direct benefits to any tribe.

E.1.8. Evaluation Criterion H—Additional Non-Federal Funding (4 pts)

Up to 4 points may be awarded to proposals that provide non-Federal funding in excess of 50 percent of the project costs.

This project will be entirely funded through a 50/50 federal to local contribution—\$160,864.00 from the Bureau of Reclamation matched with \$160,880.50 from the WCWID2. No third-party, non-federal funds will be used on this project.

Project Budget

Required budget information is presented in the following Funding Plan, Budget Proposal and Budget Narrative. A detailed breakdown of budgeted costs is presented in Table 4 of the Budget Proposal.

Funding Plan

The proposed project’s non-federal cost-share will come from District in-kind services and materials—i.e., labor required to remove the existing canal and install the new pipeline as well as a portion of pipeline materials.

Budget Proposal

Funding sources that will be utilized to finance the proposed project are presented in Table 3.

Table 3: Total Project Costs and Funding Sources, WCWID2/BOR PB Lateral Canal Water Energy and Efficiency Project

Source	Amount
Reimbursable costs (federal funding: materials/supplies)	\$160,864.00
WCWID2 cost-share contribution (labor, equipment, materials/supplies)	\$160,880.50
*Total Project Cost	\$321,744.50

Table 4: Estimated project budget

BUDGET ITEM DESCRIPTION	Computation		Unit	Total Cost
	Unit Cost	Quantity		
Salaries, Wages and Fringe Benefits				
Salaries and Wages				
Employee 1, Operator, Backhoe/Loader	\$22.00	277	hours	\$6,094.00
Employee 2, Operator, Excavator	\$17.00	340	hours	\$5,780.00
Employee 3, Operator, Bulldozer	\$22.00	235	hours	\$5,170.00
Employee 4, Operator, Dump truck	\$20.00	4	hours	\$80.00
Employee 5, Operator, Dump truck	\$20.00	4	hours	\$80.00
Employee 6, Operator, Dump truck	\$20.00	4	hours	\$80.00
Employee 7, Operator, Dump Truck	\$20.00	4	hours	\$80.00
Employee 5, Installation	\$20.00	70	hours	\$1,400.00
Employee 6, Installation	\$20.00	70	hours	\$1,400.00
Employee 7, Installation	\$20.00	70	hours	\$1,400.00
Employee 8, Installation	\$22.00	70	hours	\$1,540.00
Employee 3, Welder	\$22.00	30	hours	\$660.00
Employee 4, Welder's Helper	\$20.00	30	hours	\$600.00
Employee 10, Management/Administrative	\$25.00	100	hours	\$2,500.00
Employee 9, Clerical (Part-Time)	\$12.00	20	hours	\$240.00
Salaries/Wages Subtotal		1,328		\$27,104.00
Fringe Benefits				
Employee 1, Operator, Backhoe/Loader	\$9.00	277	hours	\$2,493.00
Employee 2, Operator, Excavator	\$14.00	340	hours	\$4,760.00
Employee 3, Operator, Bulldozer	\$9.00	235	hours	\$2,115.00
Employee 4, Operator, Dump truck	\$11.00	4	hours	\$44.00
Employee 5, Operator, Dump truck	\$11.00	4	hours	\$44.00
Employee 6, Operator, Dump truck	\$11.00	4	hours	\$44.00
Employee 7, Operator, Dump Truck	\$11.00	4	hours	\$44.00
Employee 5, Installation	\$11.00	70	hours	\$770.00
Employee 6, Installation	\$11.00	70	hours	\$770.00
Employee 7, Installation	\$11.00	70	hours	\$770.00
Employee 8, Installation	\$9.00	70	hours	\$630.00
Employee 3, Welder	\$22.00	30	hours	\$660.00
Employee 4, Welder's Helper	\$11.00	30	hours	\$330.00
Employee 10, Management/Administrative	\$20.00	100	hours	\$2,000.00
Employee 9, Clerical (Part-Time)	N/A	20	hours	N/A
Fringe Benefits Subtotal		1,328		\$15,474.00
*Wages, Salaries & Fringe Benefits Total				\$42,578.00
Supplies and Materials				
27-inch, 80 lb. Plastic Irrigation Pipe (PIP)	\$27.50	4,813	foot	\$132,357.50
27 inch, 80 lb. PIP (purchased by WCWID No.2)	\$27.50	93	foot	\$2,557.50
18-inch/80 lb. PIP	\$12.50	650	foot	\$8,125.00
15-inch/80 lb. PIP	\$8.25	300	foot	\$2,475.00
12-inch/80 lb. PIP	\$4.05	250	foot	\$1,012.50
Fitting, 27-inch, 90-degree elbows	\$1,100.00	2	each	\$2,200.00
Fitting, 27-inch, 60-degree elbows	\$1,100.00	1	each	\$1,100.00
Fitting, 27-Inch, 22.5 degree elbow	\$700.00	1	each	\$700.00

