

City of Las Cruces[®] MOUNTAINS OF OPPORTUNITY

Water Conservation in the City of Las Cruces: Installing SMART Irrigation Technology For the Efficient Use of Water Supplies

Application

Name: City of Las Cruces, Parks and Recreation Department

Address: 700 North Main, Las Cruces, NM 88001

Project Manager

Name: Franco Granillo

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Section One: Executive Summary

Date: March 15, 2021

Primary Applicant: City of Las Cruces

City: Las Cruces County: Doña Ana State: New Mexico **Applicant Category:** Category A

Federal Facility: Not on a federal facility

Project Length: 24 months

Project Start Date: October 1, 2021

Est. completion date: September 30, 2023

Project Summary. The City of Las Cruces (City) proposes to conserve and better manage water supplies through the use of SMART irrigation technology, thereby addressing city-wide critical water resource issues. Efficient use of water and energy resources is the primary goal of the City's Water Conservation Plan, a key component of the City's 40-Year Water Development Plan, listed in multiple objectives of the City's Sustainability Action Plan, and aligned with the City's Strategic Plan Capital Improvements and Infrastructure objectives to enhance the quality of life for residents, businesses, and guests. The proposed project advances water conservation and efficiently efforts through the instillation and use of centralized smart control irrigation systems at four City parks and two recreational complexes operated by the Las Cruces Parks and Recreation Department. Funds will be used to contract for the installation of central smart controllers, the irrigation sprinklers and valves, training, and evaluative data collection. The centralized SMART control irrigation systems will be equipped with evapotranspiration technologies, flow management, and cycle and soak capabilities which, when combined, will reduce water waste and labor hours, thus improving water conservation efforts. Project activities include:

- Install central control system to maximize water-use efficiency at six locations;
- Install automatic valves with electrical wiring necessary to support the central control system;
- Customize irrigation schedules based on environmental and turf requirements;
- Provide training and education to irrigation staff; and
- Evaluate irrigation system performance and determine water savings.

The proposal aligns with the WaterSMART Small-Scale Water Efficiency Project goal to contribute to water supply reliability in the western United States by conserving and using water more efficiently through use of SMART irrigation technology. The total project cost is \$150,000; the funding request is for \$75,000 over the two-year grant period.

Section Two: Project Location

2.1 Proposed Project Location

3.1.1 Statement of Location. The proposed project, *Installing SMART Irrigation Technology for the Efficient Use of Water Supplies*, is located in Las Cruces, NM of Dona Ana County, at the following parks and recreational areas:

1. Burn Lake Park (1855 West Amador, Las Cruces, NM 88001);

- 2. High Noon Soccer Complex (15 Bruins Lane, Las Cruces, NM 88001);
- 3. Sunrise Terrace Park (3333 Lunarridge Street, Las Cruces, NM 88001);
- 4. Valley View Park (716 South Espina Street, Las Cruces, NM 88001);
- 5. Veteran's Memorial Park (2651 Roadrunner Parkway Las Cruces, NM 88001); and
- 6. Young Park (860 South Walnut Street, Las Cruces, NM 88001);

Attachment C contains a map showing the location of the project park and recreation sites within the City of Las Cruces as well as a map of each individual park. The total acreage of the parks and fields to be serviced by this project amounts to 58.25 acres.

Section Three: Technical Project Description

3.1 Technical Project Description

3.1.1. Project Description. The proposed project will install and use a centralized SMART controller irrigation system at four City parks and two recreational complexes (as listed in section 3.1.1). At present, the irrigation systems for each park and recreation area are managed independently through controllers located at each specific site. Considering the number of and distance between irrigation controllers, the City faces several challenges that limit the ability to conserve water or manage the effective and efficient use of water, while still providing high quality turfgrass surfacing for the residents of and visitors to Las Cruces. Installing centralized SMART controller and irrigation technology will address these issues while helping advance the City's Water Conservation Plan goals.

A SMART irrigation system directs the application of irrigation water based on environmental conditions and the properties of the irrigated site, such as soil type, solar orientation, slope, irrigated plant material, and the type of water application devices used to disperse the irrigation water. In addition, evapotranspiration (ET) data are utilized by the SMART system to determine the actual amount of supplemental irrigation water required by the turfgrass. ET is a measure of the amount of water moved through an environment, including water evaporation from the soil and water transpiration through plants in the environment. For this project, ET is a measure of the water required by the turfgrass to live, grow, and thrive in the park and recreational complex areas.

