YUBA CITY IRRIGATION SYSTEMS UPGRADE PROJECT

WaterSMART Grants:
Small-Scale Water Efficiency

PREPARED FOR:
Bureau of Reclamation
Financial Assistance Operations
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SECTION 1. TECHNICAL PROPOSAL

A. Executive Summary

Date: April 27, 2017

Applicant Name: City of Yuba City (Community Services Department)

City, County, State: City of Yuba City, Sutter County, California

Project Summary: The City of Yuba City proposes to install water-smart controller irrigation systems in 11 public parks and 13 landscape management districts (LMDs). This project will address Task Component Area C.3.1, Landscape Irrigation Measures, by installing Weather-Based Irrigation Controllers (WBIC). According to the U.S. Environmental Protection Agency WaterSense website, as much as 50% of outdoor landscape water is wasted due to overwatering caused by inefficiencies in irrigation methods and systems. Irrigation control technologies can significantly reduce overwatering by applying water only when plants need it. The City of Yuba City has already researched costs of TORO Sentinel Central Control System components for the equipment needed for each of the project location sites. Upon equipment purchase, the City's Landscape Contractor will be responsible for replacing the existing outdated irrigation equipment with new, more efficient controllers, master valves, and flow sensors. The City requests $73,996 (50%) from the Bureau of Reclamation and will contribute a $73,997 (50%) match. The installation of the WBIC systems at the designated sites is anticipated to take approximately 15 months to complete. Assuming an award notification in June 2017, and an executed contract by September 2017, it is estimated that all work will be completed by December 2018. This project is not located on a Federal facility.

B. Background Data

The City of Yuba City is located within the northern Sacramento Valley with a population of 65,416. The City is located approximately 40 miles north of the State Capital, Sacramento. The Feather River borders the City to the East and the Sutter Buttes to the west. Primarily undeveloped agricultural land exists to the north, west, and south of the City. The City is a mid-sized agricultural community that has experienced moderate growth. The economy is primarily based on agriculture and support businesses. The largest employers include fruit processors, government, retail outlets, and service providers. The City has served as the County Seat since 1856. The City was incorporated in 1908. Much of the City's land use pattern can be traced to its evolution as a primary service center within a large agricultural area, and the

Exhibit 1: Geographic Location. *The City of Yuba City is located 40 miles north of Sacramento with a population of over 65,000 residents.*

majority of residential development is low-density single-family housing while commercial development is retail-related.

Source of Water: The City is an independent water supplier with four separate surface water agreements. The City does not purchase treated water from any other agencies, nor does it sell treated water to other agencies. The City's existing surface water sources include two appropriative water rights, State Water Resources Control Board (SWRCB) License 13855 (Application Number 0A18025) and Permit 18558 (Application Number A025751) and two surface water supply contracts from North Yuba Water District (NYWD) and the Department of Water Resources (DWR). Yuba City purchases surface water rights from NYWD which allows the City to divert 4,500 acre feet of water per year (AFY) directly from the Feather River. The City also purchases 9,600 AFY of water supplied by the State Water Project (SWP), a Bureau of Reclamation Facility, from the DWR. All surface water is treated and delivered by the City within its sphere of influence. The City owns a surface water treatment plant (WTP) and one back-up well with a capacity to store 2.9 million gallons per day for emergency situations.

Water Service Area: According to the City of Yuba City's *2015 Urban Water Management Plan* (UWMP), the City has a service area of over 14.9 square miles with 18,612 connections and more planned. The water service area encompasses the entire City limits and some connections outside of the City limits. Exhibit 2 shows the City limits, sphere of influence, and water service area. The WTP is located within City limits. The City sphere of influence borders are currently the Feather River to the east, Pease Road to the north, Township Road to the west, and Bogue Road to the south. Though Yuba City is primarily an agricultural region, the City's water district only supplies water within the sphere of influence which is used predominately for residential, commercial, industrial, and landscaping.