Table 4: Estimated project budget

BUDGET ITEM DESCRIPTION	Computation		Unit	Total Cost
	Unit Cost	Quantity		
Fitting, 27-inch x 18-inch reducing tee	\$950.00	1	each	\$950.00
Fitting, 27-inch x 15-inch reducing tee	\$920.00	1	each	\$920.00
Fitting, 27-inch x 12-inch reducing tee	\$850.00	1	each	\$850.00
Fitting, 18-inch, 90 degree elbow	\$440.00	1	each	\$440.00
Fitting, 15-inch, 90 degree elbow	\$225.00	2	each	\$450.00
Fitting 12-inch, 90 degree elbow	\$150.00	1	each	\$150.00
Valve, 18-inch clover valves	\$325.00	1	each	\$325.00
Valve, 15-inch clover valve	\$185.00	2	each	\$370.00
Valve, 12-inch clover valve	\$160.00	1	each	\$160.00
Draw Band, 18-inch	\$25.00	1	each	\$25.00
Draw Band, 15-inch	\$15.00	2	each	\$30.00
Draw Band, 12-inch	\$10.00	1	each	\$10.00
Glue	\$88.00	8	gallon	\$704.00
Primer	\$65.00	4	gallon	\$260.00
Lumber for concrete forms	\$1,250.00	1	each	\$1,250.00
Steel Rebar	\$500.00	1	each	\$500.00
Concrete	\$4,500.00	1	each	\$4,500.00
Steel for box covers	\$750.00	1	each	\$750.00
Paint	\$250.00	1	each	\$250.00
*Supplies/Materials Total				\$163,421.50
<i>*Prices for materials include estimated freight</i>				
Equipment & Labor				
Site Preparation				
Excavator	\$120.00	100	hours	\$12,000.00
Bulldozer	\$120.00	95	hours	\$11,400.00
Dump trucks	\$45.00	16	hours	\$720.00
Backhoe	\$55.00	50	hours	\$2,750.00
Subtotal		261		\$26,870.00
Ditching, Pipeline Installation				
Excavator	\$120.00	200	hours	\$24,000.00
Bulldozer	\$120.00	140	hours	\$16,800.00
Backhoe	\$55.00	192	hours	\$10,560.00
Labor/Installation Non-Equipment	\$35.00	280	hours	\$9,800.00
Labor Hours (included in operators' rate)	N/A	258	hours	N/A
Subtotal		1,070		\$61,160.00
Concrete Work/Boxes in Pipeline				
Excavator	\$120.00	40	hours	\$4,800.00
Backhoe	\$55.00	35	hours	\$1,925.00
Welding	\$80.00	30	hours	\$2,400.00
Welding (helper/assistant)	\$35.00	30	hours	\$1,050.00
Subtotal		135		\$10,175.00
Other Expenses				
Surveying, Legal, Easement				\$5,000.00
Engineering/Consulting				\$5,000.00
Administrative/Office	\$45.00	100	hours	\$4,500.00
Clerical/Office	\$12.00	20	hours	\$240.00

