

Mayor and Council Communication

DATE: 11/14/23

M&C FILE NUMBER: M&C 23-0964

LOG NAME: 22MOU TRINITY RIVER WATERWHEEL

SUBJECT

(ALL) Authorize Execution of a Memorandum of Understanding with the Tarrant Regional Water District to Pilot a Trinity River Waterwheel for Floatables Management to Support Community Litter Control Efforts

RECOMMENDATION:

It is recommended that the City Council authorize execution of a Memorandum of Understanding with the Tarrant Regional Water District to pilot a Trinity River waterwheel for floatables management to support community litter control efforts.

DISCUSSION:

The Memorandum of Understanding (MOU) with the Tarrant Regional Water District (TRWD) supports a partnership to install a waterwheel-powered trash interceptor known as a waterwheel. Upon installation, the pilot Trinity River Waterwheel Initiative will help to control floating litter, known as floatables, and will create opportunities for education and outreach to promote ongoing efforts to provide a clean city to the residents.

The City of Fort Worth (City) has outlined strategies to create and maintain a clean and safe community. Aligning with the City's goals and objectives, there is an ongoing need for collaborative efforts and engaging partnerships to address litter in the community and to protect surface water quality. The Trinity River Waterwheel Initiative will have a direct impact of removing floatables from the Trinity River using renewable energy through hydropower and solar power, which minimize energy costs and related maintenance.

The waterwheel is able to capture up to 50,000 pounds per day of floatable litter and debris from the Clear Fork Trinity River. By locating the stationary waterwheel on the Trinity River along the Trinity Trails System it is anticipated that – in addition to helping to keep the river clean – the waterwheel will also bring heightened awareness of community stewardship. To highlight the need for a waterwheel on the Trinity River, approximately 28,500 pounds of litter and debris were collected after a heavy rainfall event on August 21, 2022. This was collected along the banks of the Trinity River over a four-day period (mostly by hand) using staff and volunteers. That same year, TRWD's two Trash Bash volunteer litter clean-up events collected approximately 13,500 pounds of litter and debris from the Trinity River's banks. These cleanup events are indicative of the amount of floatables that contaminate the river.

In Fiscal Year 2021, the City, TRWD, and Streams & Valleys, Inc., a nonprofit organization that advocates for the Trinity River, began collaborating to solicit private donations to secure funding for the construction, installation, and maintenance of the waterwheel.

The adopted FY24 Budget for the Environmental Protection Fund included \$350,000 to cover one-half of the estimated capital costs, and the other half is in the TRWD FY24 budget.

A summary of funding to date is listed below.

Funding Source	Value
Private Donors	\$660,000 received or committed
Tarrant Regional Water District Funding	\$350,000
Environmental Protection Fund - Capital Funds	\$350,000

The TRWD Board of Directors approved the execution of this MOU on September 19, 2023. Under the MOU, operation and maintenance costs including debris removal/disposal will be shared between the City and TRWD. TRWD will be conducting the routine removal of collected debris to ensure continual operation of the waterwheel. Annually, the shared preventative maintenance costs are not expected to exceed \$75,000.00 per year. The term of the MOU shall be for five (5) years and may be renewed year-to-year for the expected lifespan of the waterwheel which is estimated to be more than 20 years.

Based on a tentative construction timeline for the waterwheel, estimated completion is set for Summer 2024. Construction activity timelines are subject to change based on weather conditions and contractors' availability.

A Form 1295 is not required because: This contract will be with a governmental entity, state agency or public institution of higher education: TRWD

FISCAL INFORMATION / CERTIFICATION:

The Director of Finance certifies that approval of this recommendation will have no material effect on City funds.

Submitted for City Manager's Office by: Valerie Washington 6199

Originating Business Unit Head: Cody Whittenburg 5455

Additional Information Contact: David B. Carson 6336