

# CLEAN RIVERS PROGRAM MONITORING

THE MEADOWS CENTER FOR WATER AND THE ENVIRONMENT  
AND WIMBERLEY VALLEY WATERSHED ASSOCIATION

No natural resource is more important to our future than Water. Water is what we do.

RESEARCH | STEWARDSHIP | SERVICE | EDUCATION | SERVICE



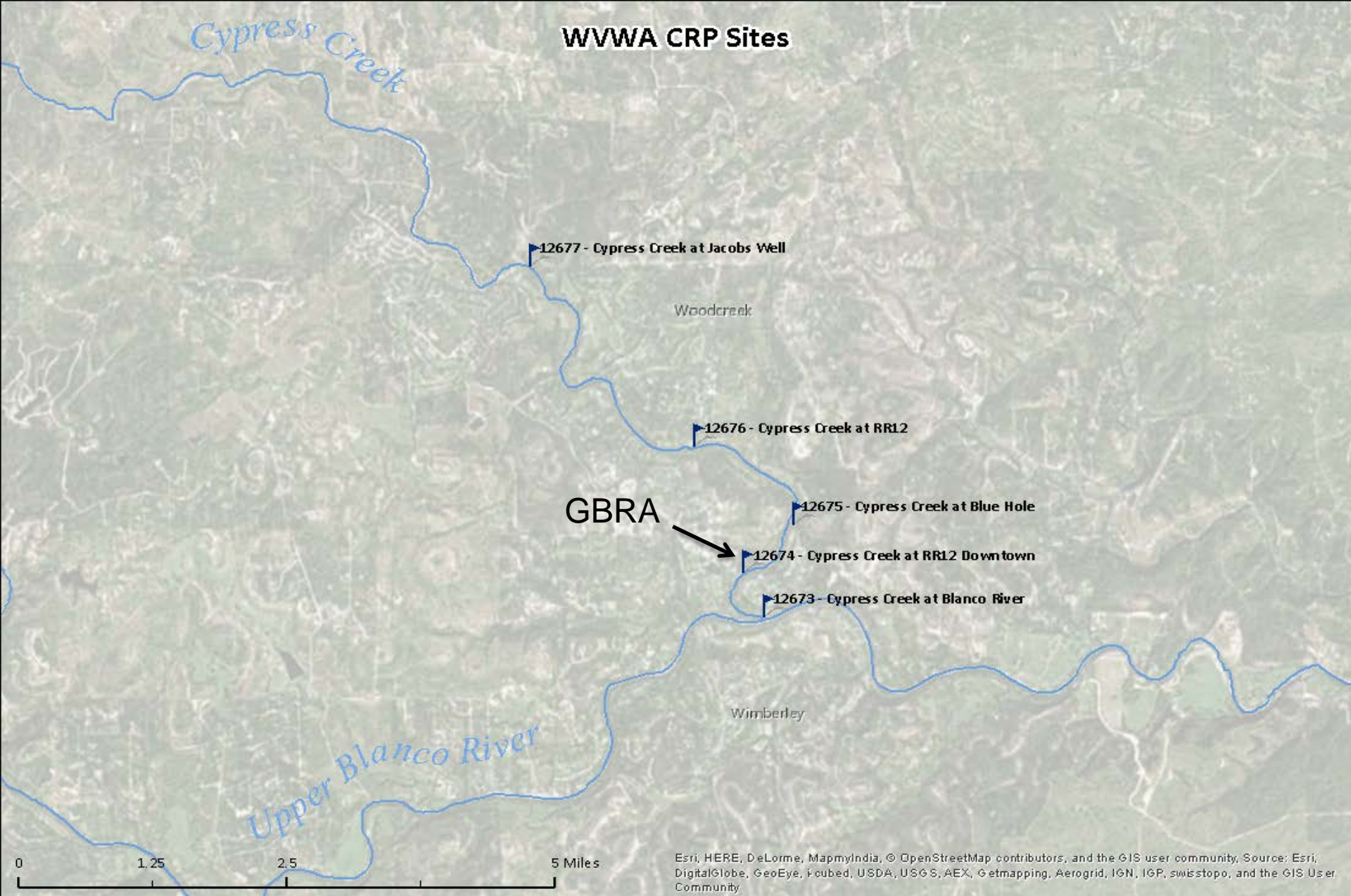
THE MEADOWS CENTER  
FOR WATER AND THE ENVIRONMENT

