

# North Central Texas



## Water Quality Project

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### Eagle Mountain Lake and Watershed Background Issues

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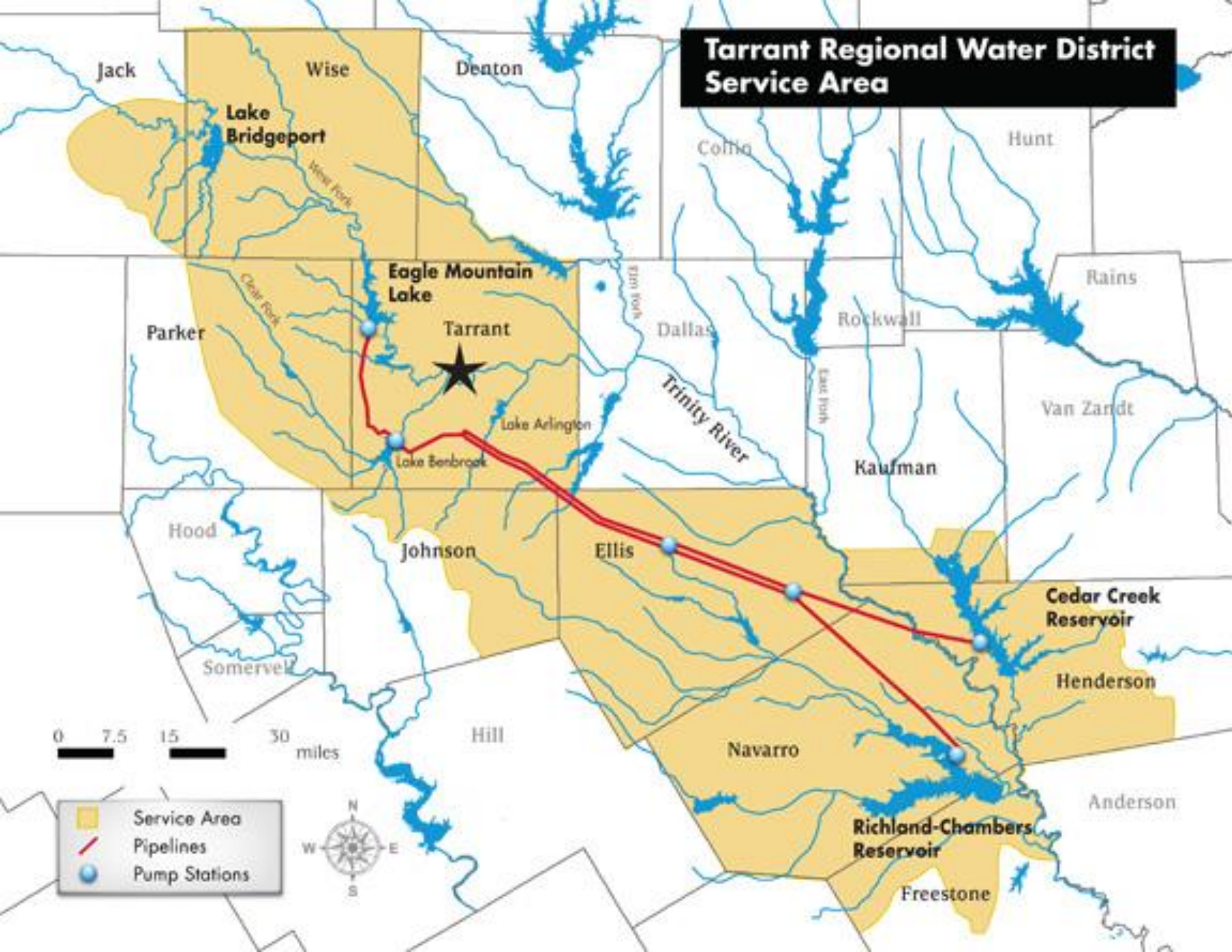
Texas AgriLife Research




Watershed Coordinator

North Central Texas Water Quality Project



# Tarrant Regional Water District Service Area



	Service Area
	Pipelines
	Pump Stations

# Eagle Mountain Watershed

- Watershed size – 860 square-miles
- Lake Surface area - 8702-acres
- Lake Conservation Storage - 182,505 ac/ft (1 acre foot= 325,851 gallons)



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### Eagle Mountain Lake Water Quality -

#### Reservoir

- High pH
- Sediment
- Use Concerns
  - Depressed Dissolved Oxygen
    - Aquatic Life Use Concern
  - Ammonia, Orthophosphorus, Total Phosphorus, Nitrite
    - Nutrient Enrichment Concern
  - Excessive Algal Growth, Chlorophyll-*a*
    - Algal Growth Concern



#### Watershed

- Texas Water Quality Inventory- Clean Water Act 303(d) Listing for
  - Bacteria (Upper West Fork Trinity below Bridgeport Dam)
  - Standards are currently under review

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### **Watershed Protection Planning for Eagle Mountain Lake**

- Analysis of point and non-point source pollutant sources utilizing local knowledge, ground surveys, and computer modeling.
- Planning Guided by 30% Reservoir Phosphorus Reduction Goal.
- Follows USEPA 9 Element Guidelines for watershed planning.
- Sub-watershed and site specific best management practice selection and implementation to reach stated pollutant reduction goal.
- Economic assessment of proposed management solutions.
- Management scenarios vetted through computer modeling
- Targeted Education and Outreach Programming.

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### Partners in Watershed Planning

