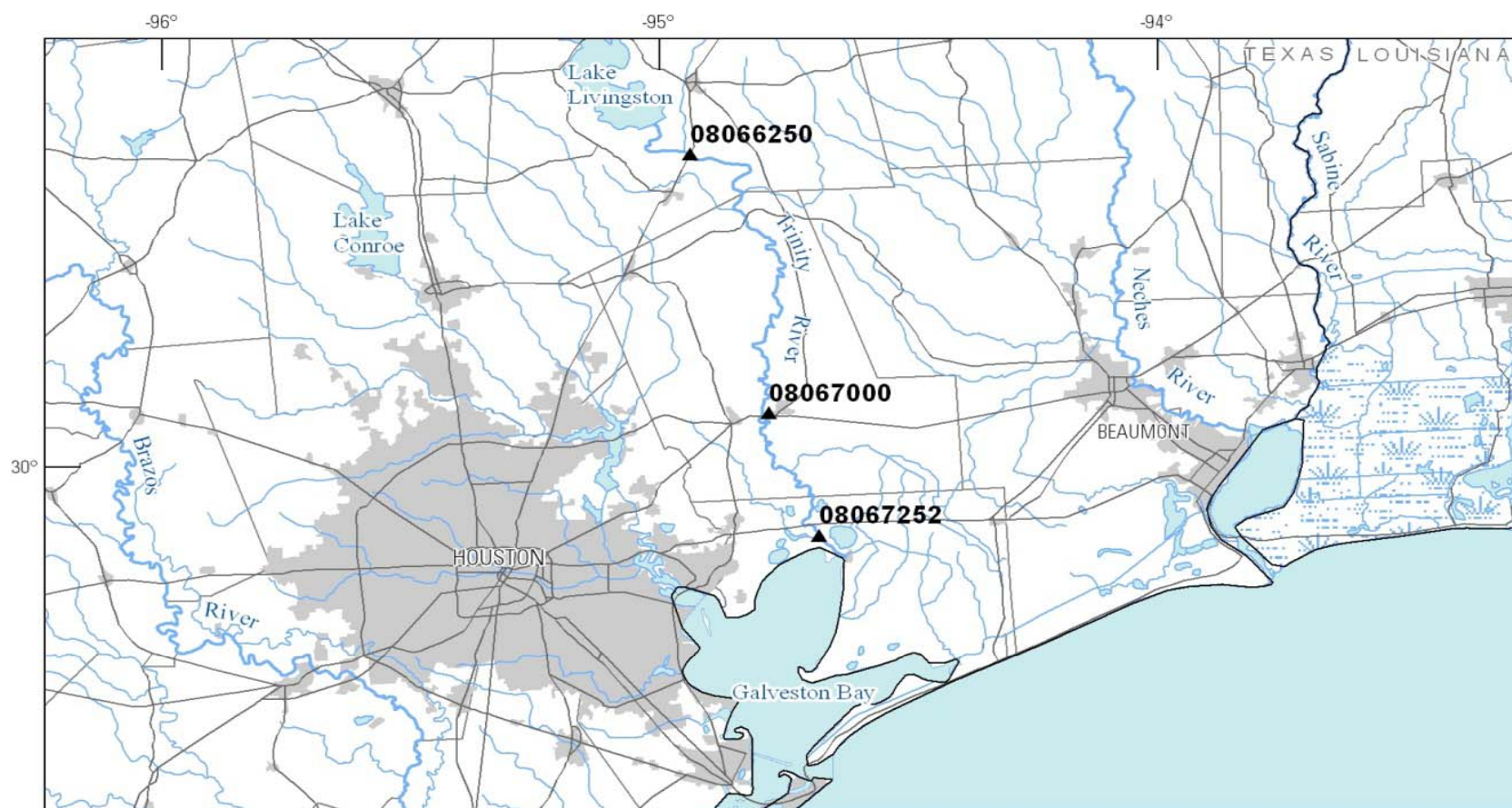


# A PRELIMINARY EVALUATION OF TRINITY RIVER SEDIMENT AND NUTRIENT LOADS INTO GALVESTON BAY, TEXAS, DURING TWO PERIODS OF HIGH FLOW

*Michael T. Lee*

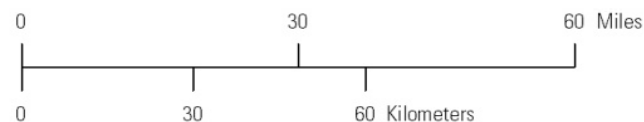


**U.S. Department of the Interior**  
**U.S. Geological Survey**



Base from:  
U.S. Geological Survey,  
The National Atlas of the  
United States 1:2,000,000