Table 4: Estimated project budget

BUDGET ITEM DESCRIPTION	Computation		Unit	Total Cost
	Unit Cost	Quantity		
Trucking (water for pipeline)				\$2,800.00
Subtotal		120		\$17,540.00
Equipment/Labor Total				\$115,745.00
Contractual/Construction				
N/A (provided by District staff)	---	---	---	\$ 0.00
Subtotal	---	---	---	\$ 0.00
Third-Party In-Kind Contributions				
N/A	---	---	---	\$ 0.00
Subtotal	---	---	---	\$ 0.00
Other				
Other				\$ 0.00
TOTAL DIRECT COSTS				\$321,744.50
Indirect Costs				
Type of rate	percentage	\$base		\$ 0.00
TOTAL ESTIMATED PROJECT COSTS				\$321,744.50

Budget Narrative

The estimated total cost of the WCWID2/BOR PB Lateral Canal Water Energy and Efficiency Project (WCWID2 Water Distribution Efficiency and Infrastructure Modernization Project) is \$321,744.50. Cost estimates are derived from experienced District estimates of material and labor and costs incurred from recent similar canal replacement and maintenance projects, including a similar project cost-shared with BOR in 2019. District staff will perform all required planning, demolition and removal of the existing concrete lateral material as well as construction and installation of the new, more efficient pipeline.

It is anticipated that 10 full-time employees and one part-time District employee, including the District Manager (Kyle Miller), will be utilized to implement the proposed project (including compliance with Reclamation reporting requirements) for a total of 1,328 staff hours. The associated cost for salaries and wages is estimated at \$27,104. The District certifies that included staff labor rates represent actual labor rates for the identified personnel.

It is estimated that an additional cost of \$15,474 will be required for fringe benefits.

The primary construction material will consist of approximately 4,906 feet of 27-inch plastic irrigation pipe (PIP); varying lesser amounts of 18-, 15- and 12-inch PIP will also be utilized in appropriate sections. Total pipeline costs amount to \$146,527.50. The purchase of various associated fittings and valves—as well as concrete, lumber, steel (for box covers) and steel rebar—will also be required for the project. The total estimated cost of supplies and materials is \$163,421.50.

No new equipment will be purchased for this project. Costs associated with the use of District equipment and labor is estimated at \$115,745.00.

Final project estimates are \$321,744.50 in direct costs; indirect costs are not applicable.

Environmental & Cultural Resources Compliance

No environmental or cultural compliance is anticipated in conjunction with implementation of this project as construction will involve the replacement of an existing lateral along existing easements. The District's water delivery infrastructure was originally constructed in the 1920s. This project seeks to replace a major portion of the PB Lateral Canal (part of the Northside Canal lateral system), which was constructed in the 1950s and 60s; the District recently replaced a portion of the Southside Canal system (i.e., the SK-9 sub-lateral), which also utilized BOR WaterSMART funding. While this project will involve the excavation of earth along with the existing PB Lateral, no impacts to the surrounding environment are anticipated as work will be limited to the existing lateral trench.

The District is unaware of any associated impacts to Federal threatened or endangered species or designated critical habitat. No wetlands or related surface waters that currently fall under CWA jurisdiction as "Waters of the United States" will be impacted by this project.

No District buildings, structures or features are known to be listed or eligible for listing on the National Register of Historic Places. And there are no known archeological sites in the proposed project area.

The proposed project will have no disproportionately high or adverse effect on low income or minority populations. The project will not limit access to or ceremonial use of Indian sacred sites or result in other impacts on tribal lands. The project will not contribute to the introduction, continued existence or spread of noxious weeds or non-native invasive species.

Required Permits & Approvals

No additional permits will be required to either remove the canal structures (primarily concrete) or install the new pipeline.

REFERENCES

Freese and Nichols, Inc., Wichita Falls Long-Range Water Supply Plan, January 2015.

Biggs & Mathews, Inc., Freese and Nichols, Inc., Alan Plummer Associates, Inc. and Red River Authority of Texas, Region B Regional Water Plan, December 2015.

Biggs & Mathews, Inc., Freese and Nichols, Inc., Alan Plummer Associates, Inc. and Red River Authority of Texas, Region B Regional Water Plan, December 2015, Region B Final Report, Wichita County Water Improvement District 2 Water Conservation Implementation Plan, April 2009.