SMART irrigation technology offers several important additional water conservation benefits for water managers and conservationists. The comprehensive, cloud-based irrigation management system streamlines irrigation management processes while allowing remote management of irrigation itself – saving valuable water, time, and City resources. SMART technology enables connectivity to nearby weather stations thus providing real time and accurate weather indictors impacting turfgrass irrigation needs. The technology also feeds water managers and crews immediate, real-time data and notifications as issues arise with the irrigation system, again saving valuable time and water resources. The centralized control system can be accessed remotely through mobile devices, provides multiple levels of user access, allows for automatic weather-based irrigation adjustments, updates programs based on local ET data, and guards against water-wasting line breaks.

These functions will aid irrigators in managing turfgrass quality, irrigation system functionality, and facility use and maintenance. The instillation of SMART irrigation technology will greatly assist the City's Parks & Recreation Department in prioritizing water conservation efforts, increasing the efficient use of water, providing accurate real-time data for decision making, and greatly enhance turfgrass health.

Specific project activities include:

- Installing centralized SMART irrigation control systems to maximize water-use efficiency at six locations;
- Installing automatic valves with electrical necessary to support the centralized control systems;
- Customizing irrigation schedules based on environmental and turf requirements and data:
- Providing training and education to the City's irrigation staff; and
- Evaluating irrigation system performance to determine water savings and efficiencies.

3.1.2. Problems and needs to be addressed. Las Cruces is located in the northern Chihuahuan Desert, near the U.S.-Mexico border in southern New Mexico. Las Cruces averages 350 days of sunshine a year and less than 10 inches of rainfall per year, making water conservation a critical concern. Much of Las Cruces (83%) is barren desert land (see Chart I). To sustain the grass in the parks and recreational complexes used for recreational sports and City leagues, the Las Cruces Parks and Recreation Department works closely with Las Cruces Utilities (LCU) to develop irrigation plans. However, without SMART technology and centralized control systems, the current irrigation system does not contribute to the water conservation efforts that are critical to the future of Las Cruces, this region of the U.S., or the nation as a whole.

With a population of more than 102,926, the City manages its water supplies to provide water for drinking, landscape irrigation, industrial, and other municipal uses. The city's population is estimated to increase from 103,432 residents in 2019 to a little over 150,000 by 2040, an increase of 45%. The tremendous growth in the area over the past two decades has put many more people in the urban area, increasing the number of water users, limiting the supply of ground water, and making water conservation a primary concern in this desert-region metropolitan area.

Chart I. Watershed Characteristics

Shrub/Shrub ecosystem

Cultivated Crops

Grassland/Herbaceous ecosystem

Developed (low and medium intensity and open space)

Barren land

New Mexico is in the midst of a probable long-term drought and water may be over-allocated in the Lower Rio Grande Basin (LRGB). Most climate models indicate that the Southwest will become drier in the twenty-first century. Rising temperatures are expected to alter precipitation patterns, potentially increasing frequencies of extreme weather events, including drought and heat waves. Extreme and variable weather may affect water demand as households, businesses, and

municipalities attempt to sustain landscaping efforts.

The City also faces challenges related to the time and effort it takes to maintain the current irrigation system across the City's 145 park areas. With the exception of eight park locations where centralized smart controllers have been installed under a previous Small-Scale Water Efficiency Projects grant, the City is reliant on the physical observation of a site and issue before an irrigation staff member knows to respond to a situation. Centralized SMART irrigation technology is especially critical to efficiently addressing situations such as a line break where, currently, an irrigator must take the time to travel to the site, do a visual inspection to check for sitting water or over-saturation, locate the problem, and manually adjust the water or repair the line to alleviate the issue. This effort is time-consuming, financially taxing, and wastes precious City water resources.

As the City's population increases, more and more users occupy the parks and sports fields every year, taxing the City's current irrigation systems that are antiquated at nearly 40 years old. The City has diligently maintained the irrigation systems, helping them well-outlast their usual life. These current manual irrigation systems are well beyond their useful life and inefficient given the dramatic improvements in landscape irrigation technology over the past several decades and years. Controller management of water applications has become quite sophisticated with the use of ET and site-specific data to better aid irrigators in making quality decisions that result in reduced water use and improved turf quality. The proposed project seeks to chip away in replacing these outdated and inefficient systems through the instillation of centralized SMART irrigation control systems at six City park and recreation complex locations which experience the most traffic and have some of the oldest and least efficient systems in the City's parks system.

