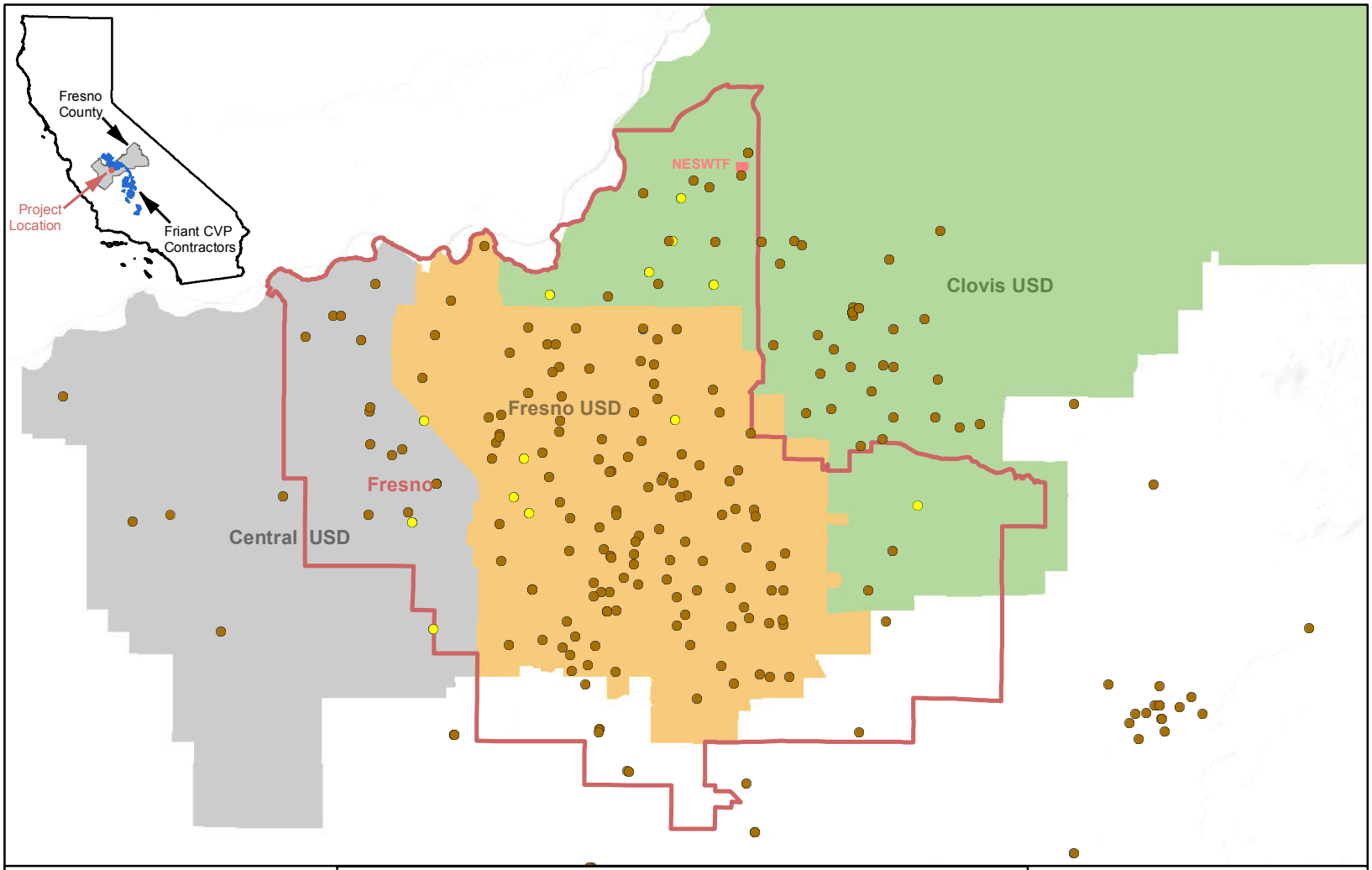

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Legend

- City of Fresno Sphere of Influence
- Central Unified School District
- Clovis Unified School District
- Fresno Unified School District
- School Site
- Priority Site

Figure 2

City of Fresno
School Districts Water
Conservation Project

Project Location and Vicinity

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CITY OF FRESNO
together with the Fresno Unified School District, Clovis Unified School District and Central Unified School District
application for the
FRESNO SCHOOL DISTRICTS WATER CONSERVATION PROJECT

FRESNO COUNTY, CA

APPLICATION SUBMITTED TO THE
UNITED STATES BUREAU OF RECLAMATION
FOR A WaterSMART: WATER AND ENERGY
EFFICIENCY GRANT
FOR FISCAL YEAR 2016

(FUNDING OPPORTUNITY ANNOUNCEMENT NO. R16-FOA-DO-004)

Project Manager: Thomas Esqueda, Public Utilities Director
2600 Fresno Street Department of Public Utilities
Phone: (559) 621-8610, Fax (559) 457-1329
E-mail: Thomas.esqueda@fresno.gov

January 2016

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

ATTACHMENTS

TECHNICAL PROPOSAL

1 . Executive Summary

(A) General Project Information

Proposal Name: Fresno School Districts Water Conservation Project
Date: January 20, 2016
Applicant Name: City of Fresno
City, County and State: Fresno, County of Fresno, California

(B) Project Summary

The City of Fresno has partnered with three local school districts (Fresno Unified School District, Clovis Unified School District and Central Unified School District) to pursue funding for projects that will provide water conservation on school campuses within the City of Fresno. The school districts who receive potable water from the City's water system. The City will make the funding available for the school districts to install irrigation system improvements that will provide more efficient delivery of water for large irrigated turf and landscaping, as well as other water conversation projects. Large irrigated turf makes up the primary demand on school sites, and some of the school districts school sites still use flood irrigation. The school districts will install efficient sprinkler systems with smart controllers that improve water system efficiency and reduce usage. The project will conserve an estimated 10 af/yr. Project sites will also be considered for connection to the City's recycled water pipeline which would conserve all potable water currently used for turf irrigation, an estimated additional 18af/yr. The project will provide needed water conservation within a community and area that has a critically overdrafted groundwater aquifer. Table 1 shows the funding request.

Table 1 - 2016 Funding Request Summary

Funding Source	Funding Amount
Non-Federal Entities	
School Districts	$450,000
Non-Federal Subtotal:	**$450,000**
Reclamation Funding:	**$300,000**
TOTAL PROJECT FUNDING	**$750,000**

(C) Project Duration and Estimated Completion Date

The project work associated with this grant will begin in October 2016 and will be completed in March of 2018. The anticipated timeline to complete the Project is consistent with the Technical Project Description and will meet the maximum length allowed for Funding Group I projects (complete within two years from the award start date).

(D) Federal Facility

The project is not located on a Federal facility.

TECHNICAL PROPOSAL

2 . Background Data

(A) Geographic Location

The City of Fresno, incorporated in 1885, is located in the Central San Joaquin Valley of California, approximately 170 miles south of the City of Sacramento, and 220 miles north of the City of Los Angeles. Fresno is the fifth largest city in California, has a population of over 531,000 people, and encompasses nearly 110 square miles. Fresno is bounded on the northwest by the San Joaquin River, approximately 10 miles downstream of Friant Dam, and is approximately 13 miles west of the Kings River. Please see Figure No. 1.

(B) Water Supply

The City's primary source of drinking water is groundwater. This supply is supported by 275 municipal water wells, and serves residential, industrial, commercial, and municipal customers. Groundwater accounts for 84% of the City's potable water supply. Surface water from the USBR Central Valley Project (CVP) makes up the remaining 16%. The City's underlying groundwater basin, the Kings Sub-basin, is in a condition of critical overdraft, as determined by the State of California.