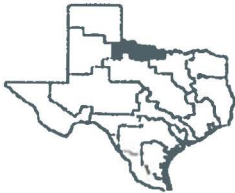
Choctaw Nation, Impacts of Climate Change on Flows of the Red River Basin, February 2016.

APPENDIX

Letters of Support

Regional Water Planning Group - Area B

in cooperation with the Texas Water Development Board



Board Members

Mr. Russell Schreiber, Chair
Mr. Mike McGuire, Vice-Chair
Mr. Dean Myers, Secretary
Ms. Tamela Armstrong
Mr. Jimmy Banks
Mr. J.K. (Rooter) Brite
Judge Mark Christopher
Ms. Carrie Dodson
Mr. Tommy Holub
Judge Randall C. Jackson
Mr. Dorell Kennon
Mr. Steve Lewis
Mr. Tracy Mesler
Mr. Kyle Miller
Mr. Heath Ownbey
Mr. Jerry Payne
Mr. Wilson Scaring
Mayor Pro-Tem Gayle Simpson
Mr. Randall W. Whiteman

September 4, 2020

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Operations
P.O. Box 25007, MS 84-27814
Denver, CO 80225

Re: **Support for Reclamation FY-21 Water and Energy Efficiency (WaterSMART Program) Funding for the Wichita County Water Improvement District No. 2 Water Distribution Efficiency Project**

Dear Mr. Weakland:

In 1997, Senate Bill 1 of the 75th Texas Legislature was passed to initiate the process of developing a comprehensive State Water Plan to meet the state's future water needs. To accomplish this task, the state was divided into 16 regional water planning groups. Region B is comprised of the following eleven Texas counties: Archer, Baylor, Clay, Cottle, Foard, Hardeman, King, Montague, Wichita, Wilbarger, and the City of Olney in Young County. The Wichita County Water Improvement District No. 2 (WCWID No. 2) provides an essential source of municipal water to the City of Wichita Falls' Reverse Osmosis Plant, and plays a vital role in irrigation and flood control in the Region B planning area. A main component of the fifty year planning cycle process is evaluating water management strategies (WMS), and preparing plans to implement those strategies. Conversion of the WCWID No. 2's irrigation canals to pipeline has been a major WMS in the *Region B Regional Water Plan* since 2006.

The Regional Water Planning Group – Area B (RWPG-B) formally supports the application of the WCWID No. 2 to the Bureau of Reclamation for funding to implement the proposed WaterSMART Water and Energy Efficiency Project. As an engaged local stakeholder, we acknowledge that replacement of the WCWID No. 2's open laterals, specifically in this case the PB Lateral Canal, by closed pipeline is essential to establishing water reliability in this drought-prone region. Through conservation of our invaluable water resources, the WCWID No. 2 is effectively fulfilling its roles as a key water provider, while ensuring continued economic prosperity in North Central Texas.

The RWPG-B appreciates this opportunity to express its unwavering support of the WCWID No. 2 in its effort to maximize local water efficiency through the proposed WCWID No. 2 Water and Energy Efficiency Project. Please contact me at (940) 761-7477, or email at russell.schreiber@wichitafalls.tx.gov should you require any additional information concerning our advocacy of this essential project.

Sincerely,

REGIONAL WATER PLANNING GROUP – AREA B

Russell Schreiber, P. E.
Chair

RS:slg

Cc: Mr. Kyle Miller, Wichita County Water Improvement District No. 2
Mr. Randy Whiteman, Red River Authority of Texas

Post Office Box 240
Wichita Falls, Texas
76307-0240
3000 Hammon Road
76310-7500
Phone (940) 723-2236
Fax (940) 723-8531
rwpg-b@rra.texas.gov



Red River Authority of Texas

TODD W. BOYKIN, President, Amarillo
JERRY BOB DANIEL, Vice-President, Truscott
MICHAEL R. BANDEFUR, Secretary-Treasurer, Texarkana
STEPHEN A. THORNHILL, Assistant Secretary, Denton
MARY LOU BRADLEY, Memphis
JERRY DAN DAVIS, Wellington
GEORGE WILSON SCALING, II, Henrietta
ZACKARY K. SMITH, Canyon
JOE L. WARD, Telephone

