Using Reclaimed Water for Irrigation:
Transitioning from a Wastewater Treatment Plant to a Water Reclamation Facility and Reuse System

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City of Portales
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Prior Wastewater Treatment Plant built in 1975 had components that required replacement, did not provide for future growth, and was unable to consistently meet discharge requirements due to high strength industrial influent.

New Water Reclamation Facility and Reuse System improve potable water conservation and will allow reuse of 0.8 MGD to 1 MGD of Class 1A effluent for irrigation at city’s public parks.

The new facility and reuse system will significantly reduce the use of potable water for landscape irrigation and are anticipated to provide an approximate wellfield demand reduction of 25%.
Storage
11.4 MG
Effluent Storage at the Water Reclamation Facility

11 MG
Reclaimed Water Impoundment at the Recreation Complex
Disk Cloth Reuse Filtration System Diagram
11 miles of reuse pipeline installed to deliver 3000 GPM.

43 reuse hydrants installed.

Meter vaults installed at 7 city parks and cemetery to irrigate 684 acres.
Infrastructure Investment

Funding Sources Used:

* Clean Water State Revolving Loan Fund (EPA/NMED)
  * $26,580,000 zero percent interest loan
  * $420,000 grant
* Special Appropriations Act Project Grant (EPA/NMED)
  * $291,000
* Local Water/Wastewater Revenue Funds

* The project represents a substantial investment in vital infrastructure that will significantly influence the city’s ability to meet current and future water needs of the community

* The project is critical for the continued viability of Portales