Texas Centric Mapping System  
Projection: Albers Equal Area  
Linear Unit: Meter  
Datum: North American Datum of 1983

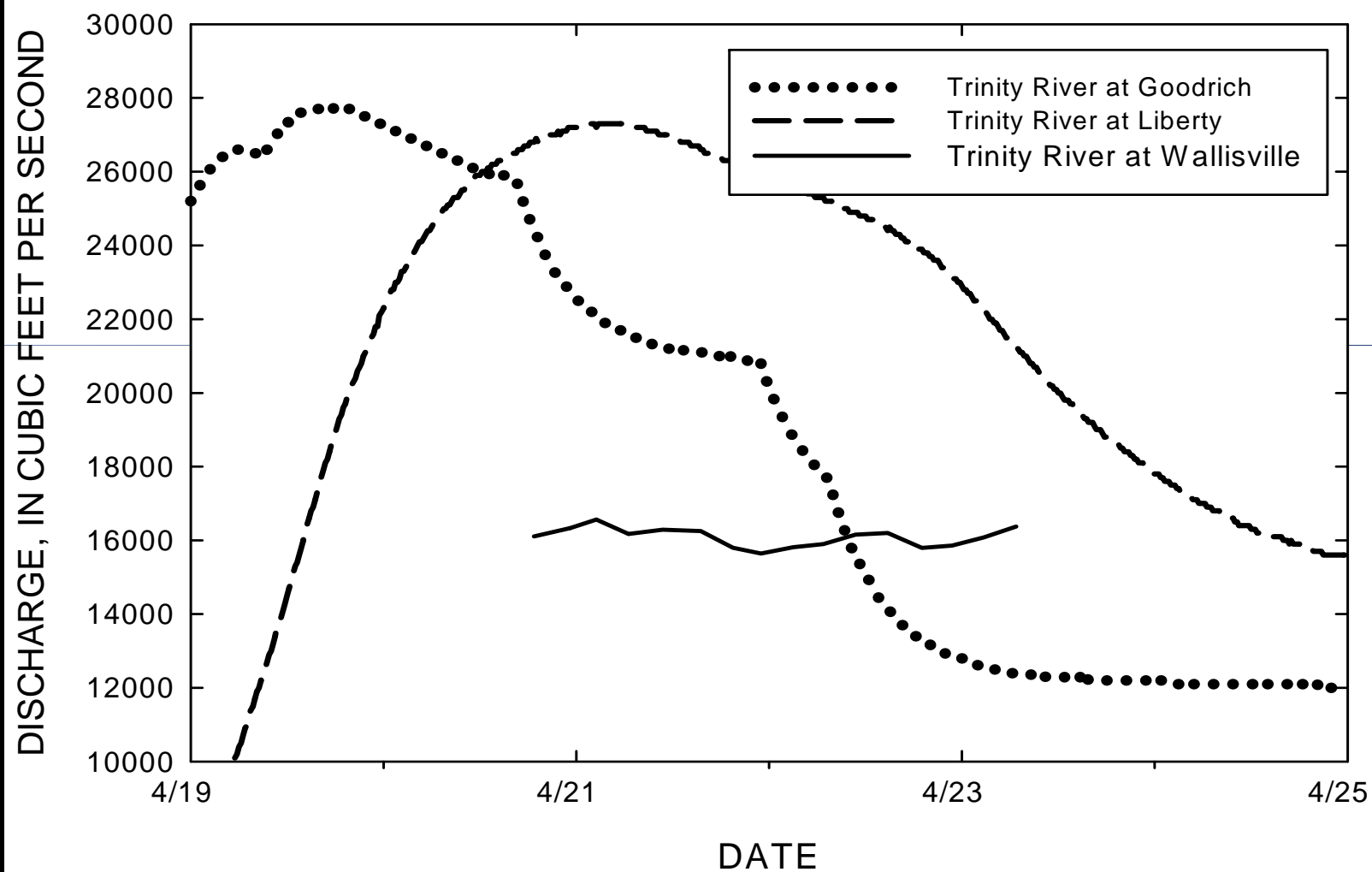


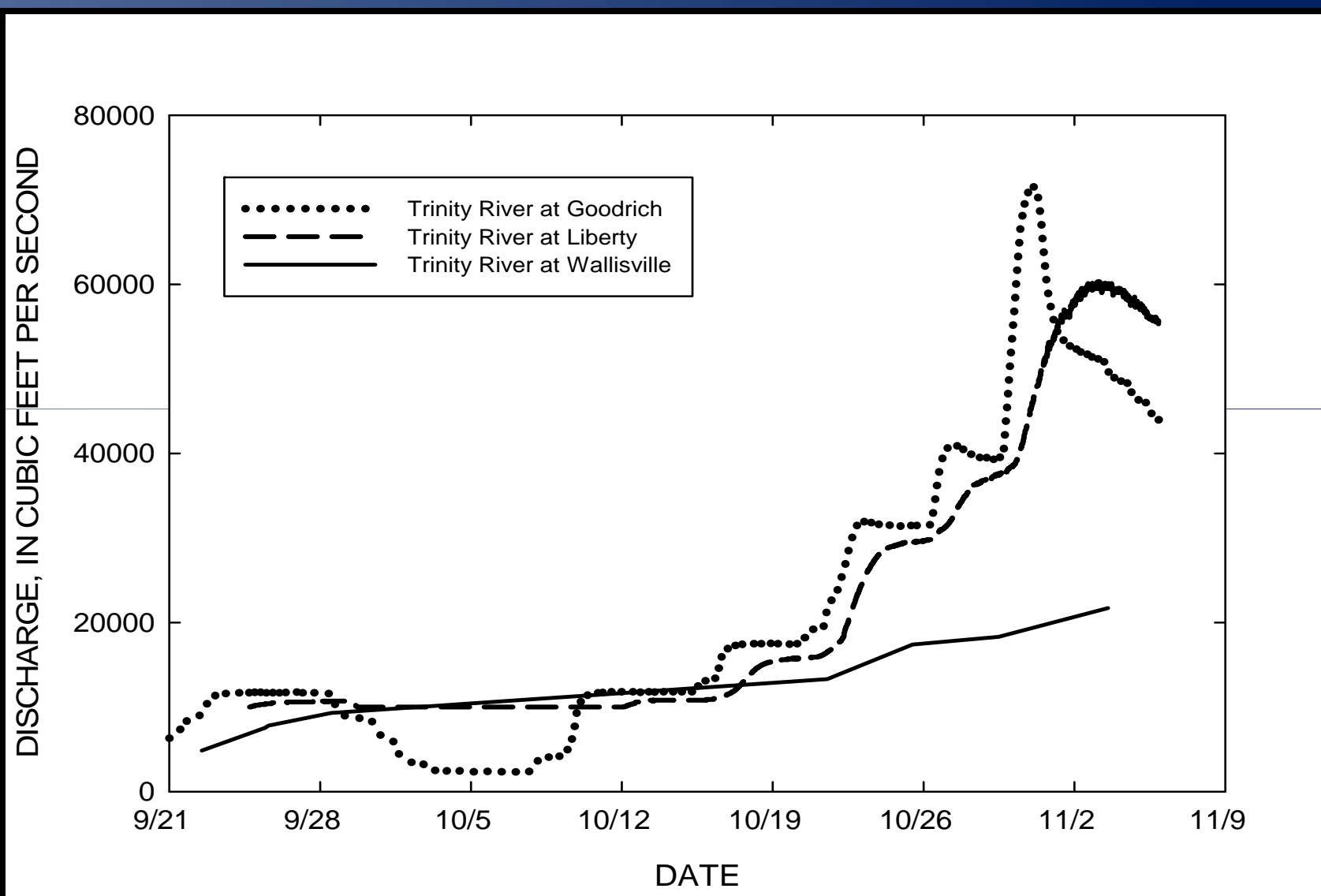
#### EXPLANATION

▲ Stream gage