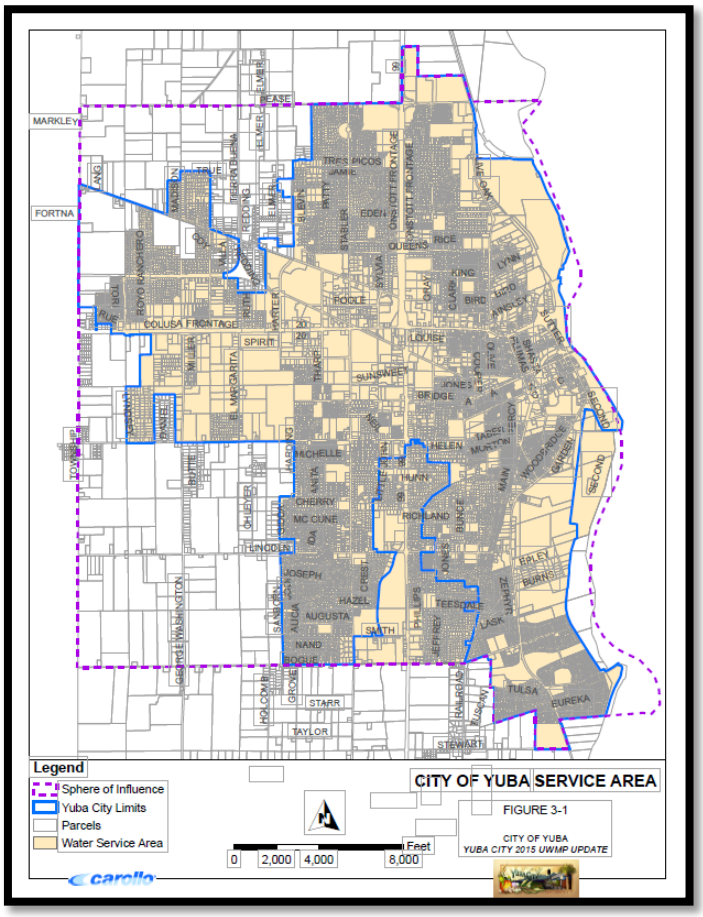


Exhibit 2: Yuba City Service Area Map

Water Distribution System: As stated above, Yuba City has 18,612 service connections within its service boundaries. Water service is provided to residents within the City limits, residents outside of the City limits but within the sphere of influence, and Franklin Elementary School, which is outside of the City's sphere of influence. The City is in the

process of expanding the sphere of influence. Existing water system facilities include approximately 175 miles of distribution water mains, one operating back-up/standby groundwater well, one surface water treatment plant, one low-lift pump station, and six booster pump stations.

Number of Water Users Served: Yuba City's service area has a 2015 population of 65,416 water users and its population is projected to increase by 3% per year to 148,806 by 2040.

Exhibit 3: 2015 Actual Demands for Potable and Raw Water

Water Use	Level of Treatment When Delivered	Volume (Million Gallons)	Volume (AF) rounded
Single Family	Drinking Water	2,044	6,273
Multi-Family	Drinking Water	508	1,559
Commercial/Institutional	Drinking Water	492	1,510
Industrial	Drinking Water	543	1,666
Landscape	Drinking Water	213	654
Other: Fire Suppression, Line Flushing, Construction Meters, and/or Temporary Meters	Drinking Water	4	12
Losses	Drinking Water	425	1,304
Total		4,230	12,978

Current Water Uses: Exhibit 3 above shows the 2015 actual demand for potable and raw water use at approximately 12,978 AF. Approximately 60.3% of the City's total water demand is from single and multi-family residential use, 24.5% is from commercial, institutional, and industrial use, and 10.1% is from water loss and other uses. The remaining 5.0% is from dedicated landscape demand.

Projected Water Demand: Water use in Yuba City varies by greater than 50% seasonally, crops grown in the region are climate-sensitive, and water use curtailments are in effect in the region. With substantial growth occurring in the past 20 years, the City is now the economic hub of the surrounding agricultural area, providing services for both city and regional residents. It is also part of the Sacramento metropolitan area economy and is influenced by trends in this larger area. Exhibit 4 contains the projected potable and raw water demands from 2015 through 2040. The demand projections are based on the City's 2020 target water use (includes conservation) and the projected populations. To project the number of connections per customer sector, it was assumed that the number of connections will grow consistently with the projected water demands.

Exhibit 4: Projected Demands for Potable and Raw Water

Water Use	Projected Water Supply (Million Gallons)				
	2020	**2025**	**2030**	**2035**	**2040**
Single Family	3,097	3,590	4,162	4,825	5,593

Multi-Family	769	892	1,034	1,199	1,390
Commercial/Institutional	745	864	1,002	1,161	1,346
Industrial	823	954	1,106	1,282	1,486
Landscape	323	375	435	504	584
Other: Fire Suppression, Line Flushing, Construction Meters, and/or Temporary Meters	6	7	8	9	10
Total	5,763	6,681	7,745	8,979	10,409

Past Relationships with Bureau of Reclamation

The City of Yuba City currently has a relationship with the Bureau of Reclamation (BOR) through the purchase of surface water rights from NYWD, which is a member agency, which allows the City to divert 4,500 acre feet of water per year (AFY) directly from the Feather River. The Feather River, a tributary of the Sacramento River, provides the primary watershed for the SWP. In addition, the City purchases 9,600 AFY of water supplied by the SWP, a BOR Facility, directly from the DWR. The City also has a relationship with the BOR through a 2012 Anadromous Fish Screen Program grant ($900,000) for the Yuba City Feather River Fish Screen Environmental Assessment/Initial Study.