The City is dedicated to implementing solutions for effective water management and demonstrating best practices for area residents, businesses, and visitors. A centralized SMART control irrigation system allows City irrigators to effectively manage irrigation systems at a specific site, using the exact amount of water required to grow and maintain healthy turfgrass at that particular location. The ET functionality of the SMART controllers will provide real-time weather and water data and needs information to the irrigator through the central control system, allowing automatic or manual adjustment of the irrigation programs for specific sites, including remote handling of water-wasting line breaks. As a result, irrigators can maximize turfgrass quality and water use efficiency simultaneously, saving valuable water and time. This project stands to decrease labor hours and vehicle miles, thereby reducing financial outputs, while also improving the city's capacity to conserve water.

3.1.3. Expected outcomes. It is anticipated that the installation of centralized SMART control irrigation technology will result in significant water savings as the outcome of efficient water management and higher quality turfgrass in park and recreation areas. Use of the central control system will aid in City irrigation management's professional development and continued advancement of irrigation knowledge, bringing additional recognition to the staff and department for their efforts and improvements in serving residents in the Chihuahuan Desert region.

Adjustments to the irrigation system can be made easily through the central control system, allowing for modifications or shutdowns based on weather conditions, ET needs of the turfgrass,

and amount of use. These easy adjustments can result in better growth of the turfgrass since it will get just the amount of water required. Irrigation system malfunctions, including line breaks, head blowouts, slow leaks, and stuck-open control valves, will be identified by the central control system, alerting the irrigators through automatic notification, and permitting immediate shut down of the system. Fertilizer application, aeration treatments, and dethatching operations can be easily scheduled and accommodated by the irrigation system resulting in stronger turfgrass growth, more judicious use of supplies and materials, and less waste of time and effort. Finally, recreation areas may be kept open and accessible to the public more of the year with less rest and downtime required to allow fields to recover from excessive use.

Section Four: Evaluation Criteria

4.1 Technical Proposal: Evaluation Criteria

4.1.1. Evaluation Criterion A—Project Benefits

The expected benefits and outcomes of implementing the proposed project to modernize the City parks irrigation systems will have a positive impact on the immediate area being irrigated, as well as a city-wide impact. It is expected that, with the centralized SMART irrigation systems in place, the water supply delivery system will experience less water waste, more predictable use, and increased conservation of water, time, and staff resources. An added benefit of this technology is that it allows for the efficient future expansion of the centralized control system to include other park locations as funds become available to retrofit and upgrade irrigation infrastructure until all 145 park locations have been upgraded. This can serve to magnify the water savings and can have a significant water savings impact for the water supply delivery system. The SMART irrigation system also serves as a model for other high-water use institutions and irrigators in the region, such as the Las Cruces Public Schools, New Mexico State University, and area golf courses.

The SMART irrigation system will use the latest in landscape irrigation technology, making use of ET data and linking with local and regional weather stations. These technologies permit data-driven decision-making regarding irrigation of turfgrass in sports fields and parks. The irrigator uses the data to determine the optimal irrigation timing, rate, and frequency to both conserve water and maintain safe, heathy stands of turfgrass for use by residents and visitors. Better water use and better turf management, through use of the central control system, will allow more use of the sports fields and community parks. With optimal, ET-based application of irrigation water to the turfgrass, irrigators can maintain the health and vitality of the turfgrass with less resting time, hence less time with no play allowed. This process will allow residents and visitors more access to recreational areas while still maintaining healthy stands of turfgrass.

In addition to conserving water, the SMART irrigation system will save energy. Since the water provided by the LCU is diverted from groundwater, that water must be pumped and stored by using significant energy resources. Conservation of water through use of the central control system will reduce the amount of water diverted and, therefore, the amount of energy required.

All told, the new SMART irrigation system will result in higher quality turfgrass with reduced water use. Higher quality turfgrass sports fields can only help to attract additional sports

tournaments, leagues, and users in general. With more users comes increased economic activity (restaurant meals, room stays, gas purchases, etc.), and an even more pressing need for efficient water use.