TEXAS STATE UNIVERSITY

# WIMBERLEY VALLEY WATERSHED ASSOCIATION

- A Clean Rivers Partner with GBRA
- GBRA monitors one site on Cypress Creek
  - Site 12674 “Cypress Creek at RR 12 Downtown”
- WVWA wanted more sites monitored along Cypress Creek
- Added 4 additional sites from Jacobs Well to Blanco River confluence
  - WVWA pays for analysis of samples
  - Also pays for technician from the Meadows Center for Water and the Environment to do monitoring (Me)
- Supports monitoring on the Blanco River as well

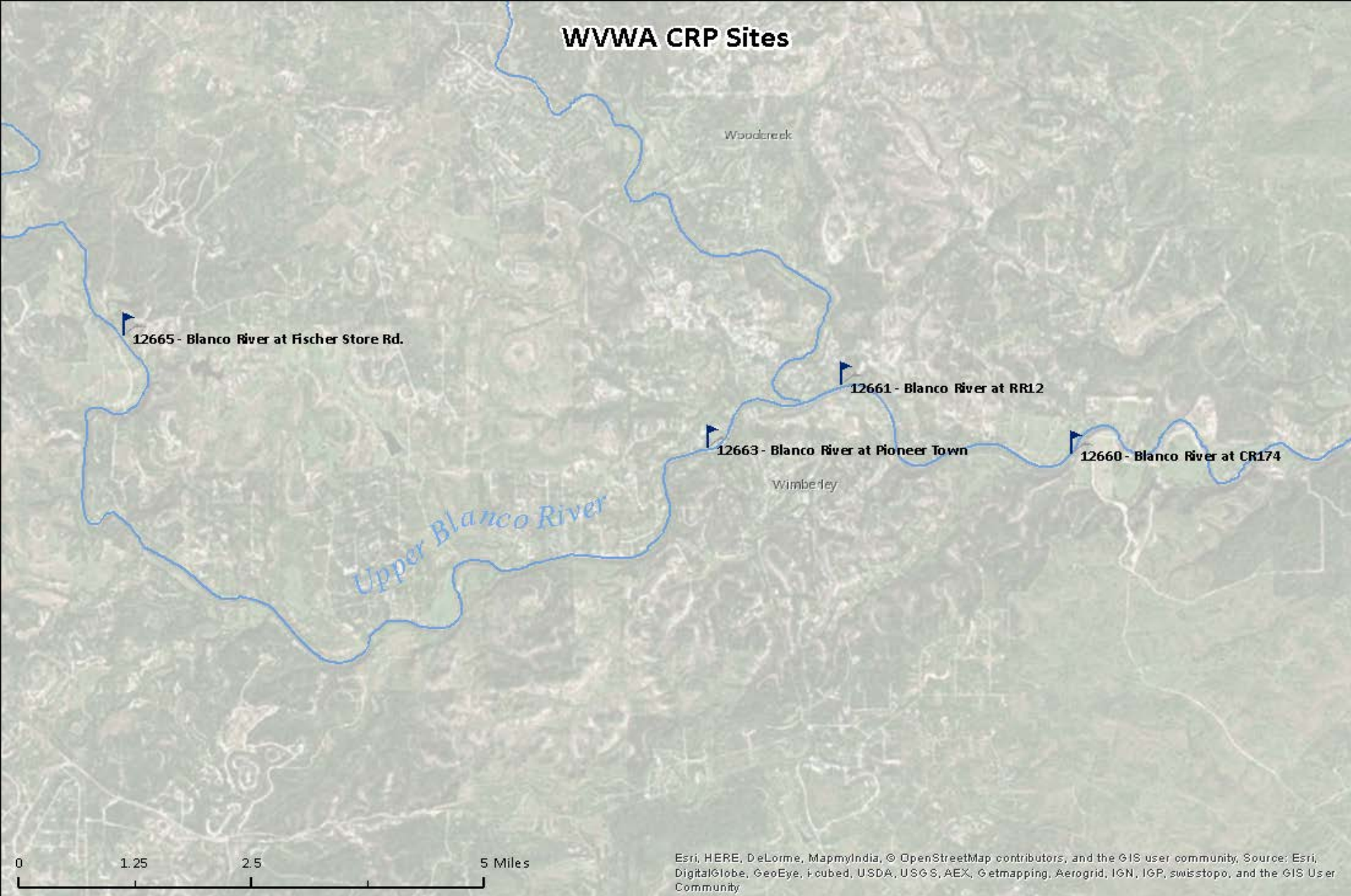
## WWWA CRP Sites



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# WVWA CRP Sites



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The Meadows Center for Water and the Environment  
201 San Marcos Springs Drive | San Marcos, TX. 78666  
Ph. 512.249.9200 | [meadowscenter@txstate.edu](mailto:meadowscenter@txstate.edu)