The City receives surface water supply from the USBR CVP; the contract for 60,000 acre-feet of Class 1 water was renewed in 2005 through 2045, and subsequently converted to a Section 9(d) Contract in 2010 (2010 Urban Water Management Plan (UWMP) - City of Fresno's Water Supply). The surface water is supplied from Friant Dam (Millerton Lake) and conveyed via the Friant-Kern Canal and then through several Fresno Irrigation District (FID) owned and operated canals to the City's surface water treatment plant. The Class 1 water has been historically fairly reliable; however, the 2013-2014 and 2014-2015 water years saw a 0% percent allocation due to extended statewide drought which triggered senior riparian water right holders to call for delivery of their historic San Joaquin River water supply. Previously, the lowest allocation for this system was 25% in 1977, also due to a protracted drought.

(C) Water Delivery System

The City's water system is comprised of nearly 1,800 miles of water mains and includes approximately 126,000 residential, commercial, and industrial service connections.

(D) Energy Sources and Uses

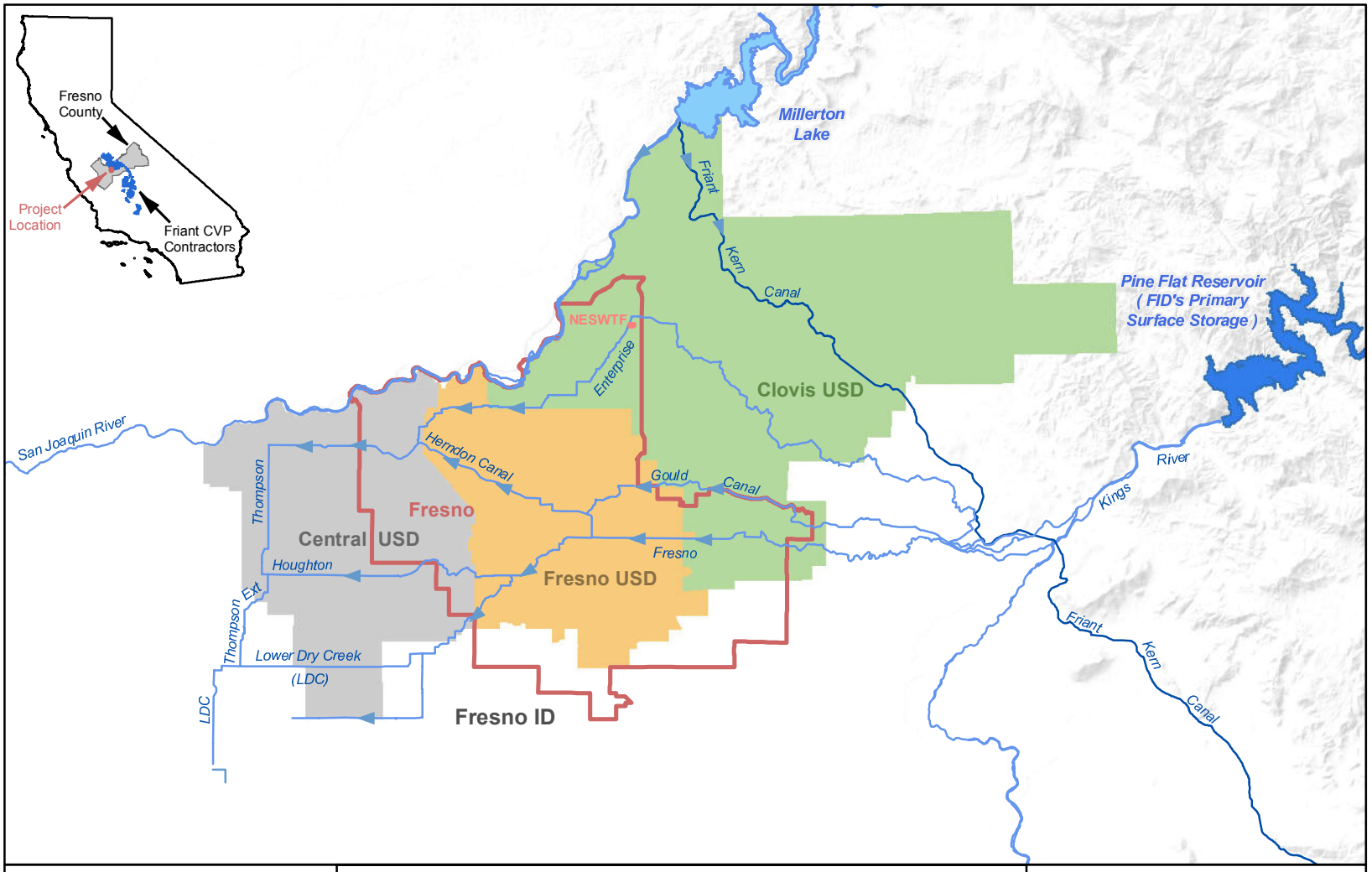
The City operates wells and surface water treatment facilities that receive electric power from Pacific Gas and Electric. The cities overall energy use for its water supply is approximately 34,272,270kWh/yr.

(E) Past Working Relationships with Reclamation

1. The City has had a Class 1 Contract for water from the Friant Division of the USBR CVP for decades, and has maintained a good working relationship with USBR for the use of its supplies. In 2010, the City renewed its contract with USBR and converted the supply to a Section 9(d) contract. In 2015, the City was a recipient of a Group II WaterSMART

Water and Emergency Efficiency Grant for its Friant-Kern Pipeline Project, which is installing 4.6 miles of 60-inch diameter pipe and a new turnout diversion structure, connecting the Friant-Kern Canal with the City's Northeast Surface Water Treatment Facility.

2. The City has been awarded a 2015 WaterSMART grant for $1,000,000 for construction of its Friant Kern Raw Water Pipeline that will provide water conservation and water quality benefits to the City. The grant is in the final stages of processing and the City is preparing for construction to be initiated in the spring of 2015.



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Legend

- Lake/Reservoir
- City of Fresno SOI
- Central Unified School District
- Clovis Unified School District
- Fresno Unified School District

Figure 1

City of Fresno
School Districts Water
Conservation Project

Project Location and Vicinity

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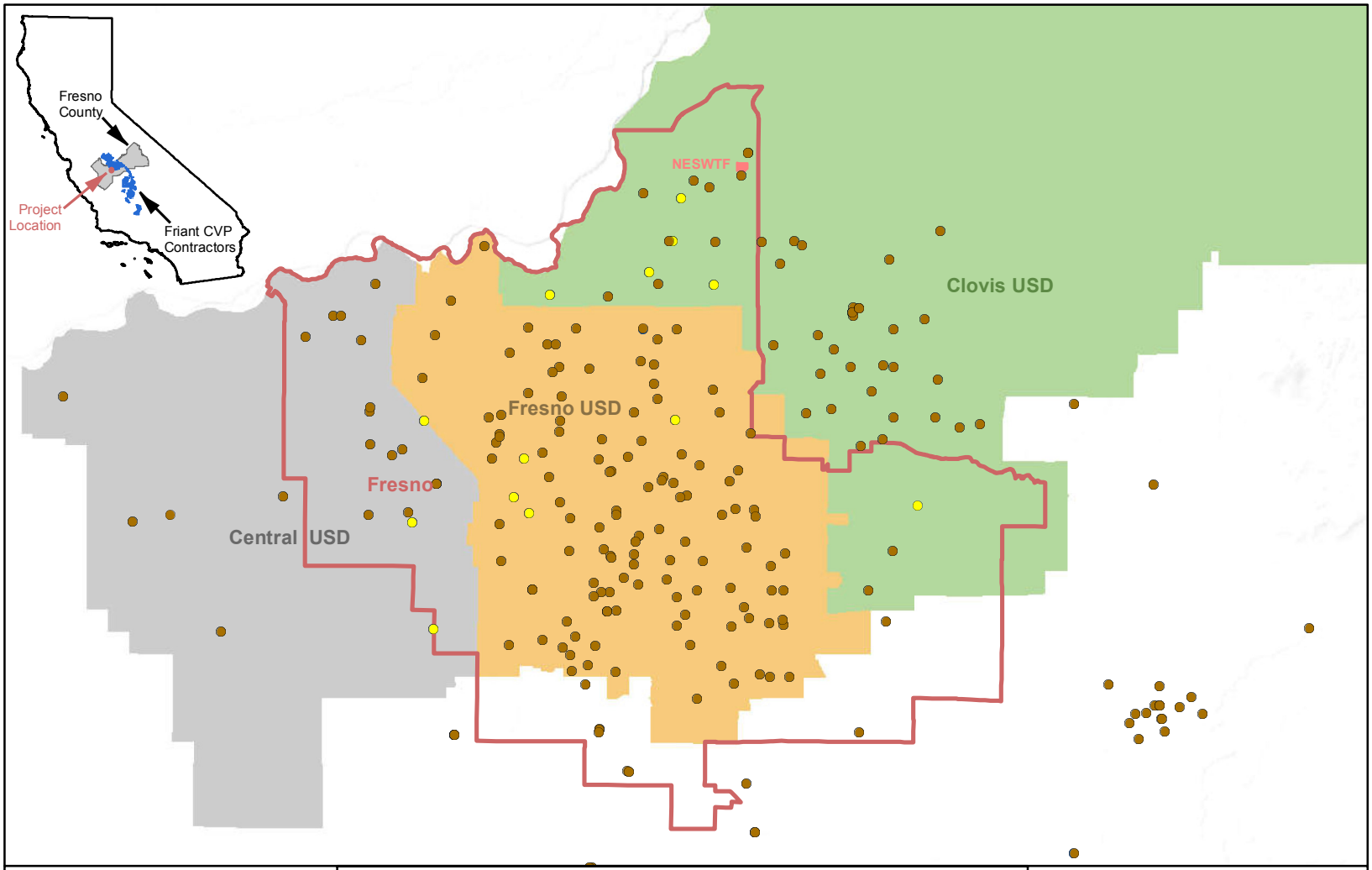

