

PROGRAM SUMMARY BY
ADULTS AND YOUTH UNITED DEVELOPMENT ASSOCIATION, INC. (A.Y.U.D.A.)

- This proposal addresses a dire and current *environmental issue*. The drinking water in the designated community is *arsenic-contaminated* and has been for several years.
- Tornillo, Texas is a *predominantly Spanish-speaking border town* in an *unregulated area* in the County of El Paso, Texas. It has approximately 850 households that depend on the local Tornillo Water Improvement District (TWID) for drinking water. The Texas Commission for Environmental Quality records show *TWID had 33 violations* from 2006-2014.
- While an arsenic treatment plant is under construction in Tornillo, it is *unclear when residents will receive safe and clean water as state compliance levels must be validated by the state water regulatory entity after completion of the facility*.
- During *2015* AYUDA conducted a *pilot program*, under a local foundation grant, to serve 50 households. It first conducted an assessment survey to determine the degree of the problem and found 850 households in need; 800 households remained in need after the pilot.
- AYUDA proposes to build on the cited pilot, a service intervention program, through a *six-month program* that will offer a *one-hour class* at *various sites* to teach program participants *how to install arsenic-elimination water filters*. Using previous experiences, the selected *sites* will be acceptable and accessible to the recipients. Also, classes will be offered on *different days and times* during the week to ensure that household members responsible for installation can attend. If needed, AYUDA will *visit the household* and assist one-on-one.
- The *expected outcomes* are basic: to provide safe, clean water to *100 Tornillo households/ 300 residents* and have an overall program *satisfaction rating* of at least 85% through evaluation data.
- No funds are requested for personnel. *Six (6) in-kind individuals* will provide their expertise and time: AYUDA's Executive Director, Finance Manager, and 3 Volunteer Community Workers. Also, an external Evaluator will assist. The cumulative *in-kind contribution is \$12,350*.
- The *external Evaluator* will be responsible for evaluation tools (data forms, tests, surveys), tabulations, analysis and a project-end report reflecting program impact through an *objective assessment*.
- To convey information about this program to those who might benefit, AYUDA will rely on its own expansive *network of environmental, health and human services* leaders, agencies and officials. It will also contact TRC, Inc. to obtain their ideas for *dissemination* through conferences/workshops/posters, Internet, TV, radio, etc. means.
- *Ten salient features* include: 1) a short-term solution to accessing safe and clean drinking water, 2) direct benefit to 100 households, 3) allaying some health and economic stress, 4) effective and efficient project management, 5) in-kind staff, 6) *culturally and linguistically competent staff and volunteers*, 7) an approachable community due to AYUDA's long history of work and accomplishments here, 8) objective impact evaluation, 9) *replicable and scalable model*, and 10) expansive dissemination.
- AYUDA is requesting *\$15,000* to purchase and issue 100 arsenic-elimination water filters for 100 households/approximately 300 individuals but will accept a lesser amount and adjust accordingly.

I – Contact Information:

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B. ADULTS AND YOUTH UNITED DEVELOPMENT ASSOCIATION, INC. (A.Y.U.D.A.)

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Requested Amount: \$15,000 (Fifteen thousand dollars)

II. Organizational Description: AYUDA is a bilingual, grassroots, *non-profit organization* founded in *1992* for the purpose of advancing and bettering the quality of life of El Paso County's *low-income families*. We accomplish this by *advocating* for self-sufficiency and positive change through the building of stronger community leaders and healthier, civically engaged communities. We also provide *direct services* designed to eliminate the many obstacles to *poverty*, safe drinking *water*, affordable and decent *housing*, quality *education*, a clean *environment*, and good *health and nutrition*.

Progressive and *community-based*, AYUDA is committed to cultivating an integrated approach to the human and economic development of the impoverished rural areas of the County of El Paso. AYUDA's *English-Spanish culturally and linguistically competent staff* serves as an advocacy organization that builds strategic alliances with an *extensive network of area partners* to find solutions to the many pressing challenges and issues facing the rural communities in El Paso County. Its primary goal is to support the community through education and to *create leaders* in the different "*colonias*" so they can advocate for their own needs and minimize the barriers they encounter daily.

To carry out said, AYUDA: relies on a *paid staff of 5 and 30 volunteers*; applies national, *non-profit management principles*; ensures fiscal compliance through applicable *fiscal standards and practices*; and counts on *essential technological* equipment, tools, and security systems.