4.1.2. Evaluation Criterion B—Planning Efforts Supporting the Project

The proposed WaterSMART project is supported by multiple existing planning efforts, most notably the City of Las Cruces 40-Year Water Development Plan, approved April 2017, with a goal of implementing the most efficient and effective technology available for the intended use, to ensure conservation of water to the maximum extent practical. Las Cruces has the goal of reducing total GPCD water use to 140 GPCD by 2055, by reducing single-family residential GPCD, working with industrial, commercial, and institutional customers, conservation at City facilities, and by reducing non-revenue water to nine percent of diversions. GPCD savings will be achieved through the Water Conservation Program by working with industrial, commercial, and institutional customers, and through conservation at City facilities. The LCU's Water Conservation Program assists the Parks and Recreation Department with water conservation by providing water audits and consulting on irrigation issues, water accounts, and level of use. The proposed project is a joint effort of the Water Conservation Program of the LCU and the Parks and Recreation Department.

The City's 2012 Water Conservation Plan, developed through a public input process by LCU, defines objectives of the plan to 1) demonstrate leadership in resource management working towards the goal of sustainability, 2) reduce the frequency and duration of drought water use curtailments, and 3) demonstrate efficient use of water supplies. The SMART irrigation system technology will provide the opportunity for the City to substantially demonstrate leadership in efficient water use by taking active measures to conserve water while increasing the level of service provided to Las Cruces residents and visitors.

The Parks and Recreation Department Strategic Business Plan, developed in 2017-2018 by the department staff, outlines several relevant Strategic Results for which the Department will aim. These include the "Strategic Result 2 – Economic Driver – As a consequence of up-to-date robust facilities, … Parks and Recreation will be recognized as an economic drive as evidenced by newly recruited business owners and employees who report that Parks and Recreation assets and program influenced their decision to relocate to Las Cruces."

The City's Sustainability Action Plan (2014) identifies an objective to "Reduce water consumption in City buildings, parks, and operations by 3-percent of the end-of-2013 baseline rate." The proposed project will aid in continuing efforts to reduce water consumption per square foot of turfgrass area while maintaining safe, aesthetically pleasing, and healthy stands of turfgrass.

Parks and Recreation Department water use is the highest of any City department. This is mainly attributable to the number of park and recreation locations with turfgrass and landscaping requiring irrigation. To date, substantial efforts have been made to reduce water use in parks by removing un-used turf at the edges of parks and in medians, installing gravel warning tracks at baseball and softball fields, beginning the instillation of centralized SMART controller technology at eight

initial park locations, and by thoroughly examining and repairing existing park irrigation systems. These efforts have paid off, resulting in reducing water use by the Parks and Recreation Department by one MGD per year. The next step is to fully install modern irrigation technology at all park locations to better conserve water resources.

4.1.3. Evaluation Criterion C—Project Implementation

Major tasks and dates are listed in Table II. Planning and Design for this project occurred pre-award thorough a collaborative planning process involving LCU and Parks and Recreation staff. Planning included determining which parks locations to include based on need, use, age and condition of the existing irrigation system, and potential water savings benefits; which staff will be involved in the design and installation process, and how the proposed project can make the greatest impact to water conservation and efficient use efforts. The design included researching irrigation technology options and obtaining quotes, where required; determining the project scope and park requirements and needs; and understanding the use of ET data to provide the most effective and efficient water use. Post-award tasks are listed below (see Table II). Major project instillation activities will begin on March 1, 2022. The Parks and Recreation Department will finalize instillation plans, contracts, and materials purchases between October 2021 and February 2022 so that contract work and instillation activities can begin as scheduled. All major project activities are anticipated to be completed by June 30, 2023 with final closeout processing completed by September 30, 2023. At this time, there is no known electrical or instillation work that will require permitting.

FFY2022FFY2023Major TasksQ1Q2Q3Q4Q1Q2Q3Q4Procurement and ContractsImage: Contracting - Electrical WorkImage: Contracting - Electrical WorkImage: Construction - Central Control SystemImage: Construction - Electrical WorkImage: Construction - Electrical WorkConstruction - Electrical WorkImage: Construction - Electrical WorkImage: Construction - Electrical WorkCloseout - Training and EvaluationImage: Construction - Electrical Work

Table II. Project Timeline

4.1.4. Evaluation Criterion D—Nexus to Reclamation

Las Cruces receives Reclamation water through the Rio Grande Project. The proposed SMART irrigation system project will not directly use Project water, however, the LCU Department does own water rights through the Elephant Butte Irrigation District which operates using water delivered through the Rio Grande Project.