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3 . Technical Project Description

(A) Project Workplan

The project includes installation of smart controller irrigation system controllers and sprinkler systems with high efficiency sprinkler heads on large irrigated turf areas as well as other water conservation improvements on school campuses. The following workplan has been developed to describe the work in detail, including specific activities that will be accomplished as a result of this project. The school districts use consulting professional engineers and irrigation system designers with specific expertise and experience on similar projects for preparation of environmental documents, surveying, design engineering and construction administration. The major project tasks include the following:

Task 1 – Project Administration

This task includes the project administration associated with the grant administration. This task includes items such as meetings, coordination with Reclamation and other agencies, overall project coordination, preparation of quarterly reports, final project report and all other reporting obligations in accordance with the grant contract requirements.

Deliverables

- Meeting minutes, quarterly, draft and final reports, and other deliverables as required.

Task 2 – Design Engineering

This task is included to perform the design engineering work for the irrigation system improvements and equipment. This task includes preparation of plans and specifications required for bidding of the construction improvements and completion of bidding. The school districts will conduct a competitive bid process to solicit bids from appropriately certified contractors for construction of the facilities in accordance with the plans and specifications. The project will be bid in accordance with all applicable district, state, and federal requirements for construction of this type of project. The Schedule of Bid Items for the contractor is anticipated to be similar to the bid items listed in the Estimate of Probable Construction Cost included as **Attachment C**. Bid documents will be opened and the contract will be awarded to the lowest responsible bidder. The improvements are expected to be exempt under the CEQA and NEPA processes. This task includes completion of CEQA exemption documents, as well as assistance with USBR preparation of NEPA exclusion.

Deliverables

- Plans and Specifications
- CEQA Exemption documents

Task 3 – Construction

This task includes construction of all project improvements including labor, equipment and material costs. The selected contractor will be responsible for all site work and construction efforts under this task, including but not limited to construction of the sprinkler system,

installation of smart controllers, and operational startup performance and testing. A complete list of the requirements of the contractor will be identified in the project plans and specifications that will be completed under Task 2. Each school district anticipates awarding all construction work to one contractor who will be required to perform all activities identified in the plans and specifications.

Deliverables:

- All construction activities and a completed and operational facility

Task 4 – Construction Administration

This task includes construction administration, construction observation, and construction management.

This task includes all required construction contract administration, observation, inspection, labor compliance and management efforts for the project. Each school district will be responsible for their own contract management, daily inspection and administration requirements. Cost for school district staff time is not included as cost share. The school districts anticipate utilizing their design engineer/consultant to assist with response to Requests for Information (RFIs) and review of submittals associated with the project equipment and materials. Cost for the engineering consultant's time is included as cost share.

Deliverables:

- Construction inspection reporting and conformance of completion in accordance with construction documents

(B) Project Schedule

The duration of the project will be 18 months and will be complete by March 2018. A Gantt chart schedule for the project is included as **Attachment A**. The schedule shows the major tasks, milestones, and major deliverables. The schedule tasks are consistent with those used in the Work Plan and Budget. The schedule is based on the time required for completion of similar projects.

4 . Evaluation Criteria

(A) Evaluation Criterion A: Water Conservation

Subcriterion No. A.1: Quantifiable Water Savings

(i) Describe the amount of water saved. (AF/yr)

The project is estimated to conserve 10 af/yr. Water use for irrigation of large irrigated turf at school sites will be reduced, thereby conserving water use by the districts and within the City. Current irrigation systems are hand operated flood irrigation systems at multiple school sites that are set for operation in the evening when school site staff leave the site, then shut off in the morning when school site staff arrive. This method over-irrigates the turf. The project will provide new automated high efficiency sprinkler systems with smart controllers that will reduce water usage at the school sites. City water records indicate and average use of 4 af/acre/yr (or higher) at sites that do not have the proposed systems. The new systems will irrigate as needed based on atmospheric conditions, delivering water as needed for the turf, which is estimated to be approximately 2.67af/acre/yr. This project is anticipated to improve irrigation at 2 school sites that have approximately 7.3 acres of irrigated turf. Reducing the water use to 2.67af/acre/yr on 7 acres will conserve an estimated 10 af/yr.

(ii) What is the average annual acre-feet of water supply?

The City's CVP 60,000 AF/Y contract has an anticipated after SJR settlement normal year supply of 58,200 AF/Y. With recent years included, the long term average supply available to the City has been approximately 54,000af/yr. The City's Fresno Irrigation District contracted supply is proportionate to the current area of City annexed land within FID's services area to the entire FID service area. FID's average year Kings River supply is 451,353 AF/Y (1895-2014). As of 2014-2015 the City occupied approximately 26% of FID's service area so the average year contractual allocation would be approximately 117,350 AF/Y. So total surface water supplies total approximately 170,000 af/year. The City does not currently have capacity to treat all of its surface water supply to meet potable demands, but is planning to increase surface water treatment capacity. Groundwater supply is used to meet potable demands and from the period of 2000-2011 groundwater use was approximately 120,000 AF/Y. This period would be representative of average year supply as it was prior to the existing drought. Total demands (groundwater pumping plus surface water treatment and recharge deliveries) for the same period totaled approximately 180,000AF.

(iii) Where is the water that will be conserved currently going? (e.g. back to the stream, spilled at the end of the ditch, seeping into the ground, etc.)

The water that will be conserved is currently being delivered by the City to the same school sites where the proposed project improvements will be made.

(iv) Where will the conserved water go?

The conserved water will stay in the groundwater aquifer. The project will reduce the overall

demand that the City system has to deliver to the school sites, reducing the overall groundwater pumping that the City has to do to meet demand.