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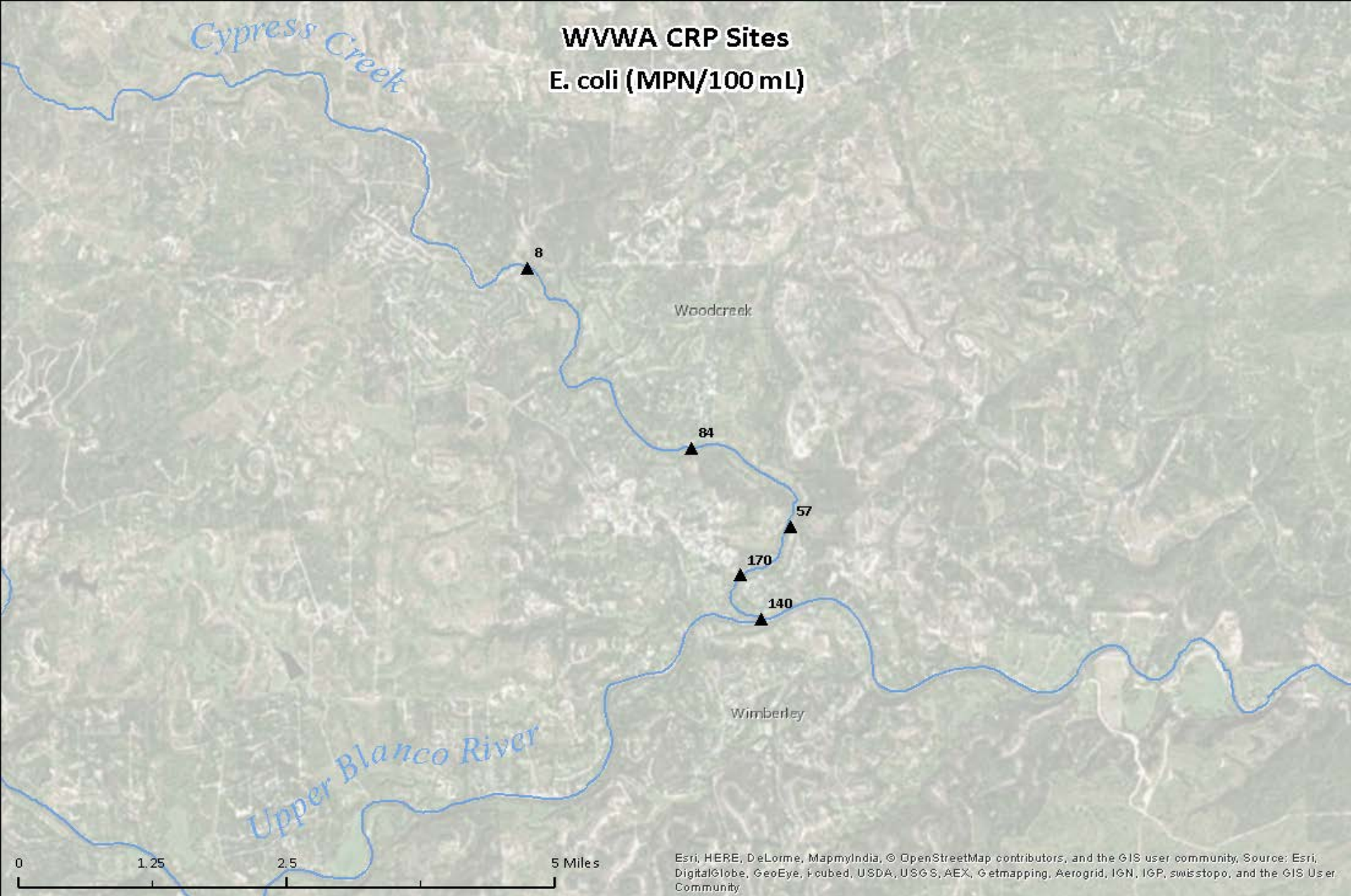
# Cypress Creek Data

