City of Idalou
Lubbock County ARPA Request

Good Morning Judge Parrish and Lubbock County Commissioners:

On behalf of the City of Idalou Council and Idalou citizens, we want to thank you for allowing us the opportunity to request funds. The assistance of ARPA funds will allow council to not issue debt to the citizens. While at times, debt is required, in the current climate council feels it to be prudent to keep all cost to the citizens at a minimum.

The City of Idalou has submitted a request for the following projects:

Category	Item	Cost
Infrastructure	Water Treatment Plant	$ 850,000.00
Infrastructure	Water Tower	$ 850,000.00
Infrastructure	SCADA (Supervisory control and data acquisition)	$ 110,000.00
Infrastructure	Wastewater Treatment Plant-Clarifier	$ 250,000.00
Infrastructure	City-Wide Meter Replacement	$ 450,000.00
Public Health	1st Responder Vehicle	$ 56,000.00
Outdoor Space	Covered Basketball Court	$ 300,000.00
Total City of Idalou Request:		$2,866,000.00

The Idalou City Council has identified these projects as high priority level projects to maintain Water and Sewer infrastructure along with identifying public health needs.

Project 1: Water Treatment Plant
Reason: Under Enforcement by TCEQ-Texas Commission on Environment Quality
Cost: $850,000.00

The City of Idalou ARPA fund request will provide residents of Idalou a safe water drinking system meeting requirements of Safe Drinking Water Act of 1974.

The U.S. Environmental Protection Agency (U.S. EPA) has established the Maximum Contaminant Level (MCL) for 1,1-DICHLOROETHYLENE to be 0.007 milligrams per liter (mg/L) based on a running annual average (RAA) and has determined that it is a health concern at levels above the MCL. The Texas Commission of Environmental Quality (TCEQ) has completed an analysis of Idalou's drinking water 1,1-DICHLOROETHYLENE and for the last three years it has continually exceeded the MCL at times by double the allowed amount. Below are the water sample results from 04/2019-11/2021Collection Date. Source: Texas Drinking Water Watch, https://dww2.tceq.texas.gov/DWW/.

11/29/18	15.6		08/12/20	14.8
01/30/19	17.4		11/16/20	10.8
04/10/19	13.8		02/23/21	8.29
09/11/19	13.2		06/03/21	17
10/31/19	12		08/30/21	8.5
06/09/20	10.3		11/18/21	8.12

The City of Idalou selected Jacob|Martin Engineering for the design and construction management to reduce the chemical level of 1,1-DICHLOROETHYLENE.

The City of Idalou will build a Water Treatment Plant located near the Well that exceeds Maximum Contaminant Level of 1,1-DICHLOROETHYLENE. Below is a description of the Low Profile Aeration system provide by Allen Phillips, Engineer with Jacob|Martin

The Low-Profile Tray Aeration design is able to remove VOCs and other contaminants from the water. The design is where water is exposed to air to remove the contaminates. The Low-Profile Tray design are stainless-steel trays that have small pores that allow pumped air to flow up through the water to create the surface area. The benefits of this design allows one operator to do maintenance and key checkups with ease. In addition, a smaller blower unit can be utilized which will reduce energy costs and noise. Furthermore, the blowers can be fitted with acoustic silencers to further reduce noise pollution. Removal efficiency of this design are shown to be 99% which is similar to the GAC filtration but comes at a lower capital cost. One disadvantage of the Low-Profile Tray Aeration which was presented on other technologies is the reserved 100 foot radius distance surrounding the unit. This disadvantage has been addressed by council and will not be a factor of the project moving forward. This technology represents a moderate capital cost unit which moderate to low operational costs.

TCEQ is currently reviewing the Pilot Study request and the city is projected to begin the pilot program mid-summer.

The City of Idalou has expended approximately $125,000.00 on the project with the purchase of land, and engineering fees. If the project exceeds the proposed budget, the City of Idalou is prepared to pay for expenditures over the requested funds


EXIT

Project 2: Water Tower
Reason: Aging Infrastructure
Cost: $850,000.00

The City of Idalou has two elevated water storage towers. The oldest elevated storage tank was erected in 1925 and holds 50,000 gallons of water. It is a riveted steel tank by Pittsburgh-Des Moines Steel Co and as was common at that time, it is a “Witch Hat” water tower design. This tank is currently in use and provides water storage and pressure for Idalou’s water system (we will refer to this as Tank One). A second water tower is also in use and has a storage capacity of 150,000 gallons (Tank Two). The replacement of Tank One will not only replace an aging tower it will also allow for the city of Idalou to add additional storage capacity. This is an important factor, due to storage capacity requirements from TCEQ. An increase storage capacity will also afford the City of Idalou the ability to plan for growth in the community. If awarded funds, the City of Idalou will replace Tank One with a new elevated water tower. The City of Idalou would consider a new elevated water tower with storage of 150,000 gallons.