Subcriterion No. A.1(6): Landscape Irrigation Measures

(b) Smart Irrigation Controllers and High-Efficiency Nozzles

(i) How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

The project is estimated to conserve 10 af/yr. Water use for irrigation of large irrigated turf at school sites will be reduced, thereby conserving water use by the districts and within the City. Current irrigation systems are hand operated flood irrigation systems at multiple school sites that are set for operation in the evening when school site staff leave the site, then shut off in the morning when school site staff arrive. This method over-irrigates the turf. The project will provide new automated high efficiency sprinkler systems with smart controllers that will reduce water usage at the school sites. City water records indicate and average use of 4 af/acre/yr (or higher) at several sites that do not have the proposed systems. The new systems will irrigate as needed based on atmospheric conditions, delivering water as needed for the turf. Table 2 below indicates that the calculated ET in the area is estimated to be 2.67ft, which amounts to 2.67af/acre/yr. This project is anticipated to provide improvements for 4 school sites, or 14 acres of turf, based on the estimated cost and turf acreage at each site. Reducing usage from 4af/acre/yr to 2.67af/acre/yr will save a conservatively estimated 1.33 af/acre/yr, or 10af/yr for the estimated 7.3 acres of turf area. If the school site is connected to the City's planned recycled water system, all irrigation demand would be conserved, but for a conservative estimate, only the water savings from conversion to smart controllers is considered.

Table 2 Evapotranspiration

Turf Evapotranspiration for Fresno Area													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Fresno ETo (in)	0.04	0.07	0.11	0.17	0.22	0.26	0.26	0.23	0.18	0.12	0.06	0.03	
Kc Turf	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	
Days	31	28	31	30	31	30	31	31	30	31	30	31	
Etc (calculated)	0.744	1.176	2.046	3.06	4.092	4.68	4.836	4.278	3.24	2.232	1.08	0.558	32.022 in
												Total Demand =	2.67 ft
Notes: Data from "A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California", UCCE and DWR, Aug 2000.													

(ii) Was historical water consumption data evaluated to estimate the percent reduction in water demand per unit area of irrigated landscape? If so, did the evaluation include a weather adjustment component?

Yes. City water records indicate and average use of 4 af/acre/yr at sites that do not have the proposed systems.

(iii) What types (manufacturer and model) of devices will be installed and what quantity of each?

Rainbird ESP-SMTe or equivalent.

(iv) Will the devices be installed through a rebate or direct-install program?

The devices will be installed directly by the school districts on their facilities.

(v) Will site audits be performed before and after installation?
Yes, pre-construction audits will be performed at proposed sites. Each proposed school site is metered and deliveries to the school documented by the City's automatic meter reading system and verified by operational staff. Turf irrigation usage will be determined where separate dedicated irrigation system meters do not exist. After completion of the project meter readings will be similarly recorded and compared to pre-construction readings.

(vi) How will actual water savings be verified upon completion of the project? Please explain the calculations and the analyses for this verification.
As mentioned, each school site is metered. Meter readings before and after installation will be compared to document the total annual water conservation savings.

Subcriterion No. A.2 Percentage of Total Supply.

As noted, the project will conserve 10 AF/year. The City's total USBR surface water supply is 60,000af/yr. The water conserved amounts to approximately .02% of the City's average annual water supply.

(B) Evaluation Criterion B: Energy-Water Nexus

Subcriterion No. B.2 Increasing Energy Efficiency in Water Management

(i) Describe any energy efficiencies that are expected to result from implementation of the water conservation or water management project (e.g. reduced pumping)

a. Please provide sufficient detail supporting the calculation of any energy savings expected to result from water conservation improvements. If quantifiable energy savings are expected to result from water conservation improvements, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.

As noted the project will conserve 10af/yr. The project will reduce how much water is delivered through the City's system. Less energy will be used because less water will be pumped. To estimate the energy conserved, the amount of energy used to pump the amount of water conserved from the City's groundwater wells was calculated. The project will conserve approximately 3800kwh/yr. Table 2 below shows the calculation of energy conserved.

Table 3 - Energy Savings Calculation

Current Energy Usage	
Annual Energy Utilization from Groundwater Pumping	
Amount of Water Conserved (not pumped)	10
Operational Duration (Days)	104
Offset GW Pumping (GPM)	22
Lift (ft of head)	120.0
Drawdown (ft of head)	40.0
System Losses (ft of head)	1.7
Well Discharge Pressure (ft of head)	127.1
Total Dynamic Head (ft of head)	288.8
Pump Efficiency (%)	82
Premium Efficiency Motor - Motor Efficiency (%)	95
Input Power (kW)	1.5
Power Utilization (kWh)	3,792.5

b. *Please describe the current pumping requirements and the types of pumps (e.g., size) currently being used. How would the proposed project impact the current pumping requirements?*
Some of the school sites being considered have existing flood irrigation systems, others having pumping facilities but do not have smart controllers or high efficiency nozzles. The City pumping system will deliver less water because the project will conserve water that will no longer have to be pumped because the school site demand has been reduced.

c. *Please indicate whether your energy savings estimate originates from the point of diversion, or whether the estimate is based upon an alternate site of origin.*
The energy savings estimates are from the reduced groundwater pumping of the City.

d. *Does the calculation include the energy required to treat the water?*
No. The energy calculation was conservatively calculated, not including any costs for wellhead treatment at City well stations which varies by location and treatment requirements.

e. *Will the project result in reduced vehicle miles driven, in turn reducing carbon emissions? Please provide supporting details and calculations. Describe any renewable energy components that will result in minimal energy savings/production (e.g., installing small-scale solar as part of a SCADA system).*

No.

(C) Evaluation Criterion C: Benefits to Endangered Species

1. *What is the relationship of the species to water supply?*

The San Joaquin River Restoration Program (SJRRP) is a direct result of a Settlement reached in September 2006 on an 18-year lawsuit to provide sufficient fish habitat in the San Joaquin River below Friant Dam near Fresno, California, by the U.S. Departments of the Interior and Commerce, the Natural Resources Defense Council (NRDC), and the Friant Water Users Authority (FWUA). The Settlement received Federal court approval in October 2006. The City of Fresno is a contractor for Friant Division water and a member of the Friant Water Authority.

The Settlement is based on two goals:

1) **Restoration:** To restore and maintain fish populations in "good condition" in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish.
2) **Water Management:** To reduce or avoid adverse water supply impacts to all of the Friant Division long-term contractors that may result from the Interim Flows and Restoration Flows provided for in the Settlement.

As one of the Friant Contractors, the City gave up some of its CVP allocation to be used for SJRRP. The project will conserve water, thereby reducing the impact of the SJRRP on the City.

2. *What is the extent to which the proposed project would reduce the likelihood of listing or would otherwise improve the status of the species?*

This project helps conserve water, which in turn helps the City meet its obligations under the SJRRP by making water available for the SJRRP. The SJRRP includes two components: 1) Increased environmental flows; and 2) a water management component to mitigate impacts to historical San Joaquin River water users. Both are part of the river restoration settlement and both are necessary for successful restoration of the river. The extent is difficult to determine. Likewise, it is difficult to estimate the extent to which wildlife resource conservation practices discussed above would improve the status of species, but some benefits are likely.

3. *How is the species adversely affected by a Reclamation project?*

The project will conserve water that will help reduce the impact of making water available for the SJRRP.

4. *Is the species subject to a recovery plan or conservation plan under the ESA?*
   Yes, in the San Joaquin River Restoration Program.

5. *What is the extent to which the proposed project would reduce the likelihood of listing or would otherwise improve the status of the species?*
   The amount of water conserved by this project directly reduces the impact to the City to meet its portion of the Friant Contractors obligations to the SJRRP which will help reduce the likelihood of impact to the species by that same amount of water.

(D) Evaluation Criterion D: Water Marketing

(i) Briefly describe any water marketing elements included in the proposed project.

a. *Estimated amount of water to be marketed*
   As previously described, the project will provide an estimated 10af/year. With the average single family residential unit consuming 0.50 acre-foot per unit per year, the water saved with the Project will provide water supply for approximately 20 single family residential customers.

b. *A detailed description of the mechanism through which water will be marketed (e.g. individual sale, contribution to an existing market, the creation of a new water market, or construction of a recharge facility)*
   The water conserved will be pumped from the aquifer and distributed through the City's water system to the City's customers for purchase.

c. *Number of users, types of water use, etc. in the water market*
   The water conserved with the Project is groundwater. The City's water system is comprised of nearly 1,800 miles of water mains and includes approximately 126,000 residential, commercial, and industrial service connections.

d. *A description of any legal issues pertaining to water marketing (e.g. restrictions under Reclamation law or contracts, individual project authorities, or State water laws)*
   There are no known legal issues or limitations.

e. *Estimated duration of the water market*
   It is envisioned that the water conserved from the Project will be entirely used by the City within the defined service area for the foreseeable future.