The water conserved through this project will reduce the amount of ground water diverted from the Mesilla Basin and Jornada del Muerto Bolson which are hydrologically linked to the Rio Grande. By diverting less groundwater from the adjacent bolsons, more water may flow in the Rio Grande or may be available for diversion for irrigated agriculture. While the City's diversions represent only 6.5% of total metered groundwater diversion in the LRGB, any amount of water not diverted aids in keeping the basins functional and available for future use.

Implementation of the City's water development plan, and of the central control irrigation system, will benefit the people of Las Cruces by providing a safe and reliable water supply while limiting water waste and optimizing water use efficiency.

Stewardship signage at the project sites will notify users of the commitment of the Bureau of Reclamation and the City to water conservation. These signs, detailing the project funded through this grant, will be seen by at least 20,000 children, adults, residents, and visitors annually.

Section Five: Project Budget

5.1 Funding Plan

The cash match funding will come directly from the City's General Fund from the FY2022 approved budget. No in-kind, third party, or federal funding will be used towards this funding request.

Table III. Summary of Non-Federal and Federal Funding Sources

Funding Sources	Amount
Non-Federal Entities	
City of Las Cruces	\$75,000.00
Other Federal Entities	
N/A	\$0
Total Cost-Share	\$75,000.00
Requested Reclamation Funding	\$75,000.00

5.2 Budget Proposal

Table IV. Budget Proposal

Table IV. Budget Proposal				
Budget Item Description	Comp	Computation		TOTAL
Budget Item Description	\$/Unit	Qty	Type	COST
Supplies & Materials				
Tablet	\$150	1	ea.	\$150
Misc. (repair/replacement parts)				
-Sprinkler Head Risers	\$63.80	1008	ea.	\$64,310
-Backflow Preventer	<i>\$4,933</i>	1	ea.	\$4,933
-Valve Box	<i>\$145</i>	100	ea.	\$14,500
-2" Globe valve with flow control	\$126	100	ea.	\$12,600
-1.5" Globe valve with flow control	\$93	50	ea.	\$4,650
-1" Globe valve with flow control	\$70	28	ea.	\$1,960
-Modular Outdoor Controller	\$300	10	ea.	\$3,000
Supplies & Materials Subtotal			\$106,103	
New Mexico Gross Receipts Tax			\$8,820	
SUPPLIES & MATERIALS TOTAL			\$114,923	

Contractual/Construction				
Burn Lake Park				
Central Control Pkg	\$1980	1	ea.	\$1980
Labor	\$210			\$210
Burn Lake Park Sub-Total				\$2,190
High Noon Soccer Complex				
Central Control Pkg (North Fields)	\$ 2910	1	ea.	\$2910
Central Control Pkg (South Fields)	\$2565	1	ea.	\$2565
Central Control Pkg (Building)	\$2542	1	ea.	\$2542
Labor	\$1418			\$1418
High Noon Soccer Complex Sub-Total				\$9,435
Sunrise Park				
Central Control Pkg	\$2280	1	ea.	\$2280
Labor	\$263			\$263
Sunrise Park Sub-Total				\$2,543
Valley View Park				
Central Control Pkg (East)	\$2153	1	ea.	\$2153
Central Control Pkg (West)	\$2242	1	ea.	\$2242
Labor	\$840			\$840
Valley View Park Sub-Total				\$5,235
Veterans Memorial Park				
Central Control Pkg	\$1980	1	ea.	\$1980
Labor	\$210			\$210
Veterans Memorial Park Sub-Total				\$2,190
Young Park				
Decoder System	\$6922	1	ea.	\$6922
Central Control Pkg	\$2682	1	ea.	\$2682
Labor	\$315			\$315
Young Park Sub-Total				\$9,919
CONTRACTUAL/CONSTRUCTION SUB TOTAL			\$31,512	
NMGRT	8.313%			\$2620
Bonding (of contractual sub-total; excludes NMGRT)	3%			\$945
Contractual/Construction Total		tion Total	\$35,077	
TOTAL DIRECT COSTS			\$150,000	
TOTAL ESTIMATED PROJECT COSTS			\$150,000	

5.3 Budget Narrative

The City requests \$75,000.00 from the U.S. Department of the Interior Bureau of Reclamation for the implementation of the WaterSMART Small-Scale Water Efficiency Projects grant. Funding is to be expended during the project period of March 1, 2022 to September 30, 2023. All expenses listed in the budget include the New Mexico Gross Receipts Tax (NMGRT) of 8.313%.

Salaries and Wages

No funding is requested from the Bureau of Reclamation for salaries and wages.