Major Accomplishments

- * Obtained *water tanks* for people in the "*colonias*" who did not have running water in their homes.
- * Installed and helped install *septic tanks* for people in the "*colonias*" who did not have a drainage system.
- * Provided a *new home* for over *50 families* from *impoverished backgrounds*.
- * Helped *adapt over 30 homes* to make living space more accommodating/accessible for *family members living with disabilities/physical challenges*.
- * Received the "Texas A&M Agri-Life Extension" *award* on April 25, 2014 for dedicated support of extension agricultural program that furthered education and training for El Paso County *agricultural producers*.
- * Received the "*Environmental Award-ECO Wise El Paso*" on October 10, 2014, for invaluable dedication and commitment to preserving the Paso del Norte environment.
- * Secured an U.S. Dept. of Agricultural-Rural Development grant of \$162,500 in 2016 to renovate the kitchen and install commercial appliances at the San Elizario Community Center, found in a rural area. It will serve as a training center and empower the community to cook more nutritious meals for healthier wellbeing.
- * Having received numerous awards for her service and dedication to rural communities in El Paso County, the *Executive Director* is widely respected as an astutely grounded leader.

III. Program Description - A.) The apprehensions were and are still widespread among residents of Tornillo, Texas. "*Oh my goodness, what do we do? What if someone gets sick in the family? Why do we still have to pay for dirty and harmful drinking water?*" These voices are from those who live in a *border town* and a *census-designated place (CDP) in a rural area* of the County of El Paso, Texas. For several years, the Tornillo Water Improvement District (TWID) mailed English and Spanish notices with bills to residents. Notices said *arsenic levels in the water were above legal requirements*.

Notices also stated that drinking arsenic-contaminated water in excess of the maximum contaminant level over many years could lead to *skin damage* and increase risks to *circulation* and *cancer*. Finally, the TWID noted there was no need to use an alternative water supply nor was this situation an emergency, but residents could contact their health providers for concerns.

The Centers for Disease Control and Prevention cite that exposure to arsenic is linked to **cancer** of the skin, *lung and bladder*. They also say that the most common health effects of long-term exposure to arsenic are *gastrointestinal* and skin problems. Other research studies have found that arsenic in drinking water can lead to *cancers* of the *kidney, liver and prostate*.

What is the history of this water quality issue?

- 2001 - In January of this year, the Environmental Protection Agency (EPA), the federal regulatory water entity, adopted a new standard for the amount of arsenic in drinking water.
- 2002 - The new EPA rule/standard became effective in February.
- 2006 - *The EPA gave water systems until January of 2006* to comply with the new 2002 rule/standard. The agency realized that small water systems would be unable to achieve compliance readily since removing naturally occurring contaminants is not easy to do.
- 2008 – The TWID was referred to the Texas Commission on Environment Quality (TCEQ) Office of Compliance and Enforcement for enforcement action for the arsenic maximum contaminant level violations.
- 2009 – A New York Times article revealed that 1 in 600 residents would likely develop bladder cancer in their lifetimes, based on studies commissioned by the EPA.
- 2011- The TWID was referred to EPA for “formal enforcement.”
- **2006-2014** –TCEQ records regarding water from the TWID from the last quarter in 2006 through the last quarter in 2014 resulted in a total of **33 violations**.
- **2016** - Tornillo began construction of an arsenic treatment facility for the Tornillo water system as part of a \$3.25 million grant from the EPA. Completion is scheduled for 2017, but *when residents will begin to receive safe and clean water is unclear*. After construction, the facility’s operation and management rest with TWID. However, both the local construction firm and TCEQ will conduct lab tests over a six-month period to ensure that the water quality meets arsenic level compliance standards. Failure to comply would require any number of corrective steps.

Locally, residents have complained for years to the TWID *but still have to pay for the contaminated water*. “Customers of the Tornillo water get their water from wells, which tend to have higher concentrations of arsenic than surface water resources, like lakes and reservoirs. Also, agriculture and industry are common sources of arsenic in groundwater. The El Paso area has both” (“*Hope in a Bottle*,” *Equal Voice News*, Amy Roe, Feb. 25, 2015). AYUDA did not stand idle. They knocked on doors and listened to the residents’ health concerns. The population reported that their tap water intermittently reflected the color of tea or was brown. Among many medical concerns, they found one parent whose child developed a rash that would not go away for two years. The child saw an allergist and dermatologist who prescribed creams, but to no avail. At one point schools were providing bottled water to its students but this was discontinued. Now, many parents send their school-aged children to school with bottled water fearing contamination in school water fountains. AYUDA then accompanied residents and helped speak to local leaders about these serious health and economic issues.