Cypress Creek Data 3/17/1998 - 12/10/2014					
Parameter	Number of Samples	Mean ± Standard Deviation	Min	Max	Standard
Flow (CFS)	332	8.5 ± 18.6	0	265	N/A
DO (mg/L)	415	6.9 ± 2.0	0.7	12	6.0
Total Suspended Solids (mg/L)	396	2.5 ± 3.4	0.5	35	400
Conductivity μS/cm	426	558 ± 61	369	916	N/A
Temperature (°C)	437	20.8 ± 4.0	8.4	32.4	30
pH	409	7.5 ± 0.4	6.3	9	6.5 – 9.0
E. coli (MPN/100 mL)	407	59	1	3800	126*
Ammonia (mg/L)	387	0.09 ± 0.08	0.02	0.92	N/A
Nitrates (mg/L)	403	0.29 ± 0.30	0.02	1.73	1.65*
Total Phosphorus (mg/L)	390	0.05 ± 0.04	0.01	0.6	0.69*

# Blanco River Data

Blanco River Data 1/13/1998 - 12/10/2014					
Parameter	Number of Samples	Mean ± Standard Deviation	Min	Max	Standard
Flow (CFS)	269	142 ± 516	2	4430	N/A
DO (mg/L)	323	8.8 ± 1.7	3.5	13.7	6.0
Total Suspended Solids (mg/L)	289	4.2 ± 7.0	0.5	49.7	400
Conductivity μS/cm	341	477 ± 62	341	838	N/A
Temperature (°C)	343	21.7 ± 6.0	9.1	36.5	33.3
pH	326	8.0 ± 0.3	6.8	9.3	6.5 – 9.0
E. coli (MPN/100 mL)	285	61	2	4800	126*
Ammonia (mg/L)	278	0.07 ± 0.08	0.02	0.3	N/A
Nitrates (mg/L)	287	0.26 ± 0.22	0.02	1.07	N/A
Total Phosphorus (mg/L)	283	0.01 ± 0.05	0.04	0.2	N/A