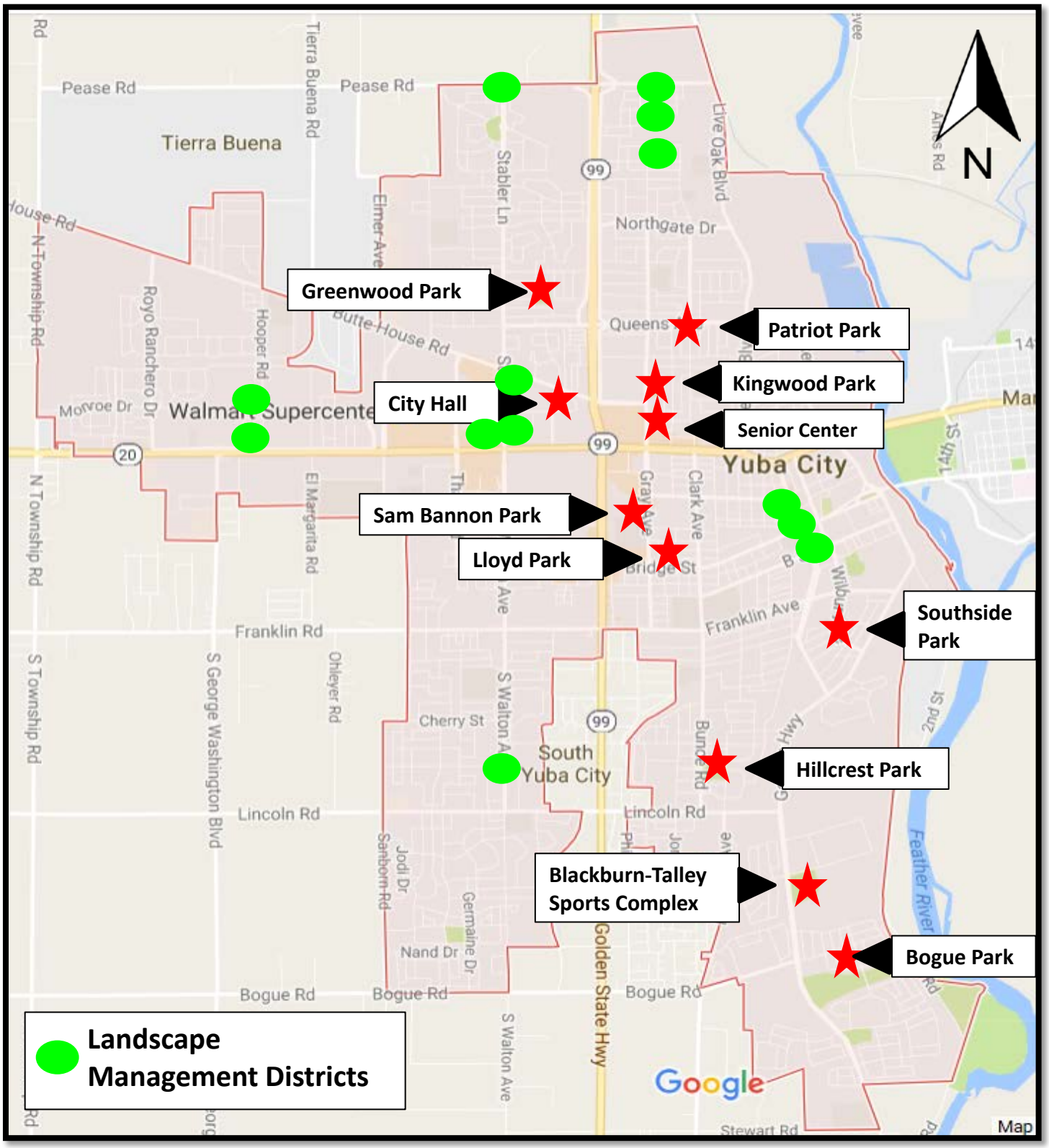
C. Project Description

The proposed project will replace the current manual, inefficient irrigation systems with WBICs in 11 of Yuba City's 25 city-owned public parks and 13 Landscape Management Districts (LDMs). Please see Exhibit 5: Project Location Map. The City anticipates using TORO Sentinel Central Control WBIC (Sentinel) systems which are used at the Sacramento International Airport and DisneyLand Park properties. System upgrades will include 24-station controllers, 12-station controllers, 2-inch master valves, and flow sensors. The easy-to-use Sentinel system can support station counts of 12, 24, 36 and 48 that communicate with a cloud-based online web application. Sentinel comes with several standard features including hand-held capability, flow-monitoring, and weather station interface. The system can be controlled remotely from a centralized location (Parks Department Maintenance Services) or from a smart-phone during weather events.

Problem: The existing irrigation system (at each of the 11 parks and 13 LMDs) is an inefficient, manually-programmed system with clock-timer controllers that does not account for factors such as changing weather or soil moisture. During weather events, City staff must physically travel to each current controller and manually "turn-off" each system, essentially wasting time and precious water. According to the Environmental Protection Agency (EPA), as much as 50% of outdoor water use in the United States is wasted due to overwatering caused by inefficiencies in irrigation methods and systems. WBICs act like a thermostat for your sprinkler system telling it when to turn on and off. It uses local weather and landscape conditions to tailor watering schedules to actual conditions on the site which significantly reduces overwatering. Irrigation water is also wasted due to evaporation, wind, or runoff, often caused by improper irrigation system design, installation, maintenance, or scheduling.

