

Texas Water Development Board
SFY 2023 Drinking Water State Revolving Fund - Emerging Contaminants
Intended Use Plan

Appendix I. Project Priority List - By Rank

Rank	Points	Entity	PWS ID	Population	Project Description	Requested Phase(s)	Total Project Cost
1	155	Bronte	TX0410001	1,110	The City is proposing to construct a new micro or ultra-filtration water treatment plant to replace the existing facility. Lab testing has identified a lithium level of 64.5 µg/L which is greater than the 9 µg/L minimum reporting level described in the EPA 5th Unregulated Contaminant Monitoring Rule (UCMR 5).	PADC	\$15,000,000.00
2	65	Daisetta	TX1460004	938	Due to ground water contamination (sodium, chlorides and total dissolved solids) and deterioration of the salt dome this PIF proposes a project which will provide for the construction of a new treatment facility at the new water well site. The proposed treatment facility will consist of a new chemical/equipment building, ground storage tanks, piping, high service pumps, chemical feed systems, electrical/SCADA, stand-by generator, paving, access drives, fencing, and all treatment related appurtenances.	PDC	\$2,220,375.00
3	60	Parker County SUD	TX1840079	4,113	The proposed project includes the use of reverse osmosis (RO) technology to prepare for upcoming PFAS limits initiated by EPA in Spring 2023. Given the introduction of PFAS into source waters from wastewater effluent discharge, PCSUD is implementing RO technology to be prepared to reduce emerging contaminants from its source water. Project will perform a PFAS treatability study and review any additional PFAS	PADC	\$66,491,000.00
4	60	Plainview	TX0950004	20,187	compliance measures based on the results of the existing sampling being performed under UCMR5.	P	\$1,000,000.00
5	55	Corsicana	TX1750002	54,650	Testing will be conducted on Corsicana's water supply. Testing at Lake Halbert, Navarro Mills, and Richland Chambers will attempt to identify the presence of PFOS, PFOA, and PFAS compounds. Additional testing on decant lagoons will be done to examine the presence of PFOS, PFOA, and PFAS compounds removed in the coagulation process.	P	\$10,000.00
6	55	Weatherford	TX1840005	36,251	This project includes monitoring for PFAS in the drinking water source and water treatment plant to complete planning activities related to control. The City of Weatherford also plans for expansion of their GAC contactor to address PFAS and other emerging contaminants, for which anticipated capital costs are included in this application.	PDC	\$26,202,671.00
7	50	Bridge City	TX1810001	9,500	The purpose of this project is to provide a new nanofiltration system to remove organic carbon from the raw water before chlorination. The project will also provide new piping, concrete foundations, filter cover, ground storage tank, pumping, controls, and modifications necessary to bring the Romero Water Well back into production. Romero Water Well was abandoned due to high levels of trihalomethanes (THM) in their finished drinking water. THM is considered a disinfection by product that results from chlorinating raw water high in organic carbons.	PDC	\$4,792,450.00
8	40	Laredo	TX2400001	256,153	Source Water Monitoring along the Rio Grande for Preventative Water Treatment Plant notification of contaminants. The City of Laredo water source is along the Mexico border and subject to an unknown array of potential water contaminants from sources outside of the United States and outside the EPA's knowledge of potential industrial wastes.	P	\$977,000.00
9	40	Corpus Christi	TX1780003	318,168	It has been proposed to add a third treatment train to the existing treatment facility to provide redundancy, and to improve treatment methods that can ensure compliance with the upcoming EPA proposed National Primary Drinking Water regulations on per- and polyfluoroalkyl substances (PFAS). Preliminary analysis will be conducted with bench scale and pilot testing to determine the most efficient and effective method of PFAS removal for the source water utilized to serve over 500,000 residents. Following the pilot study, design and construction of a full-scale treatment system that encompasses PFAS removal will be completed.	P	\$1,875,000.00

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10	40	Lubbock	TX1520002	263,930	Project will perform a PFAS treatability study and review any additional PFAS compliance measures based on the results of the existing sampling being performed under UCMRS.	P	\$4,000,000.00
11	40	Canyon Regional Water Authority		267,352	CRWA will be performing bench scale and pilot testing for PFAS removal at their Lake Dunlap Water Treatment Plant (LDWTP). This testing will be included in the planned Ozone feasibility study project. The testing will include two treatment technologies. The first technology will use the existing Nano filtration to remove PFAS and use Surface-Active Foam Fractionation (SAFF) for PFAS concentrated waste stream. The second technology will use existing advanced treatment with Ozone by adding ferric oxide and persulfate as a catalyst to remove PFAS from drinking water. However, the use of ferric oxide and persulfate with ozone will be evaluated carefully as this process will depend on the PFAS compounds present, pH of water, and other specific chemical characteristics of the water. This improvement will prepare CRWA for future PFAS regulation. The study will ensure that the CRWA is equipped to meet the new regulations and provide safe drinking water to its customers.	P	\$2,187,000.00
12	40	Arlington	TX2200001	394,266	The proposed project includes the source water monitoring, bench and pilot-scale testing, and conceptual design for PFAS treatment to address a known occurrence of PFAS compounds present in the City of Arlington's source water. The City intends to hire a third-party to develop a testing plan, and operate and maintain a pilot-scale plant using the existing pilot plant at its John F. Kubala Water Treatment Plant (JK WTP) to study the feasibility of using a GAC treatment strategy for PFAS removal. The City would then work with a third-party to develop a conceptual design.	PD	\$3,505,000.00
13	40	Fort Worth	TX2200012	1,381,310	Understanding PFAS levels in each source and whether there are seasonal variations is critical as the utility undertakes pilot testing of various PFAS removal technologies. The utility intends to conduct pilot testing of powdered activated carbon, granular activated carbon, and ion exchange treatment technologies (with a focus on carbon adsorption). Based on pilot testing results, a site-specific conceptual treatment scheme and life-cycle costs for each of the five drinking water treatment plants would be developed. The conceptual designs and cost estimates would be incorporated into the utility's five-year Capital Improvement Plan and later moved into construction for regulatory compliance with the proposed rule implementation schedule.	P	\$1,040,000.00
14	40	Houston	TX1010013	3,600,000	Planning, design and construction of treatment processes at existing water purification plants to treat for PFAS and other emerging contaminants. Initial phase being requested is for the evaluation and planning of the necessary improvements. Work to include technology evaluation, pilot testing, construction and operational feasibility, cost effectiveness and production of a preliminary engineering report (PER).	PD	\$4,000,000.00
15	40	San Antonio Water System	TX0150018	2,009,324	The proposed project includes initial sampling and laboratory testing to determine presence of any PFAS compounds and possible costs if PFAS are detected. In the instance that PFAS are detected the project includes GAC and anion exchange construction costs, as well plugging, and well drilling for new supplemental sources.	PDC	\$42,320,000.00
Total		15					\$175,620,496.00