RANDALL W. WHITEMAN, General Manager
FABIAN A. HEANEY, Assistant General Manager
DANNA P. BALES, Executive Assistant
LANA HEFTON, Controller

September 4, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Ned Weakland
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Bureau of Reclamation WaterSMART FY21 Grant Application: Funding for the Wichita County Water Improvement District No. 2 Water Distribution Efficiency Project

Dear Mr. Weakland,

It is my pleasure to send a letter in support of the Wichita County Water Improvement District No. 2 (the District) in its plan to implement the "Water Distribution Efficiency Project". This project will replace the District's open laterals with closed pipeline, which will increase water reliability in this drought-prone region. The District, through water conservation, will be fulfilling its role as a key water provider, ensuring continued economic prosperity in north central Texas.

The Red River Authority of Texas supports the District's efforts to maximize local water efficiency through this proposed project. I hope this expression of support is helpful in your consideration of the Wichita County Water Improvement District No. 2 application.

Sincerely,

RED RIVER AUTHORITY OF TEXAS

A handwritten signature in black ink, appearing to read "Randy Whiteman", written over a horizontal line.

Randy Whiteman
General Manager

RW:fh



Life's better outside.®

Commissioners

S. Reed Morlan
Chairman
Houston

Arch "Beaver" Aplin, III
Vice-Chairman
Lake Jackson

James E. Abell
Kilgore

Oliver J. Bell
Cleveland

Anna B. Galo
Laredo

Jeffery D. Hildebrand
Houston

Jeanne W. Latimer
San Antonio

Robert L. "Bobby" Patton, Jr.
Fort Worth

Dick Scott
Wimberley

Lee M. Bass
Chairman-Emeritus
Fort Worth

T. Dan Friedkin
Chairman-Emeritus
Houston

Carter P. Smith
Executive Director

September 9, 2020

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Operations
P.O. Box 25007, MS 84-27814
Denver, CO 80225

RE: Support for Reclamation FY-21 Water and Energy Efficiency (WaterSMART Program) Funding for the Wichita County Water Improvement District No. 2 Water Distribution Efficiency Project

Dear Mr. Weakland:

The Texas Parks and Wildlife Department officially supports the application of the Wichita County Water Improvement District No. 2 to the U.S. Bureau of Reclamation for funding to implement the proposed WaterSMART Water and Energy Efficiency Project. As an engaged local stakeholder, we acknowledge that replacement of the District's open laterals-in this case, the PB Lateral Canal-by closed pipeline is essential to establishing water reliability in this drought-prone region. Through conservation of our invaluable water resources, the District is effectively fulfilling its role as a key water provider while ensuring continued economic prosperity in north-central Texas.

The Texas Parks and Wildlife Department appreciates this opportunity to state its unwavering support of the District in its effort to maximize local water efficiency through the proposed WCWID No. 2 Water and Energy Efficiency Project. Please contact me at 512-389-4826 / todd.engeling@tpwd.texas.gov should you require any additional information concerning our advocacy of this essential project.

Sincerely,


Todd Engeling
Chief of Inland Hatcheries
Texas Parks and Wildlife Department



PUBLIC WORKS DEPARTMENT

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Operations
P.O. Box 25007, MS 84-27814
Denver, CO 80225

September 3, 2020

**RE: Support for Reclamation FY-21 Water and Energy Efficiency (WaterSMART Program)
Funding for the Wichita County Water Improvement District No. 2 Water Distribution Efficiency
Project**

Dear Mr. Weakland:

The City of Wichita Falls officially supports the application of the Wichita County Water Improvement District No. 2 to the U.S. Bureau of Reclamation for funding to implement the proposed WaterSMART Water and Energy Efficiency Project. As an engaged local stakeholder, we acknowledge that replacement of the District's open laterals-in this case, the PB Lateral Canal-by closed pipeline is essential to establishing water reliability in this drought-prone region. Through conservation of our invaluable water resources, the District is effectively fulfilling its role as a key water provider while ensuring continued economic prosperity in north-central Texas.