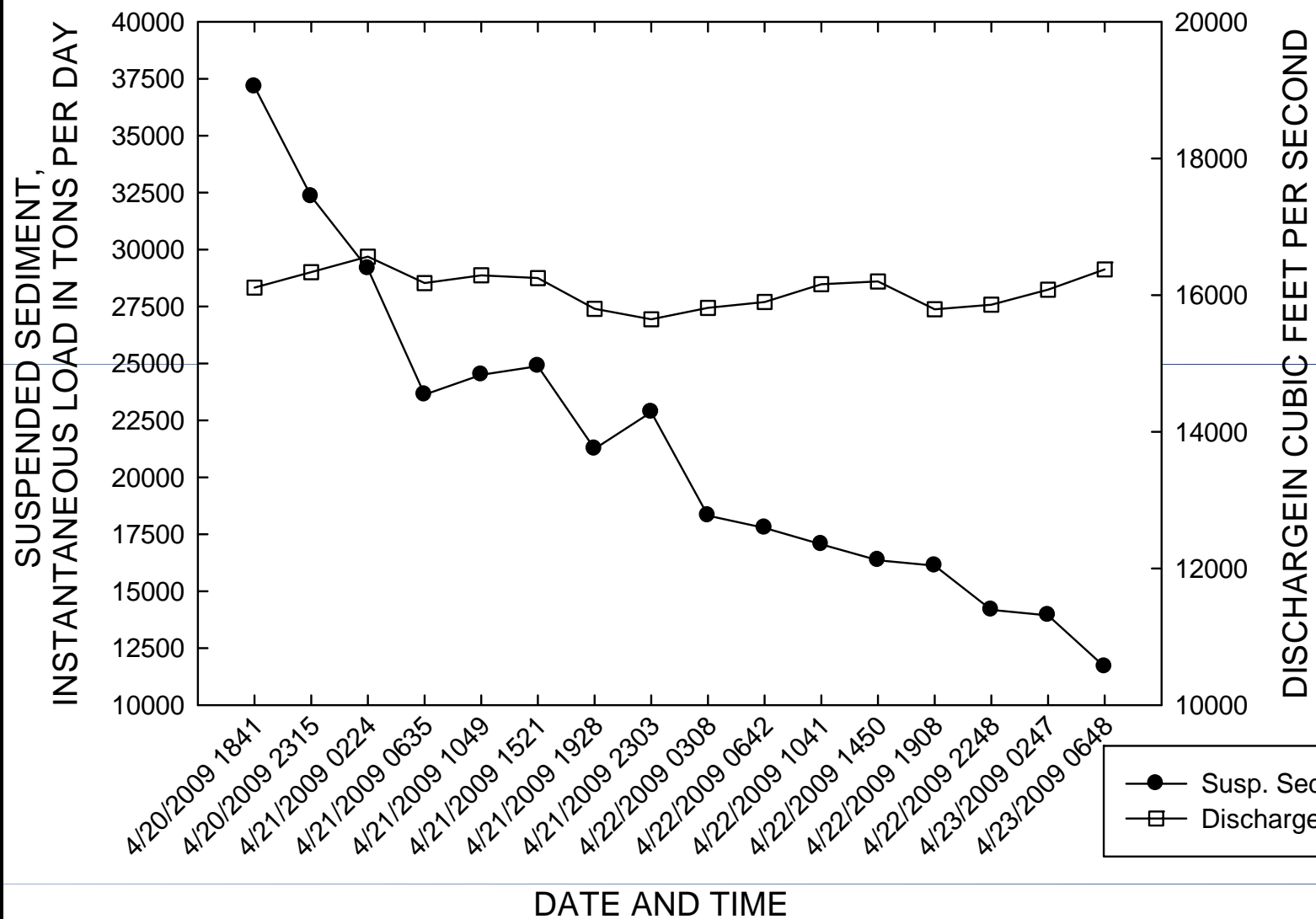


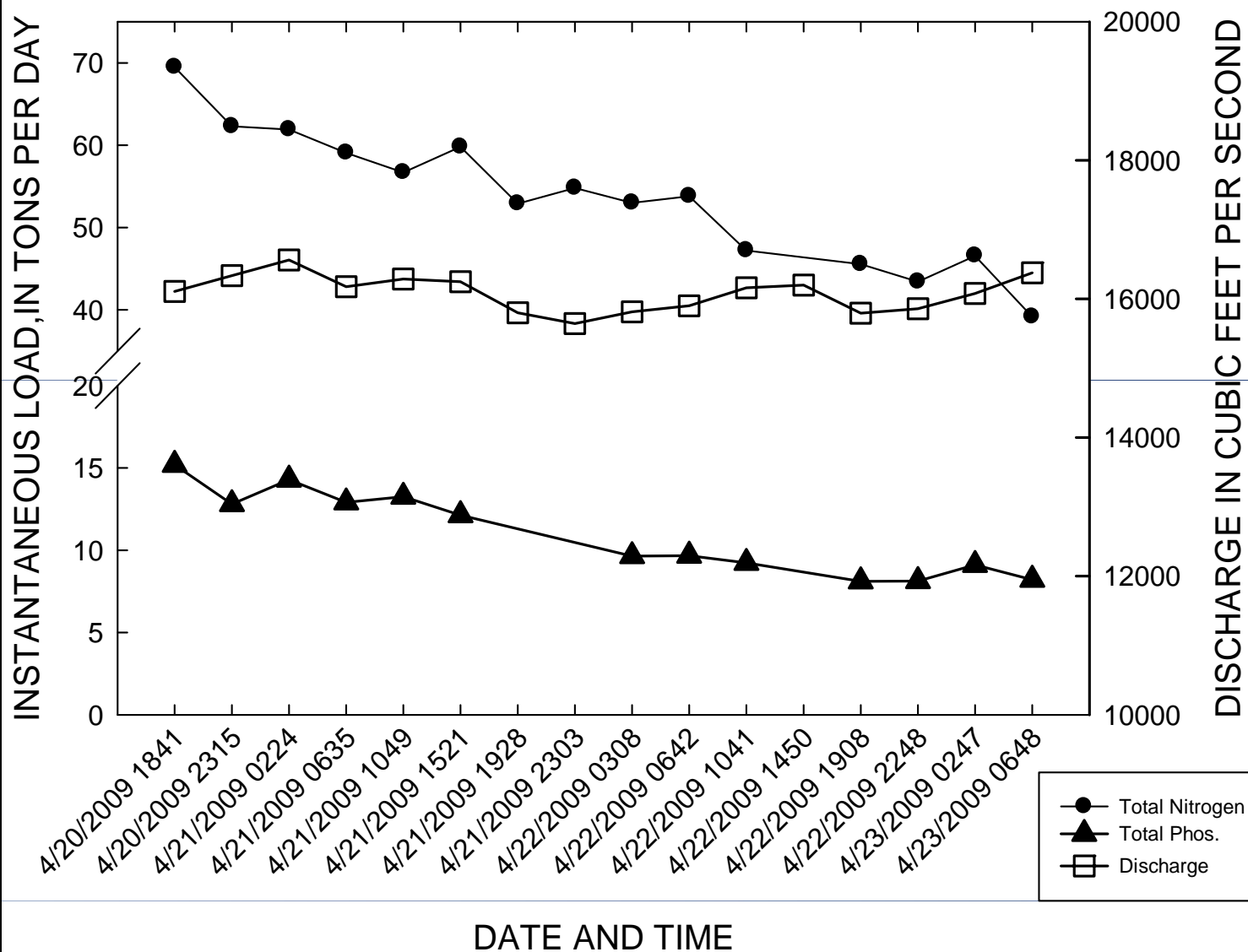
6/17/2010

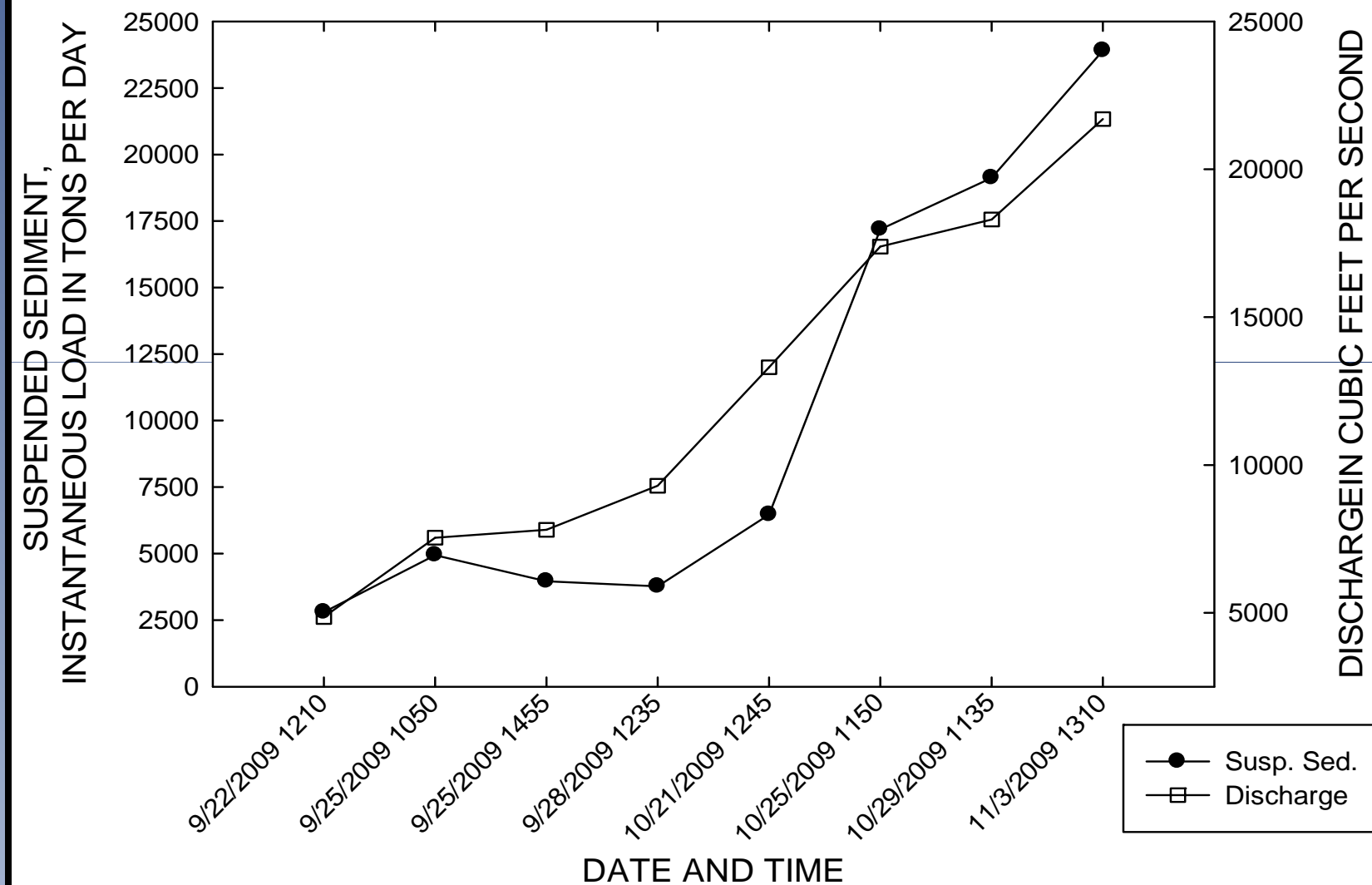