Project 3: Supervisory control and data acquisition (SCADA)
Reason: Replacement of aging and failing technology
Cost: $110,000.00

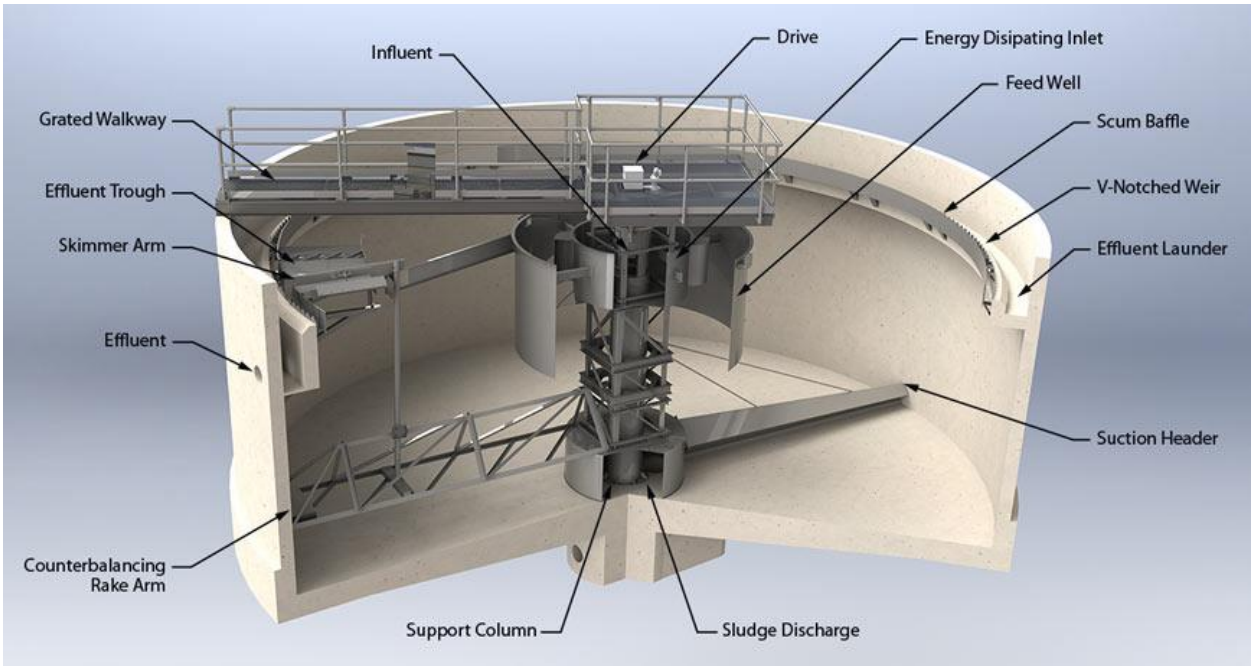
The City of Idalou in 2010 issued a Certificate of Obligation. With the use of those funds, the Public Works department installed a SCADA system in 2013. Supervisory control and data acquisition (SCADA) is a control system architecture comprising computers, networked data communications and graphical user interfaces for high-level supervision of machines and processes. It also covers sensors and other devices, such as programmable logic controllers, which interface with process plant or machinery. As anything with technology, improvements in system have occurred. Current technology with Site Pro (Lubbock based business that provides systems throughout the US) allows for control and monitoring of variable speed pump. This allows us to control the drawdown and particulate intake in real-time to reduce the risk of toxic elements entering our water supply. The system also allows us to generate custom reports for operational planning and health checks. View important KPIs and actionable data in one place to make instant control changes and adjustments with Site Intel. A key component of SCADA is it will also allow the city to manage conservation and help with the growth of the community.

If the City of Idalou were awarded this project, a new SCADA system would work in conjunction with the City of Idalou's new Water Treatment Plant (WTP). Which will allow the system to monitor levels of various chemicals. This will help the City of Idalou detect problems early on and find viable solutions to continue providing clean drinking water for the City of Idalou.

Project 4: Replacement of Wastewater Treatment Plant- Clarifier
Reason: Replacement of aging infrastructure
Cost: $250,000.00

In 1980/1981 a Smith & Loveless Racetrack Sewer System was installed/built at the Idalou Sewer Plant. This is an oxidation ditch that is a modified activated sludge biological treatment process that utilizes long solids retention times to remove biodegradable organics. Preliminary treatment such as bar screens and grit removal, normally precedes the oxidation ditch. Disinfection is required and reaeration may be necessary prior to final discharge. Flow to the oxidation ditch is aerated and mixed with return sludge from a secondary clarifier. The clarifier system at the Sewer Plant is in need of repairs such as electrical, anti-rotation arms, skimmer arms, stilling wells, drive limit switches, bridges and walkways. It would involve a retrofit of the aging system provided by Smith and Loveless. The secondary clarifier removes flocs of biological growth from the treated liquid waste stream. The secondary clarifier can be described as a circular basin where effluent from the activated sludge process is held.

The city would purchase the Smith and Loveless Clarifier Retrofit to repair the current Smith and Loveless Clarifier.

