

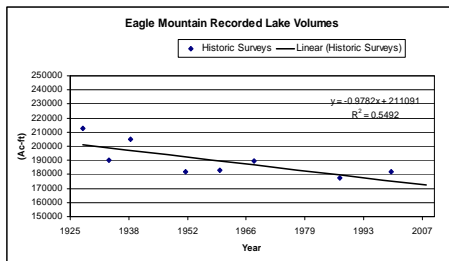
North Central Texas
Water Quality Project

**Eagle Mountain
Sediment Surveys**

Jennifer Owens
Environmental Division
Tarrant Regional Water District



North Central Texas
Water Quality Project



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**Baylor EM
Sediment
Cores**

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- Baylor Study
 - 2 Distinct Sediment Loads
 - A. Delta Sediment Density – 98 lbs/ft³
 - B. Pro Delta Sediment Density – 26 lbs/ft³
 - C. Average Density – 40.4 lbs/ft³
 - Historic Long Term Sed Rate:
427.3 Ac-ft/yr --> 376,000 tons/yr

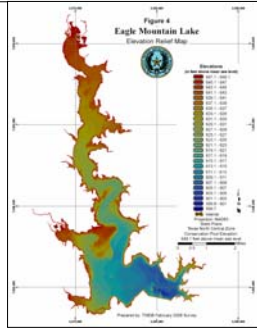
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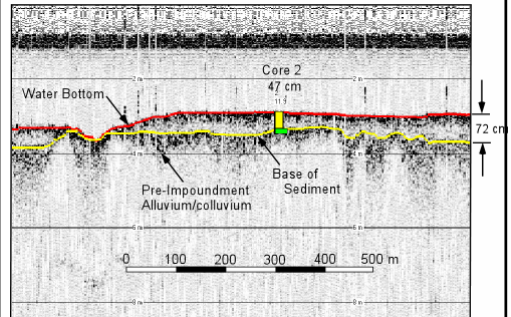
**TWDB EM
Survey Data
Collection
Transects**

Figure 31 - FWSA 2005 current data points for Eagle Mountain Lake. Grounding date used to assign sediment cores are shown at the

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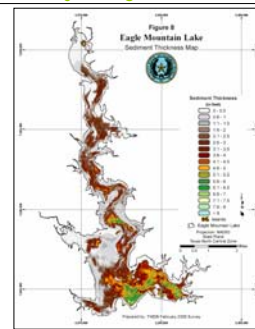
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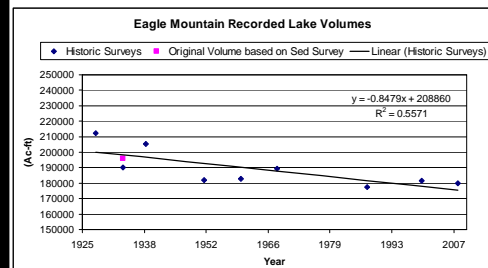


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EM Sedimentation Rates

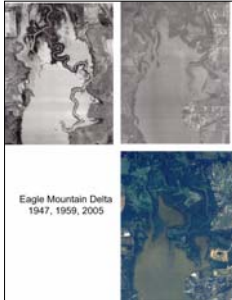
- **Baylor Study**
 - Long term average 427.3 ac-ft/yr
- **New 2008 TWDB Survey**
 - Volumetric Survey = 179,880 ac-ft
 - Equates to 408 ac-ft/yr
 - Sediment Survey = 15,861 ac-ft
 - Equates to 214 ac-ft/yr

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Eagle
Mountain
Historic Delta
Sedimentation

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Sediment Conclusions

- TWDB Sedimentation Survey may only include pro-delta sediment areas.
- Delta sedimentation areas may be impossible to survey due to lack of water.
- Volumetric Survey values may account for delta sedimentation in addition to pro-delta areas measured by sed survey.