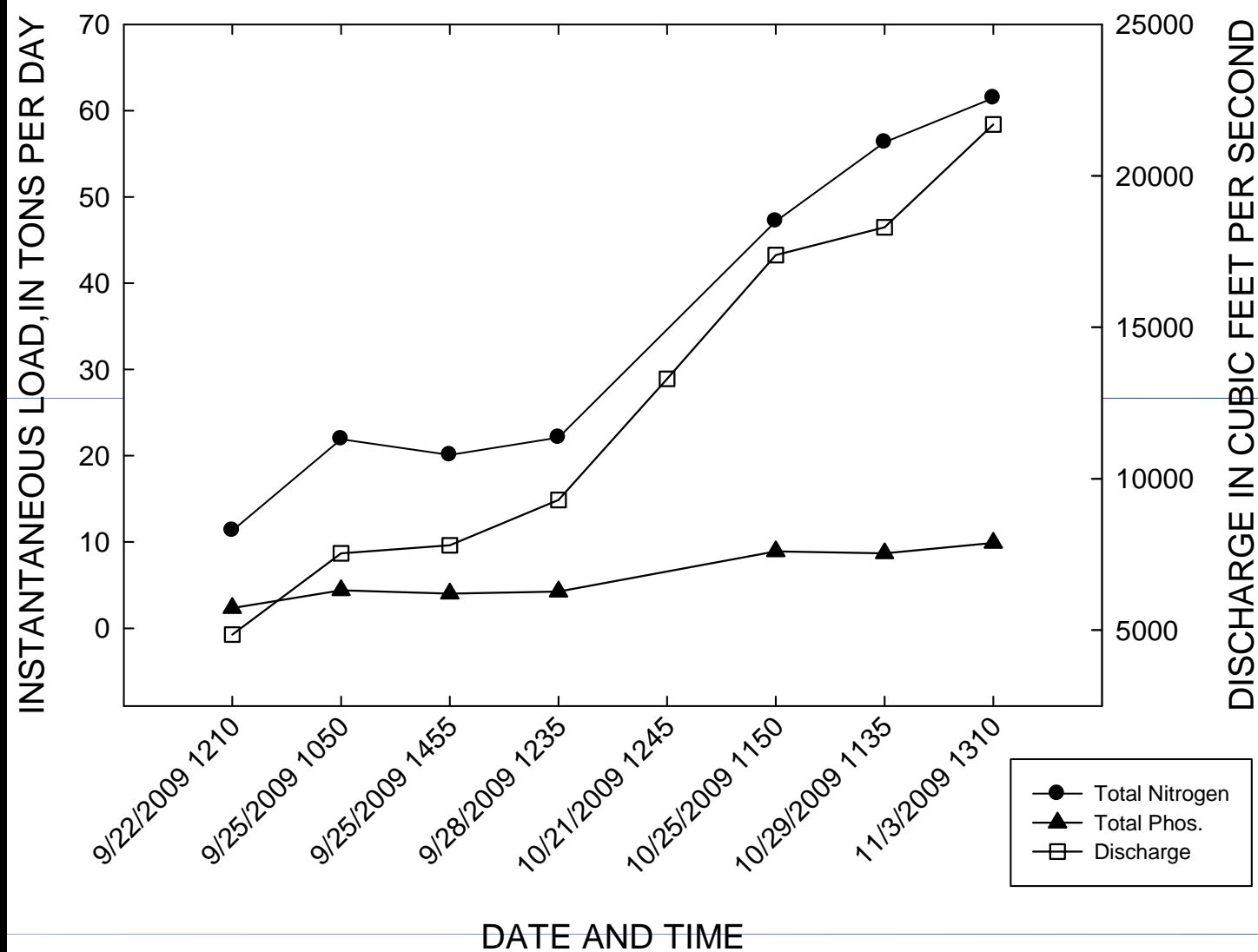


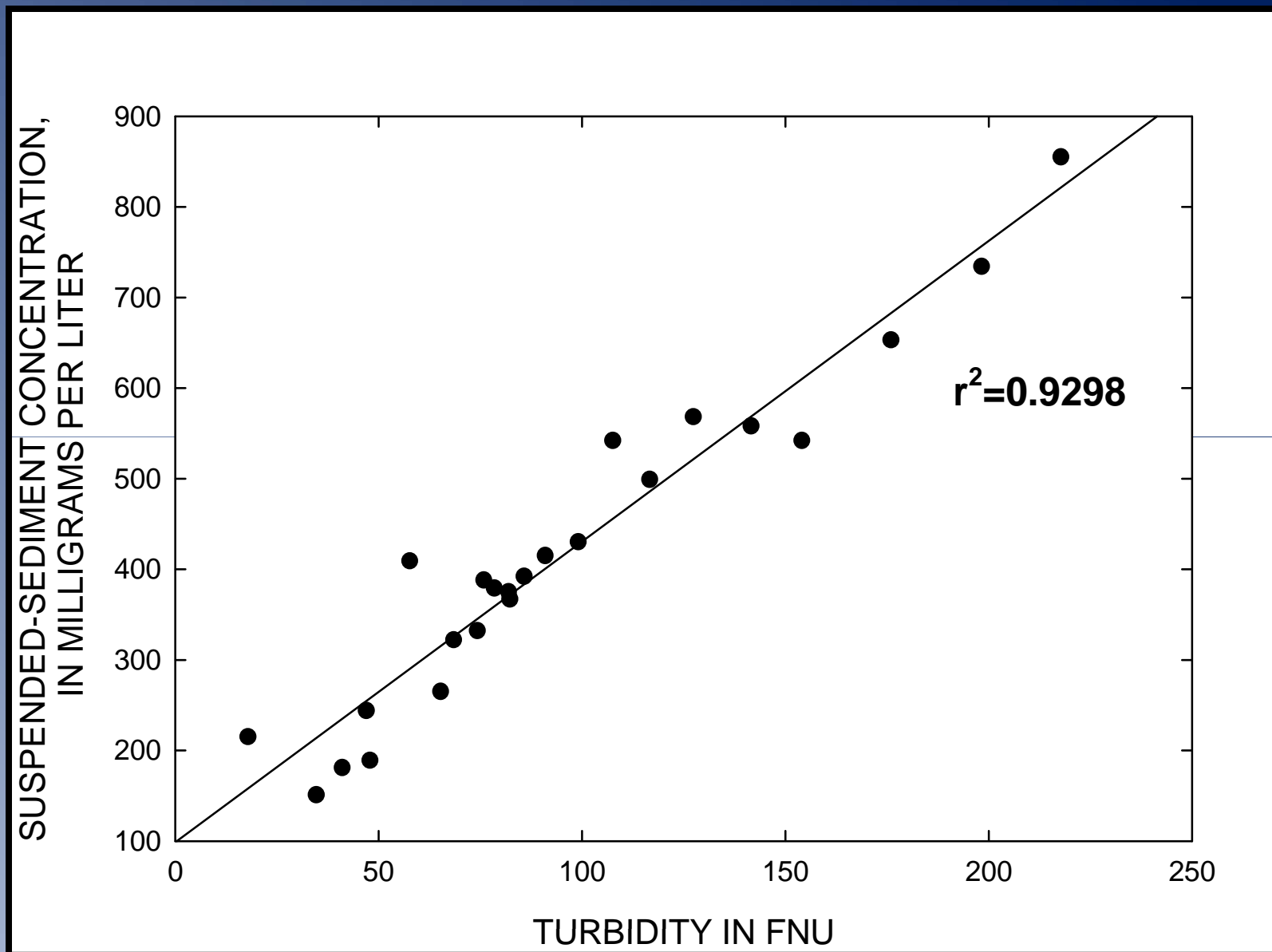
- ❑ Physical Water Properties  
Water Temperature, pH, Specific Conductance,  
Dissolved Oxygen Concentration, Turbidity
- ❑ Nutrients – Total and Dissolved Components  
Ammonia, Nitrite, Nitrite+Nitrate,  
Orthophosphate
- ❑ Sediment - Suspended Sediment Concentration  
and Sand/Fine Break