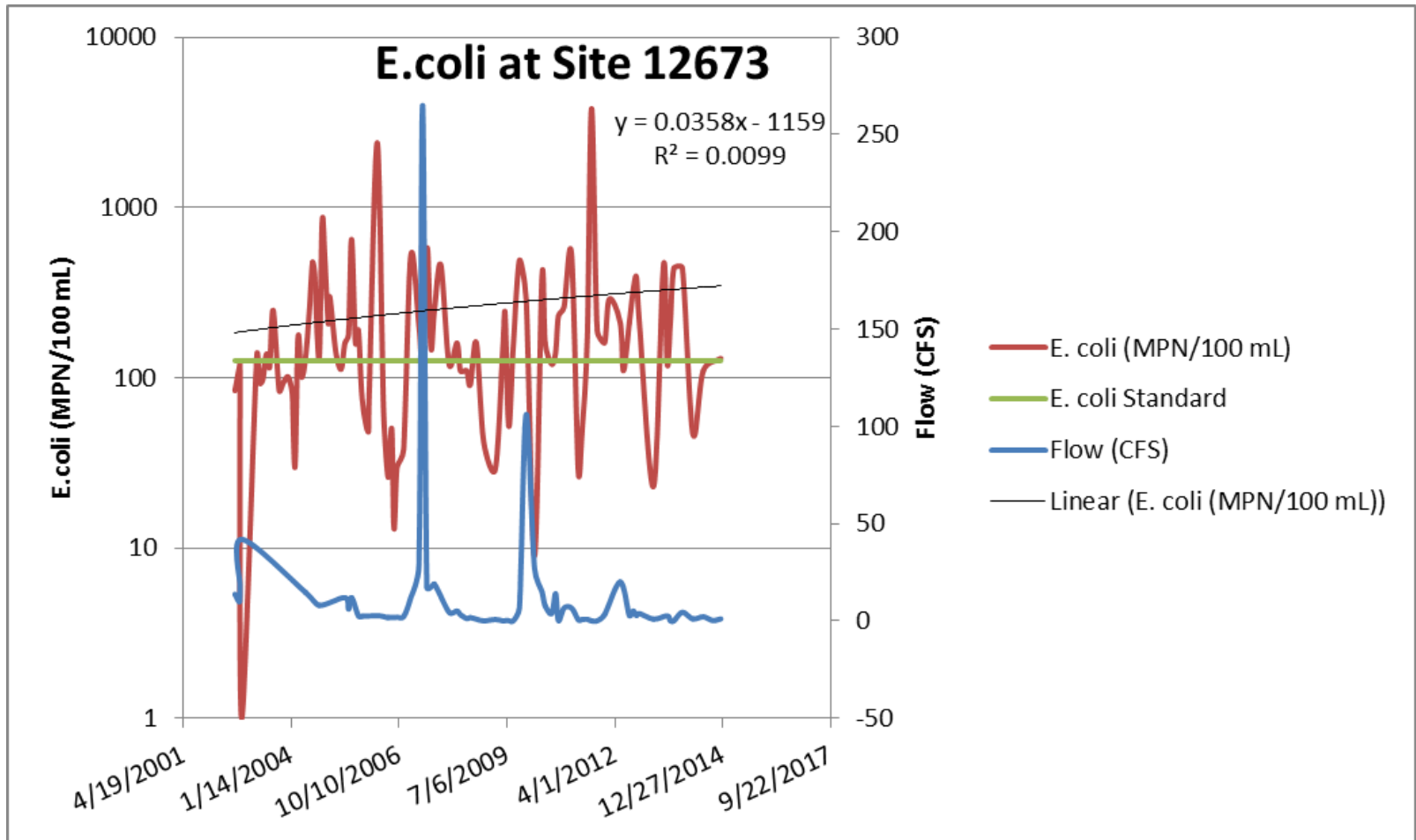




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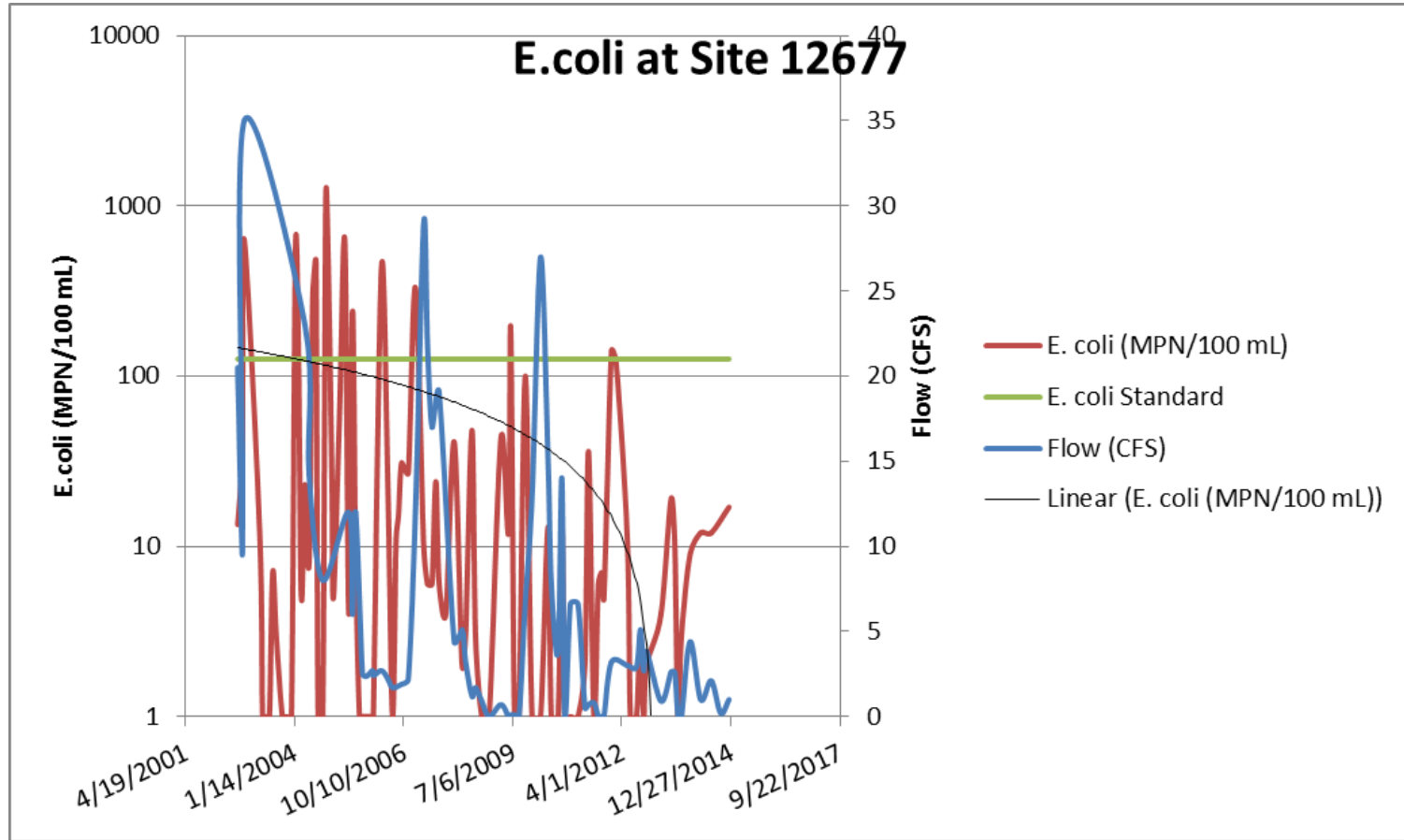
# E. coli at Blanco River Confluence



