

2023 Ak-Chin Indian Community Grant Application Cover Sheet

Name of Applicant:	Applicant is a: ☐ City/Town/County (circle) ☐ Other	
Mayor/Supervisor/Chairman/President: Mayor Kevin Hartke		
Contact Person and Title: Dawn Lang, Deputy City Manager/CFO		
Applicant Address (administrative office): 975 E. Armstrong Way		
City: Chandler	Zip Code: 85249	
Applicant Mailing Address (if different): PO Box 4008, Mail Stop 905		
City: Chandler	Zip Code: 85244	
Phone Number: 480-782-2000	Fax Number:	
E-mail Address: dawn.lang@chandleraz.gov		
Fiscal Agent for any Applicant that is not a City, Town, or County (<i>Special Taxing Districts/Fire Districts must have a Fiscal Agent</i>)		
Contact Person:		
City/Town/County Mailing Address:		
City:	Zip Code:	
Phone Number:	Fax Number:	
E-mail Address:		

Program or Project Name: Chandler K-12 Youth Water Conservation Program
Purpose (Check all that apply) ☒ education ☐ public safety ☐ health ☒ environment ☐ promotion of commerce ☐ economic and community development
Purpose of Grant (brief statement): To seek funds for the purpose of expanding K-12 water conservation youth education throughout Chandler. The purpose of the Project is to reach early elementary and high school students with a better understanding of water and the environment, how water is used, and how their water uses and understanding of it can help them to use water more wisely and efficiently, thereby helping ensure long-term sustainability of our water supplies for the future. Early water conservation education helps establish a lifelong water conservation ethic. High School water conservation education will focus on science and technology providing tools and skills to implement water conservation practices indoors and out as independent members of the community. Water savings will also be provided to the schools through the hands-on learning activities.
Beginning and Ending Date of Program or Project: July 1, 2024 to June 30, 2025
Amount Requested: \$ 94,222 Total Cost: \$109,522
Geographic Area Served: 64.90 square miles / 285,000 residents

By the execution of this Grant Application the undersigned agrees that the information contained in this Application is true, to the best of the Applicant's knowledge. The Applicant shall notify the Community if any information in this Application changes.

Signature:
For the Applicant: Dawn Lang Date: 6-5-23

Typed/Printed Name and Title: Dawn Lang, Deputy City Mgr/CFO

For the Fiscal Agent: Dawn Lang Date: 6-5-23
(If applicable)

Typed/Printed Name and Title: Dawn Lang, Deputy City Mgr/CFO

Ak-Chin Indian Community
2023 Prop 202 – 12% Contribution Grant Application
Narrative

A. Purpose of Grant

1. Describe the proposed program, project, or purchase (collectively, the “Project”)

The City of Chandler – Public Works & Utilities Department is interested in an education program intended to provide water conservation education to kindergarten through second grade students and to high school students attending school within Chandler. Given the historic drought, climate and over-allocation conditions on the Colorado River, and the fact that we live in a desert, this type of education is crucial to build stronger community engagement, a lasting conservation ethic, and provide the tools and skills to ensure long-term water conservation practices for true water savings and sustainability of our water supplies. Outdoor water use accounts for 50-70% of household water use. This is due to the complexities of landscape watering and the irrigation system. This program will focus the majority of its efforts to education on the best ways to achieve outdoor water savings.

The Great Arizona Puppet Theater presents water and conservation information in a fun and engaging way using topic specific characters, Zoner and the Drip. Depending on the audience, the Great Arizona Puppet Theater adjusts their presentation to the age group. Additionally, the educational presentation comes with State Standard course materials teachers can use in class to reinforce the water conservation education with their students. The material and presentation are designed to meet the needs of kindergarten through second grade students.

The Arizona Project Wet program through the University of Arizona will develop an entirely new water conservation program focused on water in the environment and how it is used. The project will follow State science standards and use science and technology to provide students with tools and skills to implement water conservation practices in a more complete and advanced way. Specifically, including outdoor water efficiencies where the majority of water savings can be found. This project will include teacher development and pre and post testing of students to measure the effectiveness of the education program.

If we receive these funds, Chandler intends to contract with the Great Arizona Puppet Theater and the University of Arizona to provide age-specific water conservation education and curriculum to Chandler students through engaging and hands-on lessons. Chandler will develop a webpage where teachers can learn more about the program, access curriculum, and schedule training and in-class education. Chandler will promote the program through direct contacts, U.S mail, social, and digital outreach.