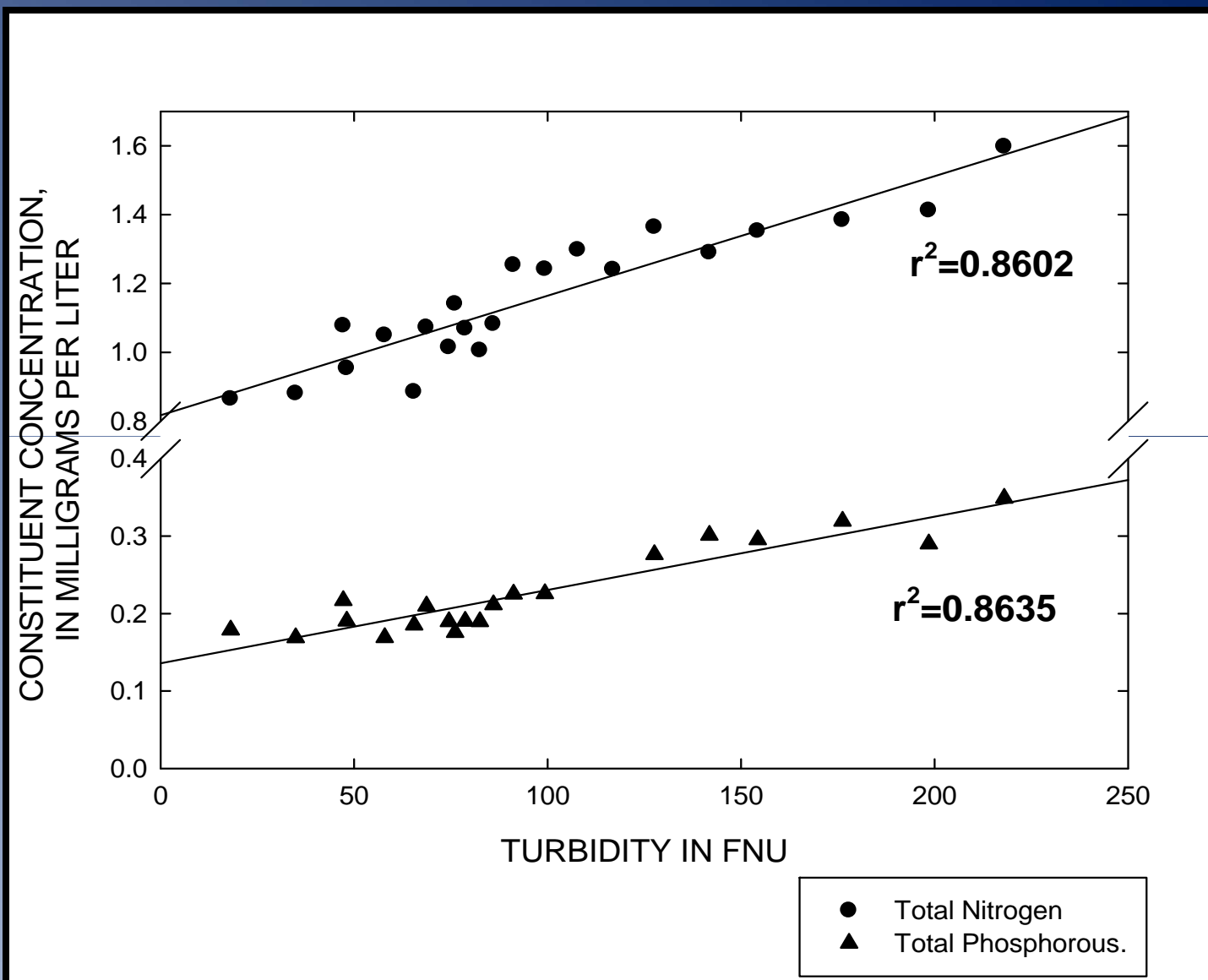






## Ranges of percentages of filtered component concentrations in total nutrient constituents

Constituent	April 20–23, 2009	September 22– November 3, 2009
Filtered ammonia ( $\text{NH}_3$ )	<LRL – 8.9%	<LRL – 7.6%
Filtered nitrite ( $\text{NO}_2$ )	0.5% – 1.5%	<LRL – 3.3%
Filtered nitrite + nitrate ( $\text{NO}_2 + \text{NO}_3$ )	11.0% – 13.8%	<LRL – 37.8%
Orthophosphate ( $\text{o-PO}_4$ )	<LRL – 6.6%	11.4% – 24.8%



# Contact Information



Michael T. Lee, [mtlee@usgs.gov](mailto:mtlee@usgs.gov)  
USGS Texas Water Science Center  
Gulf Coast Program Office  
19241 David Memorial Drive, Suite 180  
Conroe, TX, 77385