Today low-income residents still face difficult fiscal choices to pay for rent/mortgage, food, transportation, school, health, drinkable water, etc. Under a local foundation grant in **2015**, AYUDA implemented **a pilot program with a short-term solution**. It successfully **conducted a needs assessment**, researched water filter options, purchased them, conducted a short class, and then issued 50 counter-top, tap water arsenic filtration systems with replaceable filter cartridges to 50 households although the survey found 850 households in need. **The filters have a five-year warranty.**

B.) Six In-kind individuals (\$12,350 value) will implement the **program outlined below**. The Executive Director of AYUDA brings 20 years of experience working with disadvantaged populations in unregulated growth areas/colonias; management in health, education, housing, etc. projects; supervisory skills; and numerous awards and recognition for her results and compassion. Three Community Outreach Workers will either: present the one-hour class, assist with class scheduling, administer and collect evaluation data, and provide one-on-one installation as needed. These Outreach Workers collectively have 19 years of work experience with vulnerable populations. The Fiscal Manager offers 11 years of work in this capacity across many entities. The external Evaluator will render 16 years of professionalism through a combination of program development, management and evaluation. Specifics follow.

Overarching Goal: To provide arsenic-reduction water filters to 100 Tornillo households/ 300 individuals in order to facilitate safe and clean water consumption.		
OUTCOMES & In-kind Responsible Party	INPUTS (Activities)	Activity Month
1. Using proposal timelines, the Executive Director will demonstrate effective & efficient program management.	a) Conduct initial, start-up meeting. b) Adapt program if less funding is awarded. c) Conduct bi-weekly meetings & record summaries. d) Keep log of observations at 2 classes & 2 installations. e) Maintain up-to-date program & fiscal documents, including in-kind. f) Disseminate program info to other Texas border communities & keep a log. g) Submit final report.	a) 1 b) 1 c) 1-6 d) 2-5 e) 1-6 f) 4-6 g) 6
2. Using proposal timelines, the Fiscal Manager will facilitate effective & efficient fiscal management.	a) Open and establish account & practices. b) Order and account for all purchases. c) Attend program meetings. d) Maintain up-to-date expense data. e) Assist with the final fiscal report requirements.	a) 1 b) 1 c) 1 d) 1-6 e) 6
3. Using proposal timelines and evaluation data, the external Evaluator will provide an objective evaluation of the program's impact.	a) Review needs assessment results for 66 homes. b) Create log form for in-kind time and effort. c) Refine beneficiary profile form. d) Create satisfaction survey for class & household assistance. e) Attend & observe 2 classes. f) Attend & observe 2 household installations. g) Tabulate, interpret and analyze data. h) Develop a de-briefing process so AYUDA-involved parties can identify lessons learned and what worked well. i) Conduct debriefing. j) Summarize & submit findings.	a) 1-3 b) 1 c) 1 d) 2-6 e) 2-6 f) 1-6 g) 5 h) 6 i & j) 6

<p>4. Three <i>Community Outreach Workers</i> will issue 100 filters. The program will result in an overall rating of at least 85% satisfaction based on beneficiary data.</p>	<p>a) Conduct needs assessment for 66 households. b) Identify number of classes, sites, dates & times. c) Announce schedule of class/filter distribution. d) Present class; issue filters; conduct satisfaction survey. e) Identify & assist in homes, as needed, and conduct satisfaction survey. f) Submit program data monthly.</p>	<p>a) 1-3 b) 1 c) 2-6 d) 2-6 e) 2-6 f) 1-6</p>
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C.) Although the need for said filters exists for 850 households, this request will only serve **100 households/300 (100 X 3 average family size) residents** in Tornillo, Texas. AYUDA will draw from its pilot survey to identify the 100 to be served. According to the U.S. Census Bureau, 2014 and 2015 demographics for this community reflect: a total population of 1,568; **98% Hispanic /Latino**; about half male and half female; a median age of 26; and an **average household size of three**. Pertinent stats from the 2009-2013 American Community Survey 5-Year Estimates for the Tornillo Census Designated Place (CDP) reveal: the median household income as \$26,300; **32.1% living below poverty**; and **46.1% uninsured**.