Exhibit 5: Project Location Map

Yuba City Irrigation Systems Upgrade Project



List of Parks, Facilities, and Landscape Management Districts (LMD)

NAME	ADDRESS	ACREAGE	CURRENT WATER USAGE Cu/Ft PER YEAR	PROJECTED WATER SAVINGS Cu/Ft PER YEAR*
Parks/Facilities				
Blackburn-Talley Sports Complex	300 Burns Drive	12.76	8,555	2,138
Bouge Park	Bogue Road and Crystal Creek Lane	.90	1,049	262
City Hall	1201 Civic Center Boulevard	5.06	5,364	1,341
Greenwood Park	1565 Greenwood Way	5.42	4,897	1,224
Hillcrest Park	900 McCall Avenue	6.67	7,942	1,985
Kingwood Park	Gray Avenue (between Butte House Rd. and Charlotte Ave.)	4.21	4,306	1,076
Lloyd Park	Bridge Avenue (between Fippins Ave. and Hughes Ave.)	1.64	2,250	637
Patriot Park	1488 Upland Drive	.26	450	112
Sam Brannon Park	806 Gray Avenue	8.51	6,080	1,520
Senior Center	777 Ainsley Avenue	1.30	492	123
Southside Park	Wilbur Avenue (between Moore Ave. and Wilson Ave.)	.64	782	195
Landscape Management Districts				
Colusa @ Emma	Colusa Highway/Emma Court		3,939	984
Kensington @ Gray	Kensington Way/Gray Avenue		733	183
Monroe @ Western Parkway	Monroe Drive/Western Parkway		1,819	454
Norwich @ Gray	Norwich Way/Gray Avenue		1,433	358
Parc West @ Regency	Parc West Drive/Regency Way		1,138	284
Parc West @ Stabler	Parc West Drive/Stabler Lane		963	240
Pease @ Gray	Pease Road/Gray Avenue		1,840	460
Plumas @ Center	Plumas Street/Center Street		2,869	717
Plumas @ Freemont	Plumas Street/Freemont Medical		3,282	820
Stabler @ Pease	Stabler Lane/Pease Road		2,131	532
Stabler @ Richland	Stabler Lane/Richland Road		1,345	336
Stabler @ Tres Picos	Stabler Lane/Tres Picos Drive		1,121	280
Town Square	Plume Street		4,801	1,200
LMDs Totals		6.12		
Totals		53.49	69,581	17,461

***Savings based upon TORO Sentinel Central Control System's low-end estimate of 25% water savings annually.**

Solution and Expected Outcomes: With BOR assistance, 11 public parks and 13 LMDs will be upgraded with weather-based irrigation systems. Industry standards indicate that WBICs can be remotely programmed and adjusted from a centralized location. The City could save up to 50% of water used, depending upon annual weather variations. ***The project has the potential to save an estimated 17,461 cubic feet, or 147,848 gallons of water annually.*** The system's useful life is estimated at 20 years. Based on these factors, the project is estimated to save 2,956,960 gallons (9.07 AF) of water over the product's useful life. This is a significant amount of water

savings that will help the City to meet its water conservation goal and account for future water demands from the growing community.

Scope of Work: The project scope of work (SOW) is relatively simple and streamlined, and is detailed in Evaluation Criteria C, Project Implementation. The City will purchase Sentinel controllers, sensors, and accessories and replace all existing irrigation controllers at 11 public City parks and 13 LMDs. Two of the included parks (Greenwood and Kingwood Parks) will only require the installation of a master valve and flow sensor. The irrigation controllers at these two parks have already been upgraded to WBIC systems. The scope of work includes removing all existing equipment; installing new controllers, antennas, and related components; furnishing and installing new master gate valves; furnishing and installing flow sensors; and programming the system. The City will then monitor the new system for one year to provide a comparison of current water usage vs. historical data.

C. Evaluation Criteria

Evaluation Criterion A—Planning Efforts Supporting the Project (35 points)

Yuba City has actively recognized the importance of long-term water planning and water conservation and has made the proposed project a priority. With California facing one of the most severe droughts on record, Governor Brown declared a drought State of Emergency in January 2015 and directed state officials to take all necessary actions to prepare for water shortages. As a result, Yuba City has taken a number of steps to reduce water use already, including implementing a water conservation program. On May 9, 2016, Governor Brown issued Executed Order B-37-16, "Making Water Conservation a California Way of Life." In response to the Governor's Executive Order and the improving California water supply, the State Water Resource Control Board eased emergency conservation regulations and established new rules for water suppliers to implement a "locally-developed conservation standard." The City's water conservation regulations, as approved by the City Council on June 7, 2016, are as follows: 1) 15% Conservation Mandate; 2) Irrigation Restrictions; 3) Eliminate Water Waste; and 4) Rebate Programs Available.