(E) Evaluation Criterion E: Other Contributions to Water Supply Sustainability

Subcriterion No. E.1: Addressing Adaptation Strategies in a WaterSMART Basin Study

Yes. The Project will provide three major benefits: 1) improve groundwater supply to make available for drought years; 2) improve water management, and 3) reduce dependence on groundwater. These benefits will all help make water available for drought years and to alleviate water supply shortages.

- Improve Groundwater Supply: The project will reduce the use of groundwater by reducing usage on large irrigated turf areas at school sites, thereby improving the groundwater supply reliability for drought years.
- Improve Water Management: The Project will convert irrigation systems on school sites, improving the use of City provided potable water used for irrigation of large irrigated turf on school sites.
- Reduce Dependence on Groundwater : As mentioned, the proposed improvements for the school sites will reduce groundwater use, thereby helping to reduce the dependence on groundwater within an already overdrafted basin by the amount of water conserved.

Subcriterion No. E .2: Expediting Future On-Farm Irrigation Improvements

This project is not an on-farm irrigation improvement project.

Subcriterion No. E.3: Other Water Supply Sustainability Benefits

- *Will the project make water available to alleviate water supply shortages resulting from drought?*
  - *Explain in detail the existing or recent drought conditions in the project area. Describe the impacts that are occurring now or are expected to occur as a result of drought conditions.*

    As drought conditions have continued to worsen in California, the State of California has issued a mandate in 2015 to reduce municipal water use in the City of Fresno by 28 percent. This has led to City of Fresno residents to cut back or eliminate water usage for lawns, some even converting lawns into drought tolerant landscapes, along with taking additional measures to help meet this goal. The area is in the fourth year of a historic drought that has led to a zero percent allocation within the Friant system.

  - *Describe the severity and duration of drought conditions in the project area.*

    California is in its fourth year of severe drought with Fresno County classified as having exceptional drought intensity. Friant Division Contractors have received a 0% allocation for the last two years. The table below shows the allocations

during the last four years. Each year the City of Fresno is in a drought, the City relies more on groundwater due to the lack of surface water from the USBR. This causes further stress on an already overdrafted groundwater basin.

Table 4 - Water Allocations

Water Year	Class I	Class II
2012	50%	0%
2013	62%	0%
2014	0%	0%
2015	0%	0%

- *Describe how the water source that is the focus of this project (river, aquifer, or other source of supply) is impacted by drought.*

  As mentioned earlier, each year this area experiences a drought, the City receives less or no water from the USBR CVP, increasing the dependency on groundwater to meet demands. The aquifer under the City of Fresno has been considered to be critically overdrafted (DWR Bulletin 118), and there is a large cone of depression under the City of Fresno (Fresno Area Regional Groundwater Management Plan). The project will help reduce pumping from this aquifer.

- *Provide a detailed explanation of how the proposed WaterSMART Grant project will improve the reliability of water supplies during times of drought.*

  The potable water conserved from the Project is water made available for future use especially during drought years and contributes to the City's goal of sustainable use of groundwater by 2025.

- *Will the project make water available to address a specific concern? For example:*
  - *Will the project directly address a heightened competition for finite water supplies and over-allocation (e.g., population growth)?*
    The project will directly address a heightened competition for a finite water supply, specifically within the Friant Unit of the CVP in which water supply contracts have been reduced to restore the San Joaquin River.

  - *Describe how the water source that is the focus of this project (river, aquifer, or other source of supply) is impacted by climate variation.*
    Within the San Joaquin River watershed, there is limited surface storage and climate change is expected to increase run-off earlier in the season likely encroaching on storage limitations. Groundwater provides 84% of the water used to meet the water needs of 531,000 people in the City of Fresno. The underlying groundwater aquifer, the Kings Sub-basin, is a High Priority Basin in a

condition of Critical Overdraft, as determined by the State of California. Results of climate change in California are predicted to greatly reduce storage of the State's water in its 'natural reservoir,' the snowpack in the Sierra Nevada Mountains. Snow will melt earlier and faster each season, instead of at a slower and more manageable pace, creating increased risk of lowland flooding and loss of high quality water due to lack of adequate surface storage capacity downstream. In typical rain years, Fresno's dependence on groundwater is heavy, at 84% of water supply. The remaining 16% comes from treated surface water. Unpredictable availability of surface water could impact the City's ability to offset groundwater use. During periods of prolonged drought, like the one happening now, reliance on groundwater increases, which further stresses an already stressed groundwater basin.

- *Will the project help to address an issue that could potentially result in an interruption to the water supply if unresolved?*
  This project will help to provide a more reliable water supply for the City who is a Friant Contractor partially responsible for supplying water to the SJRRP. The project will reduce the demand on already overdrafted groundwater supplies that are now subject to the Sustainable Groundwater Management Act.

- *Will the project make additional water available for Indian tribes?*
  No.

- *Will the project make water available for rural or economically disadvantaged communities?*
  Yes. The Project will benefit the City of Fresno which, as a whole, is classified as a disadvantaged community using both Federal and State of California measurements. Using median household income (MHI) figures compiled by the U.S. Census Bureau, Fresno's MHI is $42,015 (2014 estimate), which is 68.77% of the State of California's MHI of $61,094 (2014 estimate) and 79.2% of the U.S. MHI of $53,046 (2009-2013 average). Using unemployment rate figures compiled by the California Employment Development Department (EDD) and U.S. Bureau of Labor Statistics (BLS), Fresno's unemployment rate is 9.9% (November 2015, EDD), which is 173.68% of the State of California's 5.7% rate (November 2015, BLS), and 198% of the U.S. unemployment rate of 5% (November 2015, BLS).

- *Does the project promote and encourage collaboration among parties?*
  - *Is there widespread support for the project?*
    Yes. The project is a collaboration between the City of Fresno and the three main local school districts. There is support for the project as evidenced by the letters of commitment for the project (see **Attachment B**).

  - *What is the significance of the collaboration/support?*

The school districts are significant water consumers within the City, and a majority of the school district's demand is for large irrigated turf that are necessary for school site activities. By reducing the demand on the largest portion of one of the City's largest users, the project provides a significant water conservation effort for the City. The school districts do not have water delivery authority, and are not eligible to apply independently for this grant. The City readily agreed to act as the primary applicant to make applying possible to help provide the needed water conservation within the area.

- *Will the project help to prevent a water-related crisis or conflict?*
  Yes. As mentioned, the project will help reduce the impact on the already overdrafted aquifer and help allow the City to meet its obligations to provide water supply as part of the SJRRP.

- *Is there frequently tension or litigation over water in the basin?*
  The SJRRP is a direct result of a Settlement reached in September 2006 on an 18-year lawsuit to provide sufficient fish habitat in the San Joaquin River below Friant Dam near Fresno, California, by the U.S. Departments of the Interior and Commerce, the Natural Resources Defense Council (NRDC), and the Friant Water Users Authority (FWUA). The Settlement received Federal court approval in October 2006. The groundwater basins that the District and the Friant system overlay are critically overdrafted and the recent Sustainable Groundwater Management Act requires the region to meet sustainable standards. This legislation has and will increase tensions and demand for available supplies as groundwater extraction is reduced.

- *Is the possibility of future water conservation improvements by other water users enhanced by completion of this project?*
  Yes, the project will provide grant money for the three major school districts in the City (other water users) to construct needed water conservation efforts.

- *Will the project increase awareness of water and/or energy conservation and efficiency efforts?*

Yes. The results from the Project will be shared with the public and stakeholders to provide awareness of the water and energy conserved by the Project.