D.) The AYUDA program is **unique in many ways**: 1) It will offer a short-term solution to the dire need for safe and clean drinking water. 2) One-hundred households will benefit directly. 3) It will help relieve some health and economic stress. 4) It will manage program and fiscal aspects expeditiously by building on its 2015 pilot. 5) All staff is in-kind, and 6) these are culturally and linguistically competent. 7) AYUDA’s long history of accomplishments and work here will pave the way for “open doors.” 8) It will provide an objective assessment of program impact. 9) The project **model will be replicable and scalable**. 10) It will have expansive dissemination.

A **model program** in government terms is defined as one that is evidence-based and can be replicated in communities with similar needs and demographics. The nature and operation of this program allows for **easy replication**. However, the program cannot provide hard evidence to demonstrate a decrease in health-related illnesses because this is clearly beyond Texas Rural Communities’ (TRC) funds and AYUDA’s project scope and lifespan. There is, undeniably, an **incredible benefit to households who say they expend between \$1,000-\$1,200/year for drinkable and cooking water**. These economically disadvantaged residents will be able to put this amount to other uses and help avoid further or new arsenic-related illnesses and even death.

AYUDA well understands the benefit similar communities derive from **sharing common concerns and solutions** with one another. It has a local media outlet directory and an extensive directory of other Texas border communities/agencies, rural areas and officials that can be reached readily within TRC contract requirements/parameters. As practical, AYUDA will explore opportunities to disseminate this valuable information through **conferences/workshops, TV, radio, Internet**, etc. means as well as confer with TRC for input.

E.) The Attachments include required fiscal documents. While every dollar for this community is important, **a lesser amount would be accepted and will be adjusted accordingly—for example, number of filters to be purchased and more stringent household criteria** (living below poverty level, have children and/or elderly members, and larger family sizes.)

F.) Given the nature of this program, the *external Evaluator* will conduct an *impact evaluation* using the following four (4) critical questions:

- How many households benefitted *and how*, and what is their general profile?
- To what degree were the beneficiaries satisfied with the classes, filters, installation assistance, and other aspects of the program?
- What programmatic and fiscal activities/characteristics affected the impact?
- Did the program have any unintended, positive or negative consequences? If yes, what were they, and how were challenges handled?

Qualitative (descriptive) and quantitative (numbers) data will be used to measure outcomes that appear under Section B of this proposal and the evaluation framework that appears next.

Outcome Area	Examples of Evaluation Tools/Data Items	Note
1-Program Management	Meeting rosters, summary of meetings, observation logs at classes and installations, no. of recipients with whom info is shared.	The Evaluator will review, tabulate, and summarize findings on a monthly basis for each area.
2-Fiscal Management	Attendance at meetings, up-to-date recordkeeping, maintained schedule of expenditures as cited in this proposal.	
3-Evaluation	Evaluation activities under the program description matrix, Section B, and sample tools cited here.	
4-Program Implementation	Needs assessment, number (no.) of households contacted for needs survey, no. in classes, no. assisted with installation, rosters, participant profiles, participant satisfaction surveys (e.g., classes, installation, decreased stress), in-kind volunteer feedback at debriefing.	

G.) As cited below, the *timeline* for program areas, *expenses* and *in-kind* demonstrate *viability*. Of particular note is that *the \$12,350 in-kind closely approximates the \$15,000 request*.

Program Areas	Month 1		Month 2		Month 3		Month 4		Month 5		Month 6	
	T R C	In- kind	T R C	In- kind	T R C	In- kind	T R C	In- kind	T R C	In- kind	T R C	In- kind
Program Mgmt.	0	250	0	250	0	250	0	250	0	250	0	250
Fiscal Mgmt.	0	250	0	0	0	0	0	0	0	0	0	100
Evaluation	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000	0	1,000
Implementation	15,000	750	0	750	0	750	0	750	0	750	0	750
TOTALS	15,000	2,250	0	2,000	0	2,000	0	2,000	0	2,000	0	2,100

H.) AYUDA has *never received funding from TRC, Inc.* This proposal more than adequately describes how it can effectively and efficiently implement a *replicable and scalable model* for English- and Spanish-speaking communities experiencing a similar challenge in rural areas.