The City of Wichita Falls appreciates this opportunity to state its unwavering support of the District in its effort to maximize local water efficiency through the proposed WCWID No. 2 Water and Energy Efficiency Project. Please contact me at 940-761-7477/Russell.schreiber@wichitafallstx.gov should you require any additional information concerning our advocacy of this essential project.

Sincerely,

Russell Schreiber P.E.
Director of Public Works
City of Wichita Falls

CITY OF WICHITA FALLS

1300 7th Street • P.O. Box 1431 • Wichita Falls, Texas 76307 • t: (940) 761-7477 • f: (940) 761-6873
www.wichitafallstx.gov

Official Resolution

RESOLUTION

A RESOLUTION DECLARING THE COMMITMENT OF WICHITA COUNTY WATER IMPROVEMENT DISTRICT #2 TO REPLACE A PORTION OF THE PB LATERAL CANAL WITH CLOSED PIPING AND AUTHORIZE THE DISTRICT'S APPLICATION FOR A BUREAU OF RECLAMATION WATERSMART WATER ENERGY AND EFFICIENCY PROGRAM GRANT FOR FISCAL YEAR 2021 (FUNDING OPPORTUNITY ANNOUNCEMENT NO. BOR-DO-21-F001)

WHEREAS, the Wichita County Water Improvement District #2 facilitates water service on behalf of District irrigation, municipal water supply, electrical power and fish/wildlife customers; and

WHEREAS, the District and City of Wichita Falls jointly own a comprehensive regional water supply system consisting of Lake Kemp, Lake Diversion and various distribution facilities, including a network of open canals and laterals; and

WHEREAS, the District serves as an essential element in this region's continued economic welfare and development; and

WHEREAS, the District and its partners experienced an extreme drought from 2011 to 2015, which reduced the water storage of Lake Kemp to 18 percent and caused severe hardships in providing reliable supply to various customers; and

WHEREAS, future water demands for the District, including the City of Wichita Falls, are projected to increase from more than 21,000 acre-feet per year in 2020 to more than 36,000 acre-feet/year in 2070; and

WHEREAS, the Region B Water Plan concluded that the District will soon experience an irrigation water supply shortage increasing to 25,460 acre-feet/year by 2060; and

WHEREAS, the Region B Water Planning Group has recommended development of an additional 8,577 acre-feet/year of water through water conservation achieved by enclosing select District laterals in pipe by 2040; and

WHEREAS, in its April 2009 study of District laterals, the Region B Water Planning Group determined that 13,034 acre-feet of water per year could be saved by converting high water loss segments to underground pipe systems; and

WHEREAS, the District is committed to maximizing its resiliency to future, inevitable drought events as well as continually rising water demands; and

WHEREAS, the District is currently finalizing a project, authorized by this Board in April 2019 and utilizing \$75,000 in BOR FY-2019 WaterSMART Small-Scale Water Efficiency Project Grant Program cost-share funding, to replace 3,800 feet of lateral canals with more efficient underground pipeline; and

WHEREAS, the District has identified the PB Lateral Canal, which suffers from major water loss through seepage and evaporation, as a priority candidate for replacement, which will result in significant water conservation and thereby create additional supply for irrigation and other uses of system water; and

WHEREAS, the U.S. Bureau of Reclamation has announced WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2021 (Funding Opportunity Announcement No. BOR-DO-21-F001),

which can provide 50% of project costs up to \$500,000 (in Funding Group 1) for projects that result in quantifiable and sustained water savings and support broader water reliability benefits, and the District desires to pursue a grant to leverage these federal funds; and

WHEREAS, the U.S. Bureau of Reclamation requires a formal resolution from the applicant's governing body to be submitted with an associated grant application.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Wichita County Water Improvement District #2:

Section 1. That the Board supports the submittal of an application for a FY-2021 WaterSMART Water and Energy Efficiency Grant to replace the PB Lateral Canal with closed underground piping, which is anticipated to result in water savings of as much as 1,270 acre-feet per year; and


Section 2. That the Board supports pursuit of similar funding in future years to enhance water reliability and efficiency and strengthen the District's resiliency to drought; and

Section 3. That the Board authorizes the District President to sign documents on behalf of the District to enter into any agreements required by the U.S. Bureau of Reclamation under the WaterSMART Grant Program; and

Section 4. That the Board acknowledges that the project is estimated to cost approximately \$400,000 to be funded with an estimated \$200,000 in federal WaterSMART grant funds and \$200,000 in matching in-kind services and materials; and

Section 5. That the District will cooperate with the U.S. Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement and otherwise comply with WaterSMART Program requirements.

