Turbidity-Based Load Estimates for the Guadalupe River Hydrologic Year 2003

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Guadalupe River, HY 2003

Discharge (cfs)
Guadalupe River, HY2003

- Estimated from turbidity
- Sampled
Guadalupe River HY03 Log-Log Model

$R^2 = 0.89$
Dec storms

Turbidity
Flow
Turbidity-estimated Load = 7388 tons
GCLAS-estimated Load = 7181 tons
Guadalupe Storm 2

Turbidity (NTU) vs. Flow (cfs)

Start

End

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Guadalupe River Storm 3

Turb-estimated load: 15.67 ton/mi²
GCLAS-estimated load: 9.56 ton/mi²
Guadalupe River Storm 4

Turb-estimated load: 21.78 ton/mi²
GCLAS-estimated load: 18.01 ton/mi²
Guadalupe River Storm 5

Turb-estimated load: 9.84 ton/mi²
GCLAS-estimated load: 7.77 ton/mi²
Guadalupe River Storm 6

Turb-estimated load: 2.44 ton/mi²
GCLAS-estimated load: 2.26 ton/mi²
Guadalupe River Storm 7

Turb-estimated load: 1.17 ton/mi²
GCLAS-estimated load: 0.98 ton/mi²
Guadalupe River Storm 8

Turb-estimated load: 1.21 ton/mi²
GCLAS-estimated load: 0.97 ton/mi²
Guadalupe River Storm 9

Turb-estimated load: 2.37 ton/mi²
GCLAS-estimated load: 2.86 ton/mi²

04/12/03
04/13/03
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Guadalupe Storm 9a

- Flow
- SSC by turb
- SSC by GCLAS
- Sampled SSC

Turb-estimated load: 2.64 ton/mi²
GCLAS-estimated load: 2.86 ton/mi²

Flow (cfs)
0 500 1000 1500

SSC (mg/l)
50 100 150 200 250 300

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04/13/03
Ann. SSC-turb

Guadalupe River, HY 2003

loess-predicted SSC