The proposed project is determined as a priority in the following key plans and documents:

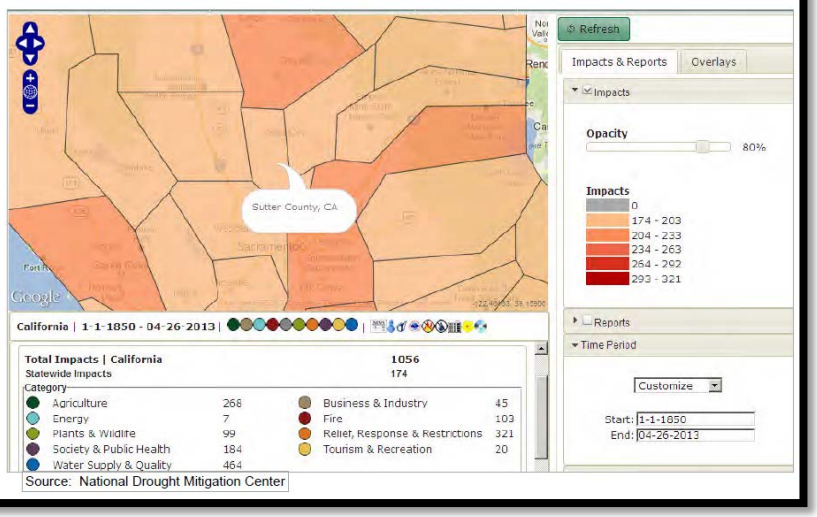
- 2004 General Plan. Proposed to establish guidelines and standards for water conservation and actively promote use of water-conserving devices and practices.
- 2015 Urban Water Management Plan. Section 7.3 Large Landscape Conservation Programs and Incentives: The City installed a test system at a park that automatically adjusts irrigation schedules based on weather conditions. New parks constructed within the city sphere of influence will utilize similar systems. Several large parks have been converted to groundwater, and AMI meters will be installed in these locations.
- 2015 Emergency Water Restrictions and Conservation Update. Includes measures promoting water conservation in both City operations and in private development including irrigation technology as a critical water saving measure.

Evaluation Criterion B—Project Benefits (35 points)

Reduces Water Use and Water Demand: The most significant benefit of installing WBIC technology is that it will significantly reduce overwatering by applying water only when plants and turf need it. The City currently estimates it uses 69,581 cubic feet (520,466 gallons) per year to irrigate the 11 parks and 13 LMDs combined. Upon installation of the WBICS, the City estimates it will reduce water consumption by up to a minimum of 25%, or 17,461 cubic feet (147,848 gallons) per year. As previously stated, industry standards estimate up to 50% reduction in water usage which translates to a possible savings of 34,791 cubic feet (260,233 gallons) annually for Yuba City. The proposed project will help improve the reliability of the system by allocating more water to drinking or potable uses.

Water Sustainability: Like most of California, Sutter County and Yuba City is in the third year of extreme drought. Despite some rain late in the season, the County would need another 52 inches between now and October to make up for the lack of rainfall in the past three years. Northern State reservoirs are less than two-thirds of their historic average, and there is virtually no snow pack in the Sierra Nevada. Water deliveries to some farms in the County have decreased and the cost of food is expected to rise. The City implemented a Water Shortage Contingency Plan in 2013. Yuba City placed restrictions on water usage in 2014 to comply with the State mandated reduction in water consumption by 22%, and again at the end of 2015 to comply with the new reduction in water consumption by 32%.

Figure 4.73. Drought Impact Reporter for Sutter County Planning Area (1850 to 2013)



The implementation of this project improves overall water supply reliability by freeing up supply from the Feather River. If in the future, the SWP has to reduce the City's annual allocation of water from the Feather River due to drought conditions, the project's savings will ensure that the City is still sustainable and can continue to function – even as its population increases and water demand continues to rise. The project could also result in water savings for NYWD and DWR as the City will not have to purchase as many water rights from the Feather River and SWP annually.

Reduces Operations and Maintenance Costs: Implementation of central wireless WBICs eliminates the need for staff to physically be onsite to manage the irrigation systems significantly reducing O&M costs. The Sentinel WBIC controllers enable City staff to manage and communicate with the system components from a central location or through a smart-phone application. Staff can make changes to the irrigation schedule and flow immediately

during weather events that would otherwise have required staff to travel to each irrigation system controller for manual adjustments, which in turn, reduces gasoline use, reduces air emissions, and improves air quality.

W**ater Conservation Requirements:** The project supports the City's commitment to, and compliance with, the Water Conservation Act of 2009, SBx7-7, to reduce per capita urban water use by 20 percent by the year 2020.

Increased Recreation Opportunities: During times of drought and/or drought conditions, the first step in water conservation is to discontinue landscape irrigation. The proposed project will enable the City to continue providing the minimum water needed to keep local green spaces and parks alive and available for recreation and exercise opportunities even in times of low-water weather events.

Evaluation Criterion C—Project Implementation (15 points)

Project Implementation: The proposed Scope of Work (SOW), to install WBIC systems in 11 City parks and 13 LMDs, is relatively simple as the proposed equipment has already been identified and the City's Landscape Contractor will be utilized to install the systems at each site. No easements, permits, or approvals are required for this project, and no new policies or administrative actions are required to implement the project. The SOW will take place on City-owned land and all necessary construction safety protocols will be followed. The major project tasks include the following:

TASK 1: PROJECT/GRANT MANAGEMENT

- Establish the grant agreement with the BOR;
- Attend and prepare for requested meetings with BOR;
- Oversee the contract and implementation progress;
- Complete all reporting requirements;
- Closeout the grant; and
- Maintain all records for at least three years after project closeout.

Deliverables: Executed grant agreement; meeting agendas and minutes; requests for reimbursement; quarterly and final reports; and audit reports (if applicable).