Objectives of our Kindergarten through 2nd Grade and High School Water Education program are as follows:

- Meet a conservation effort best management practice of the Governing Phoenix Active Management Area 4th Management Plan
- Increase water and conservation education and awareness of kindergarten through second grade and high school students in Chandler
- Assist educators by providing teacher development, in-class water conservation curriculum and in-class presentations with hands-on lessons

- Increase water conservation implementation in our youngest community members as well as in our high school students as they become independent adult community members.
- Find water savings and efficiencies at the participating high schools through the hands-on lessons.

2. Identify the target population that will be served by the Project.

The City of Chandler, incorporated on February 17, 1920, is located in the southeastern portion of Maricopa County, and encompasses approximately 65 square miles with approximately 285,000 residents. Chandler has been an innovative community shaped by entrepreneurs and hometown traditions since being founded by Dr. A.J. Chandler as one of Arizona's first master-planned communities in 1912. A legacy of Chandler families and business enterprises has established a foundation for our community to build upon. Their commitment to the pursuit of opportunity and advancement of the community combined with decades of thoughtful, consistent planning and investments have transformed Chandler into the Community of Innovation we know today. Chandler is the fourth largest city in Arizona and is one of several major cities comprising the greater Phoenix metropolitan area, which is the economic, political, and population center of the State of Arizona. It is estimated that the Project will reach 13,000 students directly each year. In addition, students sharing what they learn with family members and the teacher development component will expand that reach.

3. Describe the Project goals and objectives and outline a plan to meet these goals.

Chandler's water conservation program was established in 1990 with the intent to instill a strong water conservation ethic and reduce water use. As a result, Chandler's residents have reduced their daily water use from 144 gallons per person per day to 111 gallons over the past 25 years. Had Chandler residents not reduced their water use over the years, an additional 9.3 million gallons would be needed each day to meet water demand. Chandler's goal is to continue to strengthen the strong conservation ethic held by our community and continue to reduce overall water use. Given that outdoor water use accounts for 50-70% of all household water use, Chandler's primary water conservation goal is to educate the public on how to achieve outdoor water savings.

Chandler is governed by the Arizona Department of Water Resources 4th Management Plan for the Phoenix Active Management Area which requires the implementation of Best Management Practices. One of which is to "work with schools to provide support programming that increases students' understanding of water resources and promote water conservation." In addition to reducing overall water use, our goal is to meet this expectation. Lastly, we want to ensure we are educating our youth about water resources and conservation in ways that provide them with tools and skills to effect real water reductions and to build a strong conservation ethic throughout their life. By providing an early introduction to water conservation (K-2nd grade), it plants the seed and establishes a foundation for that understanding to grow with additional tools and education. This program is designed to enhance Chandler's existing youth education programs that focus on second through sixth grade education. The kindergarten through second grade education will introduce students to "Water in their World", water conservation, and how they can participate in conservation. Our existing programs delve deeper into the water cycle, groundwater, watersheds, and water conservation technologies. The high school program will build upon the "Water in the World" lessons to a hands-on learning of how to implement the use of water saving technology and irrigation, and how to effectively reduce water use, especially outdoors.

4. Provide a timetable for implementation of the Project.

The contract and City Council approval process will start immediately after the grant agreement negotiations are completed. The Council process will take 1 to 2 months. Once that is complete, lesson preparation and scheduling will begin. The entire timeline for the project and class offerings would be for fiscal year, July 1, 2024 through June 30, 2025.

B. Resources

1. Identify current funding sources for the Project and characterize each funding source listed as either a one-time-only or long-term funding source.

The current funding source for this project is identified as a one-time-only funding request through the City of Chandler's Water Operating Fund for Fiscal Year, July 2023 through June 2024. The Water Operating Fund is supported by the Utility Rate fees paid by the City's residents. Obtaining the grant funds will allow the Project to be implemented with greater reach to the student community and extend the education period to include Fiscal Year 2023-2024. This additional program implementation time will provide more data to evaluate program effectiveness in order to encourage long-term funding as a permanent curriculum with ongoing water savings.

2. Identify other organizations or partners that are participating in or contributing to the Project, but which are not funding sources, and describe their roles or contributions.

Chandler will partner with the Great Arizona Puppet Theater, who will provide the direct education administered by Chandler to kindergarten through second grade students. This is an existing program currently being used by the City of Mesa.

Additionally, Chandler will partner with the University of Arizona Cooperative Extension Arizona Project WET (Water Education Today) program to establish a science and technology-based education program that aligns with Arizona State Science Standards for high school students. This program will include teacher development education and in-class oral, written, and hands-on lessons provided from Project WET Staff and the high school teachers. Project WET staff will also develop pre and post testing to measure student knowledge improvements. The tests will be administered by the class teacher.