Fringe Benefits

No funding is requested from the Bureau of Reclamation for fringe benefits category.

Travel

There are no requested travel expenses.

Equipment

There are no requested equipment expenses for this category; all equipment expenses will be purchased by the contractor and are listed in the Contractual/Construction Direct Costs.

Supplies and Materials

Supplies and materials includes the purchase of one tablet at a total cost of \$150, to be used by irrigators to monitor and manipulate the central control system. This category also includes miscellaneous supplies (i.e. parts to be used for repair or replacement). The sprinkler head risers and are needed at all parks to ensure the proper flow and optimize efficient water use with the new SMART irrigation systems. The backflow preventer is required at Young Park, which currently does not have one, to ensure water use is optimized and prevent water waste. The sprinkler head risers and backflow preventer instillation will be contracted out. Itemized Miscellaneous Repair and/or Replacement Parts include:

•	Sprinkler Head Risers	1008 @ \$63.80 each
•	Backflow Prevention Device	1 @ \$4,939
•	Valve Box	100 @ \$145
•	2" Globe valve with flow control	100 @ \$126
•	1.5" Globe valve with flow control	50 @ \$93
•	1" Globe valve with flow control	28 @ \$70
•	Modular Outdoor Controller	10 @ \$300

Contractual

The grant will be led and administrated by the City and further supported a contractor:

1. Central Control System Installation, Contractor to be procured, \$35,077 total

Funds requested from the Bureau of Reclamation will be used to procure a contractor or firm with the technical expertise to install the necessary components to complete the project. During the City's procurement process, the prospective vendor will be required to complete the Bureau of Reclamation budget template to ensure that a detailed budget estimate of time, rates, supplies and materials associated by task are included for consideration.

The detailed costs are broken down in the budget and in the quote by field. All equipment, supplies, and materials to be purchased as part of the project will be furnished and installed under a construction contract and are included in the construction cost estimate. Equipment will include controllers, central control system components, and a decoder system to be installed at Young Park.

Contractual work to be accomplished by contractors includes: installation of controllers, communication equipment, and installation of decoder system at Young Park. In addition, the controllers will be programmed with an initial irrigation schedule and training will be given to all the relevant City staff including irrigators and supervisors. Training and Education will consist of introducing the Central Control system software and its primary functions related to basic and advanced irrigation operation, monitoring, programming, and reporting.

- Introduction to IQ Central Control System
- IQ Central Control System overview
- IQ Central Control Communication Options
- Software Features
- IQ Central Control System Water Management Navigation
- IQ Central Control System Satellite Navigation
- IQ Central Control System Operating Status Navigation
- IQ Central Control System Site- Logs Navigation
- Site Selection Grid, System Status, Back-up, and Restore
- Review

Also included is 24/7 On-Call / On-Site IQ Central Control assistance until irrigation techs become comfortable with the new technology and irrigation application.

The costs provided herein were identified as reasonable by comparison to current costing data and tables. Contractor bonding (3%) is required.

Environmental and Regulatory Compliance Costs

There are no required environmental or regulatory compliance costs associated with this project.

Other Costs

The are no other costs associated with this project.

Indirect Costs

Indirect cost recovery not requested for this proposal.

Total Costs

Total project cost for this proposal, including the City is \$150,000.00.

Section Six: Environmental and Cultural Resources Compliance

6.1 Environmental and Cultural Resources Impacts

The water delivery system for the City of Las Cruces was established in 1905. The proposed project and project site do not have any adverse impacts to the environment or cultural resources of the region.

Section Seven: Required Permits or Approvals

7.1 Permits or Approvals

No additional permitting or approvals are necessary for this project as all electrical services to support he centralized controller systems are adequate and meet code at each site.

Section Eight: Official Resolution

8.1 Resolution #21-039

See Attachment B.

Section Nine: Attachments

Attachment A: Letter of Commitment

Attachment B: Official Resolution



March 15, 2021

Mr. Matthew Reichert Bureau of Reclamation Financial Assistance Support Section P.O. Box 25007, MS 84-814 Denver, CO 80225

RE: City of Las Cruces Parks and Recreation Department Submission to FFY2021 Bureau of Reclamation's WaterSMART Small-Scale Water Efficiency Grant Program

Dear Mr. Reichert:

Please let this letter serve as the commitment by the City of Las Cruces to provide a 50% non-federal cash match for the WaterSMART Small-Scale Water Efficiency Project application submitted on behalf of the City's Parks and Recreation Department. The proposed project, Water Conservation in the City of Las Cruces: Installing SMART Irrigation Technology For the Efficient Use of Water Supplies, serves to conserve and use water more efficiently through the installation of centralized SMART irrigation control systems at six City parks and recreational complexes.