TASK 2: MATERIALS PROCUREMENT AND INSTALLATION

- Procure the TORO Sentinel controllers, accessories, master valves, and flow sensors; and
- Install equipment at each of the 24 sites.

TASK 2.1: KICK-OFF MEETING

- Hold a kick-off meeting with Horizon, the Sentinel vendor, and grant management team to refine the timeline, materials required by park and LMD, and final determination of equipment needed for each location.

TASK 2.2: PURCHASE MATERIALS

- Review and finalize a purchase order for the materials needed to implement the project.

TASK 2.3: CONSTRUCTION/INSTALL WEATHER-BASED IRRIGATION SYSTEM

- Install all project system upgrades at 11 parks and 13 LMDs by City Landscape Contractor based on agreed-upon timeline and park requirements including 24-station controllers, master valves, and flow sensors.

TASK 2.4: TEST AND REFINE SYSTEM AND TRAINING

- Conduct final inspections and assessments at each location site to test and refine the system to ensure operational startup performance has been completed successful; and
- Train City staff on proper use.

Deliverables: City Purchase Order to TORO; invoices for purchased products; inspection checklist identifying schedule of installation and verifying all installation activities completed; and photographs of installed materials.

TASK 3: PERFORMANCE MONITORING

- Conduct a pre- and post-assessment of the water savings resulting from the project. The water savings estimates will be based on historical water records for each of the 24 project sites over a one-year period compared to the new water usage for a one-year period.

Deliverables: Report on historical vs. post-project water usage by park and LMD.

Project Schedule The project is estimated to take approximately 12 months, with a completion date of September 2018, assuming a start date of September 2017. The City has estimated the tasks and schedule based on the tasks/time required for completion of similar projects.

Exhibit 7: Project Timeline/Schedule

Task No.	Timeline Major Project Tasks	2017 1st Qtr.	2017 2nd Qtr.	2017 3rd Qtr.	2017 4th Qtr.	2018 1st Qtr.	2018 2nd Qtr.	2018 3rd Qtr.	2018 4th Qtr.
0	BOR Award (June 2017)								
1	Project/Grant Management (Sept 2017-Dec 2018)								
2	Procurement/Installation (Sept 2017-Sept 2018)								
2.1	Kick-Off Meeting (Oct 2017)								
2.2	Purchase Materials (Nov 2017)								
2.3	Install Systems at 24 Sites (Dec 2017-Sept 2018)								
2.4	Test and Refine Systems (Jan 2018-Sept 2018)								
3	Performance Monitoring (Jan 2018-Dec 2018)								

Evaluation Criterion D—Nexus to Reclamation (15 points)
The City of Yuba City is associated with Reclamation in several areas, including the BOR-funded project mentioned previously. As stated above, Yuba City has a current relationship with Reclamation through the purchase of surface water rights from NYWD. Yuba City is member agency which allows the City to divert 4,500 acre feet of water per year (AFY) directly from the Feather River. The Feather River, a tributary of the Sacramento River, provides the primary watershed for the SWP. In addition, the City purchases 9,600 AFY of water supplied by the SWP, a BOR Facility, directly from the DWR.

North Yuba Water District. The City negotiated a contract for water supply with the NYWD originally in 1965. The agreement provides for direct diversion from the Feather River for each year through the end of calendar year 2035 and it may be renewed thereafter. The contract limits annual withdrawal to 4,500 AFY. This contract is important in that it provides a base summer water supply. Supply under this contract has never been curtailed.

Department of Water Resources. The City executed this SWP contract in 1963. The contract remains in force through 2035, with certain renewal rights. The maximum allowable allocation is 9,600 AFY. The contract is presently used to supplement the NYWD supply during the months of July and August. Water from this contract can be utilized in any month of the year. Full allocations of water under this contract have been reduced several times. In 1990 and 1991, the allocations were reduced to 20%. The following year, in 1992 the allocation was 45%. Due to lack of rain during the preceding years the DWR SWP Contract was reduced to 5% in 2014 and 25% in 2015. The City has recently acquired an additional 53 AFY of water from DWR through the Dry Year Water Purchase Program.

Section 2. Environmental and Cultural Resources Compliance

Will the proposed project impact the surrounding environment? The project will upgrade the irrigation systems in 11 City parks and 13 LMDs and consists of changing-out existing controllers. There may be very minor earth disturbance but this is expected to be limited to the first 4" of topsoil, if at all. No negative impacts are anticipated.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? There are no known species listed or proposed to be listed as threatened or endangered, or a designated critical habitat in any of the project locations that would be affected by any activities associated with the project.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" There are no wetlands or other surface waters inside the project boundaries. No negative impacts are anticipated.

When was the water delivery system constructed? In February 1910, the municipal water district was formed and in 1922, a sanitation department was formed and created a sewer system. Prior to 1969, the City water supply was local groundwater. The water was hard and contained high levels of sulfides, iron, and manganese. In 1965, the citizens passed a bond issue, 91 percent in favor, to construct a new surface water treatment plant (WTP). The WTP was placed on line in 1969. In 2007, the WTP was expanded with membrane treatment technology.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system? The proposed project will not result in any modification of or effects to features of an irrigation system (e.g., headgates, canals, or flumes).