3. Define the Project as a new or continuing project or a purchase. Provide information about how the Project will be sustained or the purchase will be maintained after the grant funding is exhausted.

This Project is defined as a **"new and continuing project"**. This Project is new to Chandler for Fiscal Year 2023/2024 with one-time funds supported by the Water Operating fund. The City is asking for this grant funding to continue the project into Fiscal Year 2024 /2025. This funding will provide additional data and time to evaluate the effectiveness of the Project which provide the resources needed to request ongoing funds from the Water Operating fund to make this permanent curriculum in the local schools.

4. If the Applicant organization has requested funding from any other Arizona tribe, please list:

- a. **Pending requests made within the last eighteen (18) months, including the name of the tribe to which the request was made and a brief summary of the project for which a grant was requested.**

The Department submitted a grant application request to the Gila River Indian Community (GRIC) in March 2023. The grant request was to fund water conservation educational programs for Chandler students K- 3rd grade. Unfortunately, the Department was not successful in receiving those funds.

- b. **Funded requests made in the last five (5) years, including the name of the tribe that awarded the funding, a brief summary of the project for which the funding was awarded, and the amount of the funding received.**

No other funding has been awarded to the Department from other tribes.

C. Reports

Approved grantees must report back to the Community about the use of all grants. Outline how your organization will account for and manage the funding if selected. Describe how Project progress and results will be tracked and documented.

The approved grant funds will be accounted for in the City's Project Accounting as a designated Grant Funded Project. The expenditures will be tracked through the City's budget and financial systems. The invoices will be processed under the assigned program number and with the generating of purchase orders issued to the approved vendors for this specific project. The Water Resources Manager will manage the project progress and track the results using our project management software.

Additionally, the high school portion of the program will track the pre and post testing results through the Project WET System and Chandler Water Conservation Staff will track the water savings after the hands-on water conservation training has occurred. Water savings will be determined by comparing water use from one year prior to the audit activity and one year post the evaluation.

The kindergarten through second grade portion will be tracked using teacher evaluations of the program.

D. Budget

Provide a budget, including justification, that supports the request in the Application. Provide an estimated timeline for when funds will be expended.

The estimated budget for this program is \$94,222. With \$30,000 for the kindergarten through second grade program and \$64,222 for the high school program with teacher development. The estimated timeline for expending the funds would begin in Fiscal Year 2024 / 2025 or July 1, 2024 to June 30, 2025.

E. Additional information

Please provide any additional information about the Project or the Applicant organization that the Ak- Chin Council should know when considering the Application.

No additional information to provide at this time.

Proposed Budget Expense	Grant Funds Requested From	
	Ak-Chin Indian Community (One-Time)	City of Chandler Estimated Contribution
Great Arizona Puppet Theater Kindergarten through second grade education (150 lessons X \$200)	\$30,000	-
U of A Cooperative Extension Arizona Project WET Classroom presentations & Admin. Fees	\$64,222	-
U of A Cooperative Extension Arizona Project WET New Program - Curriculum, Teacher, and Pre & Post Assessment Development (Paid in Year One, not included in Year Two Quote)		\$10,600
U of A Cooperative Extension Arizona Project WET Annual Program Launch		\$1,500
U of A Cooperative Extension Arizona Project WET Pre & Post Assessment		\$1,200
U of A Cooperative Extension Arizona Project WET Teacher Workshops		\$1,000
U of A Cooperative Extension Arizona Project WET Teacher Stipends		\$1,000
Total	\$94,222	\$15,300



Great Arizona Puppet Theater

302 W. Latham St.

Phoenix, AZ 85003

602-262-2050

Live In-Person Water Conservation Puppet Theater Performance Quote

“Zoner and the Drip”

For 1st to 3rd Grade

Or

“Zoner’s Water Cycle”

For 4th Grade and up

At \$200.00 per performance



THE UNIVERSITY OF ARIZONA

Cooperative Extension

Arizona Project WET

Proposal for joint program with City of Chandler for high school water conservation and irrigation audit program:

Proposed Budget:

Item Description	Cost
Annual Program launch & oversight	\$1,500.00
Pre & post Assessment & Water Savings Data Collection	\$1,200.00
Teacher Professional Development workshop (4 hours)	\$1,000.00
	\$100/teacher
Teacher Stipends for professional development	\$100 x 10 teachers = \$1000
Classroom presentations (includes staff time, supplies, etc.) – 3 class visits or 1 block visit and 1 additional period	\$1,000/class \$1,000 x 50 classes = \$50,000
University of Arizona Administrative Fee (26%)	\$14,222
TOTAL	\$68,922