- *Will the project serve as an example of water and/or energy conservation and efficiency within a community?*
  The Project will be publicized to a variety of audiences: in water plan annual reports, newsletters, websites, with news releases to media and to professional associations of other cities, special districts, and water agencies. Such targeted

exposure could prompt other public agencies to explore potential similar groundwater-saving projects in their own areas, using the surface water conversion model. Public agencies all across the State of California could see announcements of, and stories about, the proposed project.

By reducing demand on our area's already-overtaxed groundwater, we are also preserving its quality. The California Water Action Plan, released in January 2014 by California Governor Jerry Brown, states that the supply groundwater and the quality of groundwater recharge are interconnected, "Moreover, we must better manage our groundwater basins to reverse alarming declines in groundwater levels. Continued declines in groundwater levels could lead to irreversible land subsidence, poor water quality, reduced surface flows, ecosystem impacts, and permanent loss of capacity to store water as groundwater." (page 7 of the CWAP,http://resources.ca.gov/docs/california_water_action_plan/Final_California_Water_Action_Pla n.pdf). The positive impact of the Project, in combination with other groundwater preservation efforts, large and small, will work to ensure the future stability and sustainability of a critical water supply for the fifth largest metropolitan area in California.

- *Will the project increase the capability of future water conservation or energy efficiency efforts for use by others?*
  Yes, the grant will provide funding for school districts to provide water and energy conservation efforts. The installation of smart controllers and high efficiency nozzles to improve irrigation efficiency on large irrigated school site turf areas will serve as an example for other sites for the school districts to modify, and for other large irrigated turf water users, such as golf courses and cemeteries to install similar projects.

- *Does the project integrate water and energy components?*
  Yes, the project will utilize smart controllers and high efficiency equipment. Water deliveries and energy usage will be monitored.

(F) Evaluation Criterion F: Implementation and Results

Complete copies of the reports reference below are available upon request.

Subcriterion No. F.1 Project Planning:
Does the project have a Water Conservation Plan, System Optimization Review (SOR), and/or district or geographic area drought contingency plans in place? Does the project relate/have a nexus to an adaptation strategy developed as part of a WaterSMART Basin Study)? Please self-certify, or provide copies of these plans where appropriate to verify that such a plan is in place.

(i) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, Systems Optimization Review, or other planning efforts done to determine the priority of this project in relation to other potential projects.

This project is consistent with USBR's Water management Goal Investment Strategy Final Report (March 2015) for the San Joaquin River Restoration Program (SJRRP). The Investment Strategy identifies projects that could reduce the impacts to the Friant Contractors from the release of San Joaquin River Restoration flows, which this project will do for the City of Fresno.

(ii) Describe how the project conforms to and meets the goals of any applicable planning efforts, and identify any aspect of the project that implements a feature of an existing water plan(s).

The project meets the Investment Strategy goal of reducing impacts to Friant Contractors by conserving water and reducing demand that the City is obligated to meet, helping the City meets its obligations under the SJRRP.

Subcriterion No. F.2 Readiness to Proceed

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

A detailed workplan listing each task required for implementation is included in the Technical Description, a corresponding project schedule is included as **Attachment A** and project budget is included in the Budget section of this application.

(ii) Explain any permits that will be required, along with the process for obtaining such permits. Identify and describe any engineering or design work performed specifically in support of the proposed project.

No permits are anticipated to be required for the project as the project is a replacement of the existing irrigation system.

Subcriterion No. F.3 Performance Measures

(i) Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (i.e., water saved, marketed, or better managed, or energy saved).

Each school site is metered. Turf irrigation is a significant water demand at each school

site. The City records daily flowmeter readings from its automatic meter reading system, and the data is summarized monthly and yearly. After completion of the project, the volume of water delivered to each site will be recorded and compared to the deliveries made prior to the improvements.

Subcriterion No. F.4 Reasonableness of Costs

Please include information related to the total project cost, annual acre-feet conserved, energy capacity, or other project benefits and the expected life of the improvement(s).

The total project cost is based on actual costs for similar projects that have been completed by the Districts as well as recent estimates for projects that will be bid during 2016. Copies of these estimates are included in **Attachment C.** The cost estimate for all non-construction costs were based on recent similar design and inspection support costs for similar projects completed by the District.

(G) Evaluation Criterion G: Additional Non-Federal Funding

The project includes non-Federal funding well in excess of 50% of the project costs. The school districts will contribute the balance of the funding.

(H) Evaluation Criterion H: Connection to Reclamation Project Activities

(i) How is the proposed project connected to a Reclamation project activities?

The City has a USBR CVP Friant Division contract and is part of the SJRRP. The project will conserve water use within the City thereby reducing demands on the City's overall supply, including its CVP supply.

(ii) Does the applicant receive Reclamation project water?

One of the City's primary water supplies is a 60,000AF CVP Class I Contract (No. 14-06-200-890 ID) administered by USBR.

(iii) Is the project on Reclamation project lands or involving Reclamation facilities?

No, the project is not on Reclamation project lands and does not involve Reclamation facilities.

(iv) Is the project in the same basin as a Reclamation project or activity?

Yes. The Project is located within the CVP's Friant Division where the primary facility is the Friant Kern Canal. The project is within the San Joaquin Rivers water Basin, which is the subject of an on-going WaterSMART Basin study.

(v) Will the proposed work contribute water to a basin where a Reclamation project is located?

The project will directly reduce demands of the City, a Friant-Kern canal contractor, thereby reducing the demand on, and extending water supply available of, the City's Class 1 Friant supply.

(vi) Will the project help Reclamation meet trust responsibilities to Tribes?

No.

PERFORMANCE MEASURES

See Part 3 of Section F: Implementation and Results, for specific information on performance measures.

ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

(i) Will the project impact the surrounding environment (i.e., soil [dust], air, water [quality and quantity], animal habitat, etc.)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

Minimal ground disturbing activities will occur in the installation of the new sprinkler systems. Compliance with San Joaquin Valley Air Pollution Control District Rules and Regulations is required and will be used to minimize any potential dust impacts to the area. The turf areas at the schools are existing and there will not be any change to the size or use of these areas. Any potential impacts to animal species will be temporary and minimal. The access and availability of these areas will remain open space for wildlife after the high efficiency sprinkler heads and associated pipeline infrastructure are installed. Therefore the construction of project facilities will not significantly impact the environment.

(ii) Are you aware of any species listed or proposed to be listed as a Federal endangered or threatened species, or designated Critical Habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

It is not anticipated that the Project would affect any endangered or threatened species near the Project.

(iii) Are there wetlands or other surface waters inside the project boundaries that potentially fall under Federal Clean Water Act jurisdiction as "Waters of the United States?" If so, please describe and estimate any impact the project will have.

No, the project sites are existing school sites.

(iv) When was the water delivery system constructed?

The existing onsite school system irrigation systems were constructed with the existing schools. The age of the systems that will be replaced will vary with age based on the school sites that will be identified by the school districts for inclusion in the project.

(v) Will the project result in any modification of, or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

The project will not result in any modification of, or effects to, a USBR or surface water irrigation system. The project involves the replacement of existing turf buried irrigation systems on existing developed school sites.

(vi) Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?

There are no known buildings, structures or features listed on the National Register of Historic Places within the project area. There are 41 properties and districts listed on the National Register in Fresno County, and there are no schools within the Fresno, Clovis or Central School Districts on that list. Archaeological and historical investigations for the Project will be conducted under Section 106 evaluation under NEPA.

(vii) Are there any known archeological sites in the proposed project area?

The school sites are existing and developed and no known archeological sites are in the project areas. See note above.

(viii) Will the project have a disproportionately high and adverse effect on low income or minority populations?

The project will not have a disproportionately high or adverse effect on low income or minority populations.

(ix) Will the project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

The project locations are existing developed school sites. There are no known Indian sacred sites or tribal lands in the project area so no adverse impacts to tribal lands are anticipated.

(x) Will the 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 known to occur in the area.

REQUIRED PERMITS OR APPROVALS

Permits and approvals anticipated for the Project are discussed below.