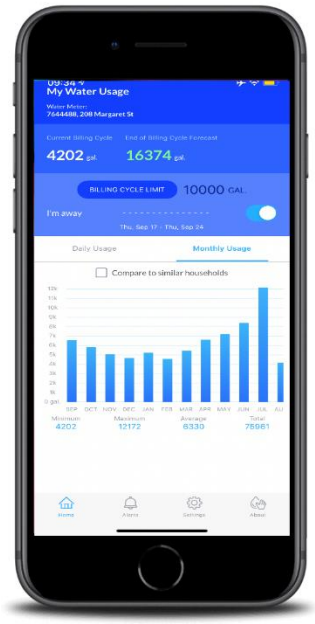


Project 5: City Wide Meter Replacement
Reason: Replacement of aging meters and enhancing citizen involvement
Cost: $450,000.00

The City of Idalou meter system is in need of a city-wide replacement, commercial and residential. The city has approximately 1,000 meters. A third of those meters fall under a radio system which eliminates the need for city employees to physically read those meters, approximately 300 meters. The remaining 700 meters are read monthly by a meter reader. There are meters that are aging out of system due to the amount of water that runs through the meter. Typically, a meter that has over 1 million gallons of usage is not as efficient as a new meter due to the constant use of the mechanics inside of the meter.

The meters that are currently on a radio system go through a Badger product. This system was purchased in 2009/2010. The system uses antiquated technology and as of December 31, 2021 it is no longer a supported product by Badger Meter. This has the city currently moving those meters out of the radio read system and into a physical reading.

By upgrading the water meters to a smart meter system, the city will be able to report a more precise usage of water to state reporting authorities and residents. The city would also be billing for exact water usage. As mentioned earlier, as a meter ages the accuracy decreases which results in the city not having precise water usage numbers and residents not being billed for all usage. With newer technology, the city can also empower citizens to actively participate in their water consumption through the use of a water meter apps. Staff and Council have reviewed systems that allow the end user to download an app that will alert them of their water usage along with leaks. With the ability to provide citizens with a real time leak indicator, we save the citizens from having a large water bill and from potential damage to their property from a leak.



Project 6: Replacement of 1st Responder EMS Vehicle
Reason: Unreliable Vehicle
Cost: $56,000.00

The 1st Responder vehicle (2002 F250) is 20 years old and due to recent engine trouble is now out of service. A new 1st responder unit will allow Idalou EMS to continue with our mission of providing care for NE Lubbock County. A new vehicle with 4 wheel drive also allows for improved access on county dirt roads and during inclement weather conditions. This allows for our transport unit to remain on the hard surface road in most scenarios.

The replacement of our 20 year old 1st responder unit gives us an additional resource for treating our neighbors in NE Lubbock County. The 1st responder unit is a critical piece of equipment for getting help to those in need. During the past several years of COVID-19 responses, we have been able to utilize this unit and not contaminate our primary ambulance and crew unit until it is determined that transport is required.

While UMC EMS supplies the ambulance that Idalou EMS uses for transports it does not provide a 1st Responder Vehicle.

Project 7: Covered Basketball Court
Reason: Current basketball court is unusable due to court condition.
Cost: $300,000.00

The City of Idalou recognizes the 1.7-acre City of Idalou Park should be the priority park for the city to improve and develop based on public input from their citizens and the needed improvements. This application is a request for funding to assist in improving and developing the City of Idalou Park.

The proposed project will fill the need/gap of the development of safe and reliable activities within the park. The current basketball court is dilapidated and no longer safe for children to play due to the uneven and worn concrete.

During the 2020 shut-down, communities were reminded how important park facilities are to residents quality of life. While many were required to stay home, parks became a safe outlet to let children play, a safe way for individuals to leave their home and participate in healthy outdoor activities. The City of Idalou Skate Park was heavily used during that time, providing fun for the young and young at heart. The basketball court was used sparingly due to the conditions of the court.

The City of Idalou has applied for grant funding through Texas Parks and Wildlife. On Friday, March 25, 2022, Idalou was notified that it did not receive funding for the upcoming funding cycle.

In 2010, the City of Idalou issued debt in the amount of $2,200,000.00. Many capital outlay projects were addressed. In the fall of 2021, the city refinanced that debt from a 4.25% interest rate to 1%; a total net savings of $123,000.00. That is equivalent to ¾ of a bond payment; average $13,000.00 a year.

The City of Idalou will have to issue debt for the projects discussed, more than doubling the city's I&S rate and increasing water/sewer rates. Currently the city receives $103,500 from the city's I&S Rate and $58,000 from raised water and sewer rates. The city would look to double that amount in both areas of Ad Valorem and Water/Sewer rates. Lubbock County funds would help alleviate the tax burden on the residents of Idalou.

2021 PROPERTY TAX RATE CALCULATION

2021 Taxable Value	$ 132,276,538
2021 Adopted Tax Rate	$ 0.574947
2021 M&O Rate	$ 0.496797
2021 I&S Rate	$ 0.078150
2021 Estimated Tax Levy*	**$ 760,519.99**
2021 Estimated M&O Levy	$ 657,145.87
2021 Estimated I&S Levy	$ 103,374.11