The City of Las Cruces commits to the following:

Federal Requested Share \$ 75,000
Non-Federal City Cash Match
Total Project Cost \$150,000

The non-federal cash match will be provided with funding from the City's general fund. This fund will have a balance sufficient to cover the match amount at the beginning of the 2021-2022 fiscal year.

Please do not hesitate to contact me should you have any questions regarding this commitment.

Sincerela

City Manager

RESOLUTION 21-039

A RESOLUTION TO SUPPORT INCLUDING IMMIGRANTS IN THE 2020 CENSUS COUNT AND REAPPORTIONMENT, CHALLENGING THE PRESIDENTIAL MEMORANDUM.

The City Council is informed that:

WHEREAS, the City of Las Cruces (City) is tasked to represent and address the needs of all its community members; and

WHEREAS, President Trump issued a Memorandum Excluding Illegal Aliens From the Apportionment Base Following the 2020 Census on July 21, 2020, which specifies (i) undocumented immigrants will be excluded from the "whole number of persons in each State" enumerated by the 2020 Census and used to apportion the number of Representatives to each State, and (ii) directs the Secretary of State to take "all appropriate action" to provide the President with information to exclude undocumented immigrants from the apportionment base (85 Fed. Reg. 44,679, July 23, 2020); and

WHEREAS, the Memorandum declares that "[f]or the purpose of the reapportionment of Representatives following the 2020 Census, it is the policy of the United States to exclude from the apportionment base aliens who are not in a lawful immigration status under the Immigration and Nationality Act, as amended (8 U.S.C. 1101 et seq.), to the maximum extent feasible." Id. at 44,680; and

WHEREAS, the President's new policy unequivocally violates the Fourteenth Amendment, which states that apportionment be based on "the whole number of persons in each State" and the Supreme Court ruling in Plyler v. Doe, 457 U.S. 202, 210 (1982) ruled that undocumented immigrants are "persons"; and

WHEREAS, this presidential action unlawfully discriminates against Hispanics and immigrant communities of color in violation of the Due Process Clause of the Fifth Amendment and by explicitly targeting and punishing States that refuse to assist in this administration's enforcement of federal immigration law violates the Tenth Amendment to the Constitution; and

WHEREAS, this Executive decision to exclude undocumented immigrants from apportionment—as well as any action taken to implement or further that decision—is contrary to law, arbitrary and capricious, in clear violation of the Administrative Procedure Act; and

WHEREAS, basing apportionment on all persons, the Framers to the Constitution further emphasized and ensured that each State's representation in the House of Representatives reflected all persons regardless of whether they could then vote, including women, children, and the "entire immigrant population not naturalized." Id. at 432 (Rep. John Bingham); see, e.g., id. at 411 representation based on number of voters improperly "takes from the basis of representation all unnaturalized foreigners" (Rep. Burton Cook); and

WHEREAS, since 1790, in accordance with the Constitution's express requirement to base apportionment on all persons living in each State, the decennial actual enumeration has always counted all persons living in the United States based on where they "usually reside" [See Census Act of 1790, § 5, 1 Stat. 101 (1790); 2020 Decennial Census Residence Rule and Residence Situations, 80 Fed. Reg, 28,950, 28,950 (May 20, 2015)] and continues the historical precedent established by our Founding Fathers as "The Census Act of 1790 established the concept of 'usual residence' as the main principle in determining where people are to be counted. This concept has been followed in all subsequent censuses."; and

WHEREAS, in New Mexico, one in ten residents were born in another country and our large, diverse immigrant population is an integral part of our community and has the constitutional right to be counted; and

WHEREAS, New Mexico already faces numerous challenges having had one of the highest undercounts during the 2010 Census, with 53% of the Hispanic population residing in hard-to-count areas; and

WHEREAS, the President's attempt to ban immigrants from being counted in the 2020 Census poses new and extraordinary challenges to achieving a complete count, the timing of which will only serve to reinforce public confusion, lack of confidence, distrust and lead to an even greater undercount; and

WHEREAS, a complete count is key to ensuring that the City of Las Cruces within Doña Ana County receives its fair share of federal assistance and for 1% undercount, we lose about \$64 million in federal revenue over the next 10 years, as well as appropriate congressional representation, which is significant and detrimental to the health and welfare of our community.