National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA). Environmental documents for the Project would be prepared for compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The project is anticipated to be exempt under both CEQA and NEPA.

Construction Document Approvals. The construction documents will be reviewed and signed by each school district.

Indirect Source Review. The projects will consider an Air Impact Assessment to the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Dust Control Plan. Permits from the San Joaquin Valley Air Pollution Control District (Dust Control Plan) may be required if the project limits disturbed are over 5 acres. Improvements at each school site are anticipated to disturb much less than 5 acres.

Storm Water Pollution Prevention Plan. A Storm Water Pollution Prevention Plan may be needed for the project since there is a 1 acre disturbed area threshold. The Contractor will be required to prepare and submit the plan before construction. May only have to submit a waiver.

County of Fresno. County permits will be required for electrical work.

LETTERS OF PROJECT SUPPORT

The City has confirmation from the Fresno Unified School District, Clovis Unified School District and Central Unified School District of their interest and commitment to implementing water conservation projects. **Attachment B** includes letters from each of the Districts.

OFFICIAL RESOLUTION

Attachment D includes the resolution authorizing the preparation of this application and funding for the cost share. This resolution was adopted at the January 7, 2016 Council meeting.

Attachment A

Attachment A- Fresno School Districts Water Conservation Project

	2016							2017												2018		
Task	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
Task 1 - Project Administration																						
Task 2 - Design Engineering																						
Task 3 - Construction																						
Task 4 - Construction																						

Attachment B

Fresno Unified
School District
Preparing Career Ready Graduates

December 23, 2015

Mr. Thomas C. Esqueda, Director
City of Fresno
Department of Public Utilities
2600 Fresno Street
Fresno CA 93721

Subject: Letter of Support
USBR WaterSMART Grant Application

Dear Mr. Esqueda:

The purpose of this letter is to confirm that the Fresno Unified School District supports serving as a co-applicant with the City of Fresno to apply for a Department of Interior, Bureau of Reclamation (USBR) WaterSMART: Water and Energy Efficiency Grant. It is understood that if grant funds are awarded to the City and the Fresno Unified School District, then the grant proceeds will be used to upgrade and enhance the water efficiency of the indoor plumbing systems and outdoor irrigation systems at elementary, middle, and high schools located within the City of Fresno public water supply service area.

It is further understood that the WaterSMART grant is offered as a 50/50 cost-share grant, and that the Fresno Unified School District will provide 50 percent of the funding required for planned indoor plumbing fixture upgrade projects and planned irrigation system upgrade projects. For cost share purposes, the USBR will allow the Fresno Unified School District to include costs for indoor plumbing projects and outdoor irrigation projects expended after July 1, 2015.

We want to extend our sincere appreciation to the City of Fresno for offering the Fresno Unified School District the opportunity to participate in this grant application with the City in an effort to reduce water consumption in the City's service area. We look forward to working closely with the City to prepare the grant application, which is due to the USBR January 20, 2016.

Sincerely,

Michael E. Hanson
Superintendent

CLOVIS UNIFIED SCHOOL DISTRICT

December 30, 2015

Mr. Thomas C. Esqueda, Director
City of Fresno
Department of Public Utilities
2600 Fresno Street
Fresno CA 93721

Subject: Letter of Support
USBR WaterSmart Grant Application

Dear Mr. Esqueda:

The purpose of this letter is to confirm that the Clovis Unified School District supports serving as a co-applicant with the City of Fresno to apply for a Department of Interior, Bureau of Reclamation (USBR) WaterSMART: Water and Energy Efficiency Grant. It is understood that if grant funds are awarded to the City and the Clovis Unified School District, then the grant proceeds will be used to upgrade and enhance the water efficiency of the indoor plumbing systems and outdoor irrigation systems at elementary, middle, and high schools located within the City of Fresno public water supply service area.

It is further understood that the WaterSMART grant is offered as a 50/50 cost-share grant, and that the Clovis Unified School District will provide 50 percent of the funding required for planned indoor plumbing fixture upgrade projects and planned irrigation system upgrade projects. For cost share purposes, the USBR will allow the Clovis Unified School District to include costs for indoor plumbing projects and outdoor irrigation projects expended after July 1, 2015.

We want to extend our sincere appreciation to the City of Fresno for offering the Clovis Unified School District the opportunity to participate in this grant application with the City in an effort to reduce water consumption in the City's service area. We look forward to working closely with the City to prepare the grant application, which is due to the USBR January 20, 2016.

Sincerely,

Janet L. Young, Ed.D.
Superintendent
Clovis Unified School District

1450 Herndon Avenue • Clovis, CA 93611-0599
559-327-9000 • www.cusd.com

CENTRAL UNIFIED SCHOOL DISTRICT
4605 North Polk Avenue · Fresno, CA 93722
Phone: (559) 274-4700 · Fax: (559) 271-8200

December 30, 2016

Mr. Thomas C. Esqueda, Director
City of Fresno
Department of Public Utilities
2600 Fresno Street
Fresno CA 93721

Subject: Letter of Support USBR WaterSmart Grant Application

Dear Mr. Esqueda:

The purpose of this letter is to confirm that the Central Unified School District supports serving as a co-applicant with the City of Fresno to apply for a Department of Interior, Bureau of Reclamation (USBR) WaterSMART: Water and Energy Efficiency Grant. It is understood that if grant funds are awarded to the City and the Central Unified School District, then the grant proceeds will be used to upgrade and enhance the water efficiency of the indoor plumbing systems and outdoor irrigation systems at elementary, middle, and high schools located within the City of Fresno public water supply service area.

It is further understood that the WaterSMART grant is offered as a 50/50 cost-share grant, and that the Central Unified School District will provide 50 percent of the funding required for planned indoor plumbing fixture upgrade projects and planned irrigation system upgrade projects. For cost share purposes, the USBR will allow the Central Unified School District to include costs for indoor plumbing projects and outdoor irrigation projects expended after July 1, 2015.

We want to extend our sincere appreciation to the City of Fresno for offering the Central Unified School District the opportunity to participate in this grant application with the City in an effort to reduce water consumption in the City's service area. We look forward to working closely with the City to prepare the grant application, which is due to the USBR January 20, 2016.

Sincerely,

Mark G. Sutton
Superintendent
Central Unified School District

Attachment C

RAIN BIRD VARIABLE FREQUENCY PUMP STATION QUOTE

BASIC INFORMATION

Quote Number:	**CVC040513504A**	Date:	**4/5/2013**
Distributor Name:	**TBD**	Job Name:	**Jefferson ES**
Distributor Contact:	**TBD**	Job City:	**Clovis**
Distributor Phone:	**TBD**	Job State/Province:	**CA**
Distributor Email:	**TBD**	Job Country:	**USA**
Rain Bird Sales Rep:	**Ethan Petro**	Sales Region:	**NCA**

PUMP STATION DETAILS

Design Flow Rate:	**400**	**GPM**	Voltage:	**230**	**V**
Minimum Flow Rate:	**175**	**GPM**	Phase:	**30**	**P**
Rated Discharge Pressure:	**75**	**PSI**	Hertz:	**60**	**HZ**
Boost Pressure:	**45**	**PSI**	Pump Station Full Load Amps:	**77**	**AMPS**
Intake Pressure:	**30**	**PSI**	Apparent Power:	**97**	**KVA**
Exhaust fan requirement:	**356**	**CFM**	Pump Station Disconnect Size:	**100**	**AMPS**
Elevation:	**0-3300**	**FEET**	Pump Station Model Number:	**VHN0N02000230**	

PUMP STATION DESCRIPTION

This quote is for a pre-fabricated pumping station designed to produce the rated discharge pressure from the Minimum Design Flow Rate up to the Maximum Design Flow Rate as per the Pump Station Details listed on this quote. Pumps for this application are designed for for use in flooded suction, suction lift and boosting applications only. The main pumps of this packaged system are of a horizontal single stage end-suction centrifugal type and are designed for **indoor applications or installed within an enclosure protected from the elements and properly ventilated**