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? The project consists of changing-out existing controllers and will not affect any buildings, structures, or features listed under the National Register of Historic Places.

Are there any known archeological sites in the proposed project area? There are no known archeological site in the proposed project area.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations? The proposed will upgrade the irrigation systems in 11 City parks and 13 LMDs. The project consists of changing-out existing controllers and is expected to have a positive effect on low-income and minority populations as it will help to conserve water usage and reduce overall water costs.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands? The project consists of changing-out existing controllers and will not limit access to and ceremonial use of Indian sacred sites or result in any impacts on tribal lands.

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

Section 3. Required Permits or Approvals. No permits or approvals are required for the implementation of this project. All activities within the scope of work take place on non-Federal, City-owned land.

Section 4. Official Resolution. The signed and adopted resolution is included in Appendix A: Resolution.

Section 5: Project Budget

A. Funding Plan

Yuba City will fund all non-Reclamation share of project costs through City resources. No other sources will be used. Yuba City will provide $73,997 in cash through the Department of Community Services Budget. The project management team will be included as in-kind contribution. The City has not incurred any previous costs on this project, has no funding partners, and has no pending funding requests for the proposed project.

Exhibit 8: Summary of Non-Federal and Federal Funding Sources	
Funding Sources	**Funding Amount**
Non-Federal Entities	
1. City of Yuba City (Cash Contribution)	$73,997
2. City of Yuba City (In-Kind Funding)*	$0
Non-Federal Subtotal (50%):	$73,997
Other Federal Entities	
1. Not Applicable	$0
Other Federal Subtotal:	$ 0
Requested Reclamation Funding (50%):	$73,996
Total Funding:	$147,993

B. Letters of Commitment. There are no other funding partners for this project.

C. Budget Proposal. The total cost of the Yuba City Irrigation Systems Upgrade Project is estimated at $147,993. The City will provide a 50% share at $73,997 and is requesting Reclamation funding of $73,996, or 50% as follows.

Exhibit 9: Funding Sources		
Funding Sources	**% of Total Cost**	**Total Cost by Source**
Recipient Funding	50%	$73,997
Reclamation Funding	50%	$73,996
Other Federal Funding		$0
Total	**100%**	**$147,993**

A further breakdown of these costs is noted in Exhibit 10: Proposed Budget, below:

Exhibit 10: Proposed Budget						
Budget Item Description	Computation			Recepient Funding	Reclamation Funding	Total Cost
	$/Unit	Unit	Quantity			
Salaries and Wages						
Not Applicable						
Subtotal						
Fringe Benefits						
Not Applicable						
Subtotal						
Travel						
Not Applicable						
Equipment (over $5,000 per item)						
Not Applicable						
Supplies/Materials						
24-Station WBIC Controller	$ 5,073	EA	9	$ 22,908	$ 22,749	$ 45,657
12-Station WBIC Controller	$ 3,187	EA	13		$ 41,431	$ 41,431
2-Inch Master Valve	$ 94	EA	24		$ 2,256	$ 2,256
2-Inch Flow Sensor	$ 315	EA	24		$ 7,560	$ 7,560
Subtotal						$ 96,904
Contractual/Construction						
Installation of WBIC components at 24 sites	$51,089	LS	1	$51,089		$51,089
Environmental						
Not Applicable. CEQA will be a Categorical Exemption.						$0
Other						
Not Applicable						$ -
Indirect						
Not Applicable						$
Total Project Costs				$ 73,997	$ 73,996	$ 147,993
Percentage Contribution by Funding Source				50%	50%	100%

D. Budget Narrative

Salaries and Wages. Not applicable.

Fringe Benefits. Not applicable.

Travel. Not Applicable.

Equipment. Not applicable.

Materials and Supplies. The City has obtained WBIC System component quotes from Horizon. Horizon is a leader in irrigation and landscape equipment and management and has a California team familiar with the needs and conditions of Yuba City. Please see Attachment B for a copy

of the Horizon quote. The included quote includes the costs for the following WBIC system components: 1) 24-Station TORO Sentinel Controller; 2) 12-Station TORO Sentinel Controller; 3) 2-Inch Inline Plastic Master Valve; and 4) 2-Inch Plastic Flow Sensor. Total equipment costs (including tax and shipping) are $96,904. Please see Exhibit 11 below for a breakdown of costs per location.

Exhibit 11: Total Equipment Costs Per Location

LOCATION	EQUIPMENT NEEDED	COST
Blackburn-Talley Sports Complex	24-Station Controller, Master Valve, Flow Sensor	$5,482
Bouge Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
City Hall Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Greenwood Park	Master Valve, Flow Sensor	$409
Hillcrest Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Kingwood Park	Master Valve, Flow Sensor	$409
Lloyd Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Patriot Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Sam Brannon Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Senior Center Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Southside Park	24-Station Controller, Master Valve, Flow Sensor	$5,482
Landscape Maintenance Districts (13)	12-Station Controller, Master Valve, Flow Sensor	$3,596/EA
Total		**$96,904**

Contractual/Construction. Total construction costs are estimated to be $51,089 for all 24 project location sites including 11 public City parks and 13 LMDs throughout the City of Yuba City. All installation will be conducted by the City's landscape contractor, who does not charge for mobilization. There is no grading expected for this project. Construction will include replacing the existing manual irrigation controllers with TORO Sentinel WBIC controllers (at 22 of the proposed sites) and installing master valves and flow sensors at all 24 sites. All construction costs are based upon Yuba City's experience with similar projects and the landscape contractor.

