Reservoir Modeling: WASP

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Tarrant Regional Water District
WASP Model

• An EPA developed and supported model
• The WASP Model has been used to provide a quantitative understanding of the nutrient balance for our reservoirs and to assess reservoir responses to external and internal nutrient load reductions.
North Central Texas Water Quality Project

Cedar Creek Reservoir Model Representation using WASP

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Vertical View
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Cedar Creek WASP Modeling Results
TP (1991-2001)
Cedar Creek WASP Modeling Results
TN (1991-2001)
North Central Texas
Water Quality Project

Cedar Creek WASP Modeling Results

Chl'a' (1991-2001)
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Cedar Creek WASP Model
Nutrient Budget – TP (1991-2001)
Cedar Creek WASP Model
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Cedar Creek WASP Model Nutrient Budget – TP (1991-2001)
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Cedar Creek Reservoir
Annual Chl’a’ Seg 4
Median and Percentiles (1991-2001)
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Chl'a' Segment 4: Reduction in SWAT *NPS File Loading – Median and Percentiles (91-01)