PUMP AND MOTOR DETAILS

QTY.	SIZE	DESCRIPTION
1	**400 GPM**	Horizontal single stage end-suction main pump with cast iron discharge head
	116 FEET	Includes silent check valve and isolation valve
	B3TPMS	Pump Model
1	**20 HP**	Horizontal close coupled main motor, 3450RPM, TEFC, NEMA B, Class F insulation, 1.15 SF, Cont. duty rated

- Motor is VFD started

MECHANICAL SYSTEM DETAILS

DESCRIPTION

- Variable Frequency Drive [VFD] (Manufactured by Mitsubishi)
- Pump Start Relay. **Please select input type (24V AC), (24V DC), (120V AC), (other_____)**
- GT1020 Monochrome Touch-screen operator interface (Manufactured by Mitsubishi)
- Circuit breaker motor protection
- NEMA 3R Electrical enclosure. **(must be properly ventilated if enclosure not selected)**
- Liquid filled suction and discharge pressure gauges
- Discharge check valves, and pump station isolation valves
- Stainless steel pressure transducer
- Flow switch
- 6" ANSI flanged discharge connection
- 6" ANSI flanged suction connection
- Green polyester based full surface powder coated steel piping and fittings for corrosion resistance

CONTROL SYSTEM DETAILS

DESCRIPTION

- Automatic pressure ramp-up capability
- Electrical overload shutdown safety
- VFD fault shutdown
- Automatic system diagnostic utility
- High pressure and low pressure discharge safeties
- Low voltage, phase loss, and phase balance protection safeties
- Surge protection
- Low Pressure discharge alarm - Dry run protection
- Thermal sensor for overheating and shutdown
- Rain Bird Corporation guarantees its pump station products to be free of defects in materials and workmanship for a period of one (1) year from the date of startup, but not later than sixteen (16) months from the date of invoice.

Attachment D

RESOLUTION NO. 2016-1

RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, AUTHORIZING APPLICATION TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION FOR A WATERSMART: WATER AND ENERGY EFFICIENCY GRANT FOR FY 2016 FOR THE PUBLIC SCHOOL WATER EFFICIENCY UPGRADE PROJECT AND THE DIRECTOR OF PUBLIC UTILITIES OR DESIGNEE(S) TO EXECUTE ALL APPLICATION DOCUMENTS ON BEHALF OF THE CITY AND THE CENTRAL UNIFIED SCHOOL DISTRICT, CLOVIS UNIFIED SCHOOL DISTRICT, AND THE FRESNO UNIFIED SCHOOL DISTRICT

WHEREAS, the City of Fresno ("City") is a unit of local government with public water supply delivery authority within the western United States; and

WHEREAS, the Department of the Interior, Bureau of Reclamation has issued a funding opportunity under the WaterSMART: Water and Energy Efficiency Grant for Fiscal Year (FY) 2016; and

WHEREAS, the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District operate public schools within the City's water supply service area, and the combined water consumption of the three school districts within the City's public water supply service area is approximately 1.7 billion gallons per year; and

WHEREAS, the State of California has issued a mandate to reduce municipal water use in the City of Fresno by 28 percent; and

Date Adopted: 01/07/2016
Date Approved: 01/07/2016
Effective Date: 01/07/2016

WHEREAS, the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District have appropriated funds for water efficiency improvements to reduce the use of surface water and groundwater in the City of Fresno public water supply service area; and

WHEREAS, the Public School Water Efficiency Upgrade Project is consistent with the Fresno Metropolitan Water Resource Management Plan and will reduce the use of potable water in public schools within the City of Fresno public water supply service area and reduce groundwater extraction from the local aquifer and surface water use from the Sierra Nevada mountains; and

WHEREAS, eligibility for WaterSMART grants is limited to entities with water or power delivery authority and the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District are ineligible to apply independently, but can act as a co-applicant; and

WHEREAS, it is in the interest of the City of Fresno's constituents to facilitate submission of a WaterSMART Grant application to fund a project whose result is significant savings of surface water and groundwater, particularly in this time of serious and ongoing drought; and

WHEREAS, the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District have each submitted letters of support authorizing joint application with the City of Fresno to the Bureau of Reclamation for the Public School Water Efficiency Upgrade Project, and authorizing each of the school districts to bear all of their respective project design, construction, and maintenance costs and responsibilities not covered by the WaterSMART grant; and

WHEREAS, each of the school districts has appropriated funds in the 2015-2016 and 2016-2017 fiscal years to meet the fifty percent cost match commitment for the Public School Water Efficiency Upgrade Project; and

WHEREAS, the City of Fresno Department of Public Utilities is desirous of submitting a WaterSMART Grant application to fund said project to reduce potable water demands in the City's public water supply service area.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Fresno as follows:

1. The City of Fresno submits a WaterSMART: Water and Energy Efficiency Grant for Fiscal Year (FY) 2016 to the Bureau of Reclamation, acting as lead applicant, with the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District as co-applicants.
2. The City of Fresno Public Utilities Director or designee(s) thereof are authorized and empowered to execute the application in collaboration with the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District.
3. The Public School Water Efficiency Upgrade Project is being submitted as a Group II project, which awards up to $700,000, and the Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District are prepared to fund fifty percent or more of the Project.
4. The City Attorney is authorized to execute program related agreements, certifications, assurances, and opinions.
5. Subject to the foregoing provisions, the City certifies it has legal authority to participate in the grant program with the Bureau of Reclamation and the

Central Unified School District, the Clovis Unified School District, and the Fresno Unified School District and enter into a cooperative agreement.

RESOLVED, that nothing in this Resolution binds or obligates City's general fund, taxing authority, or borrowing power.

* *

STATE OF CALIFORNIA)
COUNTY OF FRESNO) ss.
CITY OF FRESNO)

I, YVONNE SPENCE, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, at a regular meeting held on the day of January 7, 2016.

AYES : Brand, Brandau, Olivier, Quintero, Soria, Caprioglio
NOES : None
ABSENT: Baines
ABSTAIN: None

YVONNE SPENCE, CMC
City Clerk

By: 1-19-2016
Deputy

APPROVED AS TO FORM:
DOUGLAS T. SLOAN
City Attorney

By:
BRANDON M. COLET
Deputy City Attorney

BMC:nd (69999nd/bmc) 12-21-15

Attachment E

ATTACHMENTS FORM

Instructions: On this form, you will attach the various files that make up your grant application. Please consult with the appropriate Agency Guidelines for more information about each needed file. Please remember that any files you attach must be in the document format and named as specified in the Guidelines.

Important: Please attach your files in the proper sequence. See the appropriate Agency Guidelines for details.

1) Please attach Attachment 1	2016 Fresno WaterSMART Grant	Add Attachment	Delete Attachment	View Attachment
2) Please attach Attachment 2		Add Attachment	Delete Attachment	View Attachment
3) Please attach Attachment 3		Add Attachment	Delete Attachment	View Attachment
4) Please attach Attachment 4		Add Attachment	Delete Attachment	View Attachment
5) Please attach Attachment 5		Add Attachment	Delete Attachment	View Attachment
6) Please attach Attachment 6		Add Attachment	Delete Attachment	View Attachment
7) Please attach Attachment 7		Add Attachment	Delete Attachment	View Attachment
8) Please attach Attachment 8		Add Attachment	Delete Attachment	View Attachment
9) Please attach Attachment 9		Add Attachment	Delete Attachment	View Attachment
10) Please attach Attachment 10		Add Attachment	Delete Attachment	View Attachment
11) Please attach Attachment 11		Add Attachment	Delete Attachment	View Attachment
12) Please attach Attachment 12		Add Attachment	Delete Attachment	View Attachment
13) Please attach Attachment 13		Add Attachment	Delete Attachment	View Attachment
14) Please attach Attachment 14		Add Attachment	Delete Attachment	View Attachment
15) Please attach Attachment 15		Add Attachment	Delete Attachment	View Attachment