PASSED AND APPROVED this 17th day of August, 2020 by the Wichita County Water Improvement District #2 Board of Directors.


Bobby Rowland, President

Regional Water Planning Group - Area B

in cooperation with the Texas Water Development Board



Board Members

Mr. Russell Schreiber, Chair
Mr. Mike McGuire, Vice-Chair
Mr. Dean Myers, Secretary
Ms. Tamela Armstrong
Mr. Jimmy Banks
Mr. J.K. (Rooter) Brite
Judge Mark Christopher
Ms. Carrie Dodson
Mr. Tommy Holub
Judge Randall C. Jackson
Mr. Darell Kennon
Mr. Steve Lewis
Mr. Tracy Mesler
Mr. Kyle Miller
Mr. Heath Ownbey
Mr. Jerry Payne
Mr. Wilson Scalling
Mayor Pro-Tem Gayle Simpson
Mr. Randall W. Whiteman

September 4, 2020

Mr. Ned Weakland
Bureau of Reclamation
Financial Assistance Operations
P.O. Box 25007, MS 84-27814
Denver, CO 80225

Re: Support for Reclamation FY-21 Water and Energy Efficiency (WaterSMART Program) Funding for the Wichita County Water Improvement District No. 2 Water Distribution Efficiency Project

Dear Mr. Weakland:

In 1997, Senate Bill 1 of the 75th Texas Legislature was passed to initiate the process of developing a comprehensive State Water Plan to meet the state's future water needs. To accomplish this task, the state was divided into 16 regional water planning groups. Region B is comprised of the following eleven Texas counties: Archer, Baylor, Clay, Cottle, Foard, Hardeman, King, Montague, Wichita, Wilbarger, and the City of Olney in Young County. The Wichita County Water Improvement District No. 2 (WCWID No. 2) provides an essential source of municipal water to the City of Wichita Falls' Reverse Osmosis Plant, and plays a vital role in irrigation and flood control in the Region B planning area. A main component of the fifty year planning cycle process is evaluating water management strategies (WMS), and preparing plans to implement those strategies. Conversion of the WCWID No. 2's irrigation canals to pipeline has been a major WMS in the *Region B Regional Water Plan* since 2006.

The Regional Water Planning Group – Area B (RWPG-B) formally supports the application of the WCWID No. 2 to the Bureau of Reclamation for funding to implement the proposed WaterSMART Water and Energy Efficiency Project. As an engaged local stakeholder, we acknowledge that replacement of the WCWID No. 2's open laterals, specifically in this case the PB Lateral Canal, by closed pipeline is essential to establishing water reliability in this drought-prone region. Through conservation of our invaluable water resources, the WCWID No. 2 is effectively fulfilling its roles as a key water provider, while ensuring continued economic prosperity in North Central Texas.

The RWPG-B appreciates this opportunity to express its unwavering support of the WCWID No. 2 in its effort to maximize local water efficiency through the proposed WCWID No. 2 Water and Energy Efficiency Project. Please contact me at (940) 761-7477, or email at russell.schreiber@wichitafallstx.gov should you require any additional information concerning our advocacy of this essential project.

Sincerely,

REGIONAL WATER PLANNING GROUP – AREA B



Russell Schreiber, P. E.
Chair

RS:slg

Cc: Mr. Kyle Miller, Wichita County Water Improvement District No. 2
Mr. Randy Whiteman, Red River Authority of Texas

Post Office Box 240
Wichita Falls, Texas
76307-0240
3000 Hammon Road
76310-7500
Phone (940) 723-2236
Fax (940) 723-8531
rwpg-b@rra.texas.gov