Environmental and Regulatory Compliance Costs. Not Applicable. The City anticipates submitting a Categorical Exclusion as the project consists of changing-out existing controllers.

Other Expenses. Not Applicable.

Indirect Costs. Not Applicable.

Total Cost. Total cost for implementation of the project is anticipated to be $147,993.

E. Budget Form. SF-424C Budget Form under separate cover.

End of 15-page narrative

RESOLUTION NO. 17-024

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF YUBA CITY APPROVING THE APPLICATION FOR GRANT FUNDS FOR THE BUREAU OF RECLAMATION'S WATERSMART GRANTS: SMALL-SCALE WATER EFFICIENCY PROJECTS FOR FISCAL YEAR 2017 FOR THE LOCAL PARKS IRRIGATION SYSYEM UPGRADE PROJECT

WHEREAS, the City of Yuba City has prepared an application to apply for federal funding from the United States Department of the Interior, Bureau of Reclamation (Reclamation) to assist in the funding of the Small-Scale Water Efficiency Project; and

WHEREAS, the funding opportunity provided by Reclamation through their Grant Program entitled "WaterSMART Grants: Small-Scale Water Efficiency Grants for FY 2017" Funding Opportunity Announcement No. is BOR-DO-17-F011; and

WHEREAS, the Local Parks Irrigation System Upgrade Project will implement efficient irrigation systems with smart controllers that improve water system efficiency and reduce water usage in City of Yuba City Parks and Landscape Maintenance Districts; and

WHEREAS, the Applicant, if selected, will enter into an agreement with Reclamation to carry out the project.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Yuba City hereby:

1. Approves the filing of an application for the implementation of the Local Parks Irrigation System Upgrade Project; and

2. Certifies that Applicant understands that the Applicant will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement; and

3. Certifies that it understands the assurances and certification in the application; and

4. Certifies that Applicant is capable of providing the amount of funding specified in the application; and

5. The City appoints the City Manager, or designee, as agent to conduct all negotiations, execute and submit all documents including, but not limited to applications, agreements, payment requests and so on, which may be

necessary for the completion of the aforementioned project; and

6. The Mayor, or presiding officer, is hereby authorized to affix his signature to this Resolution signifying its adoption by the City Council of the City of Yuba City and the City Clerk, or her duly appointed assistant, is directed to attest thereto.

The foregoing resolution of the City Council of the City of Yuba City was duly introduced, passed and adopted at a regular meeting thereof held on the 18th day of April, 2017, by the following roll-call vote:

AYES: Councilmembers Buckland, Cardoza, Didbal, Harris and Mayor Cleveland

NOES: None

ABSENT: None

Stanley Cleveland Jr, Mayor

ATTEST:

Patricia Buckland, City Clerk

CITY OF YUBA CITY INCORPORATED JAN 23, 1908 SUTTER CO. CALIFORNIA

H075-SACRAMENTO-HDI
301 BROADWAY
SACRAMENTO, CA 95818-2039
Phone 916-492-1000
Fax 916-492-1057

Quotation

QUOTE #	1Z013185
LOCATION	H075
DATE	03/15/17
PAGE	1 of 1

BILL TO

H26075
CITY OF YUBA
1201 CIVIC CENTER DR
YUBA CITY, CA 95991
Phone 530-822-4617
Fax 530-822-4694

SHIP TO

QUOTES ONLY
Customer Pick-Up
301 BROADWAY
SACRAMENTO, CA 95818-2039
Fax 530-822-4694

QUOTE DATE	EXPIRE DATE	REQUIRED DATE	REFERENCE NUMBER	PAYMENT TERMS
03/15/17	04/14/17		SENTINEL CONTROLLERS	NET 30 DAYS
WRITTEN BY			CONTACT	SHIP VIA
S JESUS PENALOZA(H085			Eddie	PICK UP
FREIGHT TERMS			JOB NUMBER	SALES REP
COLLECT (IN/OUTBOUND)			QUOTES	H080/H080-ROSEVILLE-H

PRODUCT/DESCRIPTION	QUANTITY	PRICE	U/M	EXTENSION
*EIC SC12WS3U 12 STATION SENTINEL CONTROLLER	1	3,186.50	EA	3,186.50
*EIC SB24WS1U 24 STATION SENTINEL CONTROLLER	1	5,072.73	EA	5,072.73
TOC-58-1115 P220-26-08 TORO 2" ELEC IN LINE PLAST VALV	1	94.30	EA	94.30
TOC-58-1032 TFS-200 TORO FLOW SENSOR 2" PLASTIC T	1	315.10	EA	315.10