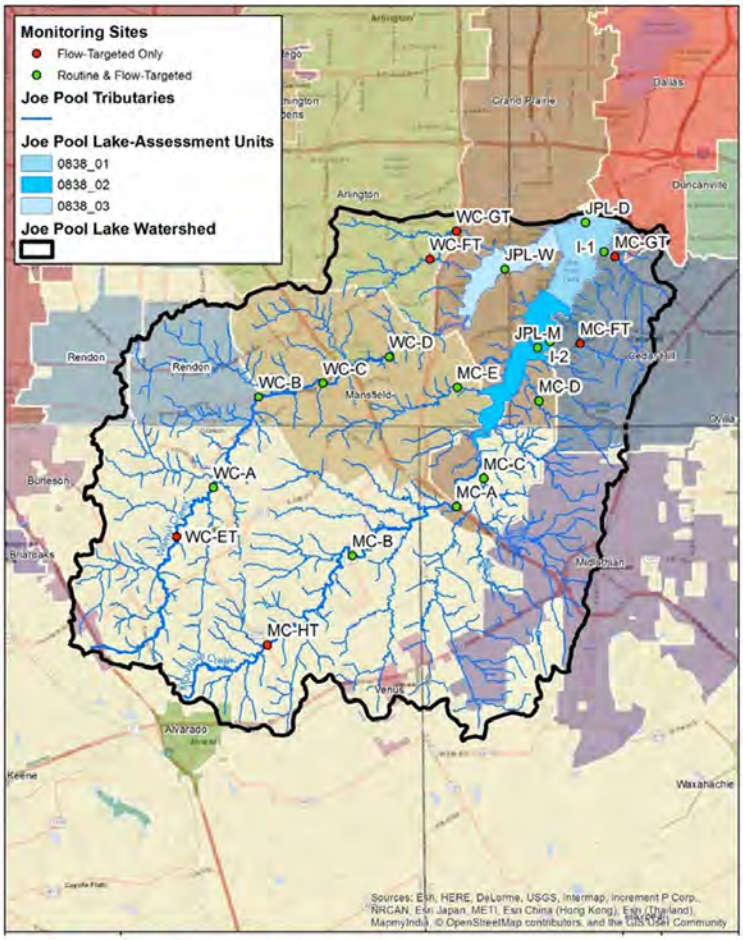
Joe Pool Lake

Watershed Protection Plan

Background

Joe Pool Lake (JPL) has a total drainage area of 304 sq. miles and is fed by the waters of Walnut Creek and Mountain Creek. Walnut Creek's headwaters are in the City of Burleson and flow approximately 24 miles northeast, emptying into JPL in southeastern Tarrant County. Mountain Creek's headwaters are in the City of Alvarado and flow approximately 19 miles northeast, emptying into JPL in northwestern Ellis County. The JPL watershed is comprised of urban areas in the northern end of the watershed, with industrial, municipal complexes and agricultural use throughout the center and southern extent. In 2014, segments of Mountain Creek had concerns for nitrate and Walnut Creek did not meet state water quality standards for bacteria. Both waterbodies have since been delisted. Currently, water from Joe Pool Lake is being withdrawn by the City of Midlothian as part of its municipal water supply. This water withdrawal is used to supply the communities of Venus, Rockett, Mountain Peak, Sardis, and parts of southern Grand Prairie. JPL is expected to be used as a future water source for many Dallas-Fort Worth cities. Two projects are occurring to develop a watershed protection plan (WPP) for JPL watershed to improve water quality and to mitigate future impacts of rapid urbanization.

River Basin: Trinity River
Water Body: Joe Pool Lake (Segment 0838)
Location: Dallas, Ellis, Johnson, and Tarrant Counties



Project Descriptions

Sept. 2018 – Feb. 2022

- Complete a characterization of the watershed
- Routinely conduct bi-monthly water quality monitoring and stormwater monitoring at 14 sites within JPL
- Develop a stakeholder group

Nov. 2019 – Feb. 2022

- Identify pollutant contributions
- Expand and define involvement of stakeholder groups
- Develop effective WPP that will provide implementation guidance for restoring water quality in the JPL watershed

Funding Agencies

- Texas Commission on Environmental Quality
- U.S. Environmental Protection Agency
- Local Partnership Group consisting of the Cities of Cedar Hill, Grand Prairie, Mansfield, and Midlothian and the TRA

For More Information

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