NOW THEREFORE, Be it Resolved by the Governing Body of the City of Las Cruces:

(1)

THAT the City does hereby support the Attorney General of the State of New Mexico and all other relevant state agencies and representatives, including our Federal Delegation, in their action on this matter to defend the rights of our undocumented and immigrant residents and their inclusion in the 2020 Census and reapportionment; and request the State to review the issue of geocodes and undercounting of residents receiving mail from Post Office Boxes by the Census Bureau in the 2020 Census.

(11)

THAT City staff is hereby authorized to do all deeds as necessary in the accomplishment of the herein above.

DONE AND APPROVED this 08 day of September 2020

ATTEST

APPROVED

Christine Rivera

Moved by: Gill Sorg

Seconded by: Kasandra Gandara

AYES Kasandra Gandara, Gabe Vasquez, Gill Sorg, Ken Miyagishima, Yvonne Flores, Tessa

Abeyta-Stuve, Johana Bencomo

NAYS



Council Action and Executive Summary

21-039

Type of Action:

□ Ordinance

☐ TIDD Resolution

District: ⊠1 ⊠2 ⊠3 ⊠4 ⊠5 ⊠6

1st Reading:September 8, 2020Adopted:September 8, 2020Drafter:Jamey RickmanDepartment:City Manager's Office

Program: Community Engagement Line of Business: Community Relations

Title: A RESOLUTION TO SUPPORT INCLUDING IMMIGRANTS IN THE 2020 CENSUS

COUNT AND REAPPORTIONMENT, CHALLENGING THE PRESIDENTIAL

MEMORANDUM.

TYPE OF ACTION: ☑ Administrative ☐ Legislative ☐ Quasi-Judicial

PURPOSE(S) OF ACTION:

To support state action and legislation.

BACKGROUND / KEY ISSUES / CONTRIBUTING FACTORS:

In a Memorandum on July 21, 2020, President Trump requires the exclusion of undocumented immigrants from the 2020 Census count and apportionment, for the first time in the nation's history. This action aims to reduce the political influence and congressional representation of jurisdictions where higher numbers of undocumented immigrants reside, like Doña Ana County and many other counties across New Mexico and the nation. Since the first Census in 1790, the United States has counted every single person, recognizing no one ceases to be a person because they lack documentation. In fact, eight of the 39 original signers of our constitution were not born in the United States. The census counts every person residing in our nation safely, confidentially, and accurately.

The Constitution specifically requires every person residing in the United States to be counted, every ten years, regardless of citizenship status. Questions about immigration or citizenship have already been struck down by the Supreme Court for the 2020 Census. Nevertheless, the politicizing of the census and the violation of constitutional mandates seek to:

- · Impact the apportionment of congressional seats and electoral college representation;
- Impair and distort redistricting efforts;
- · Take away federal dollars that fund essential public services and programs; and
- Corrupt the integrity of data that form the basis of critical government functions, commercial decisionmaking and ultimately, meaningful outcomes for individuals.

Therefore, following the rule of law and the time-honored tradition of protest, even against the leader of the highest office in our nation; Cities, Counties and Attorneys General in 21 states, including New Mexico, have formed a coalition that filed a lawsuit against President Trump. Every community member in the City of Las Cruces and Doña Ana County has the right to be counted and garner our fair share of both federal funding and congressional representation.

PLAN(S):

Department Strategic Business Plan

COMMITTEE/BOARD REVIEW:

ANNUAL BUDGET APPROVAL:	
□Yes	
⊠ No	
□ N/A	
Does this action amend the Capital Imp	provement Plan (CIP)?
□Yes	
⊠ No	
□ N/A	

OPTIONS / ALTERNATIVES:

None

- 1. Vote "Yes"; this will approve the Resolution and support state action and legislation to support including immigrants in the 2020 Census count and reapportionment, challenging the presidential memorandum.
- 2. Vote "No"; this will not approve the Resolution that the City Council does not support this Resolution.
- 3. Vote to "Amend"; this could delay the Resolution and City Council will need to give further direction to staff.
- 4. Vote to "Table"; this will delay the Resolution and Council will need to give further direction to staff.

REFERENCE INFORMATION:

The resolution(s) and/or ordinance(s) listed below are only for reference and are not included as attachments or exhibits.