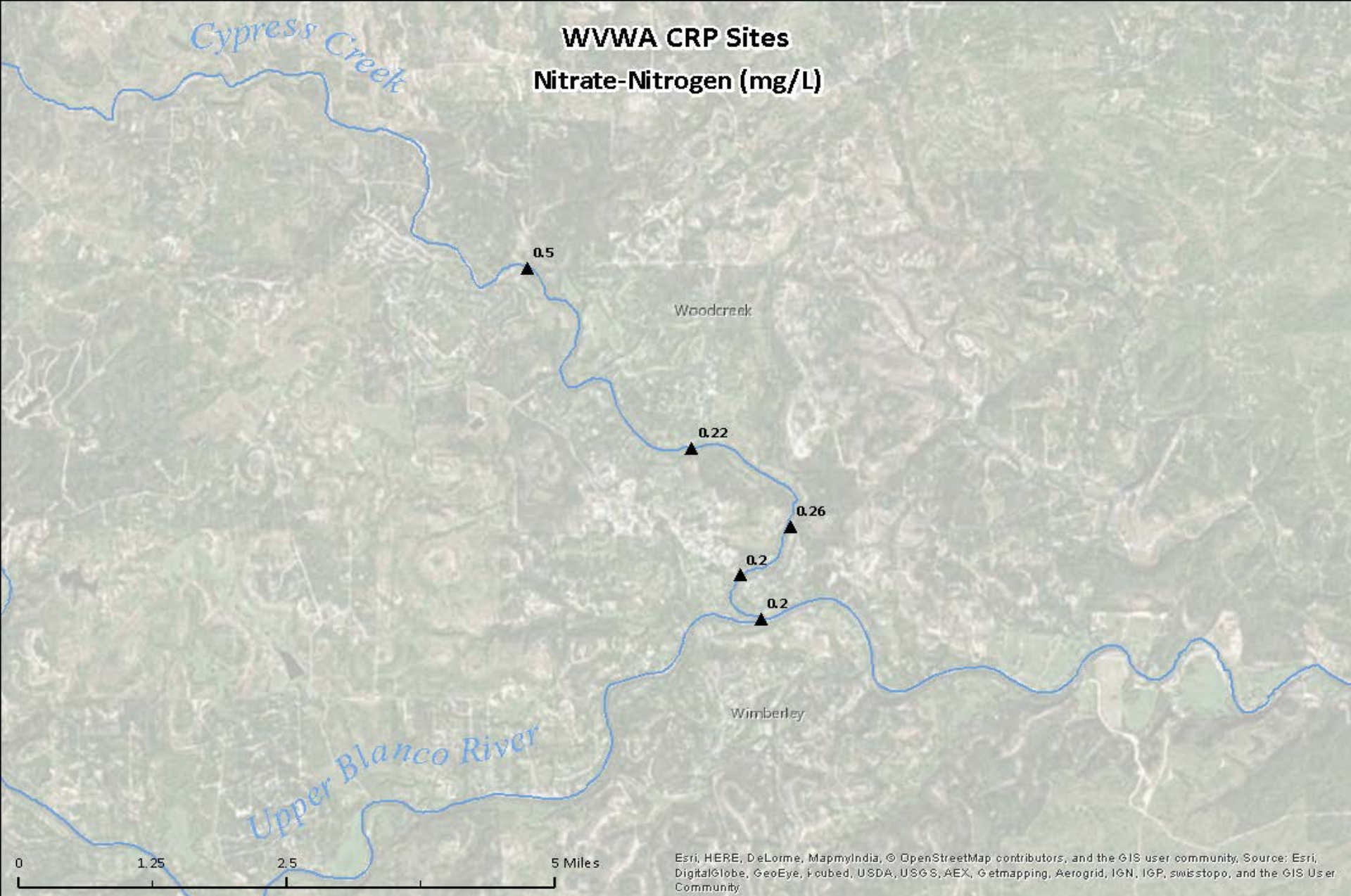
P = 0.341 (Minitab)



# E. coli at Jacob's Well



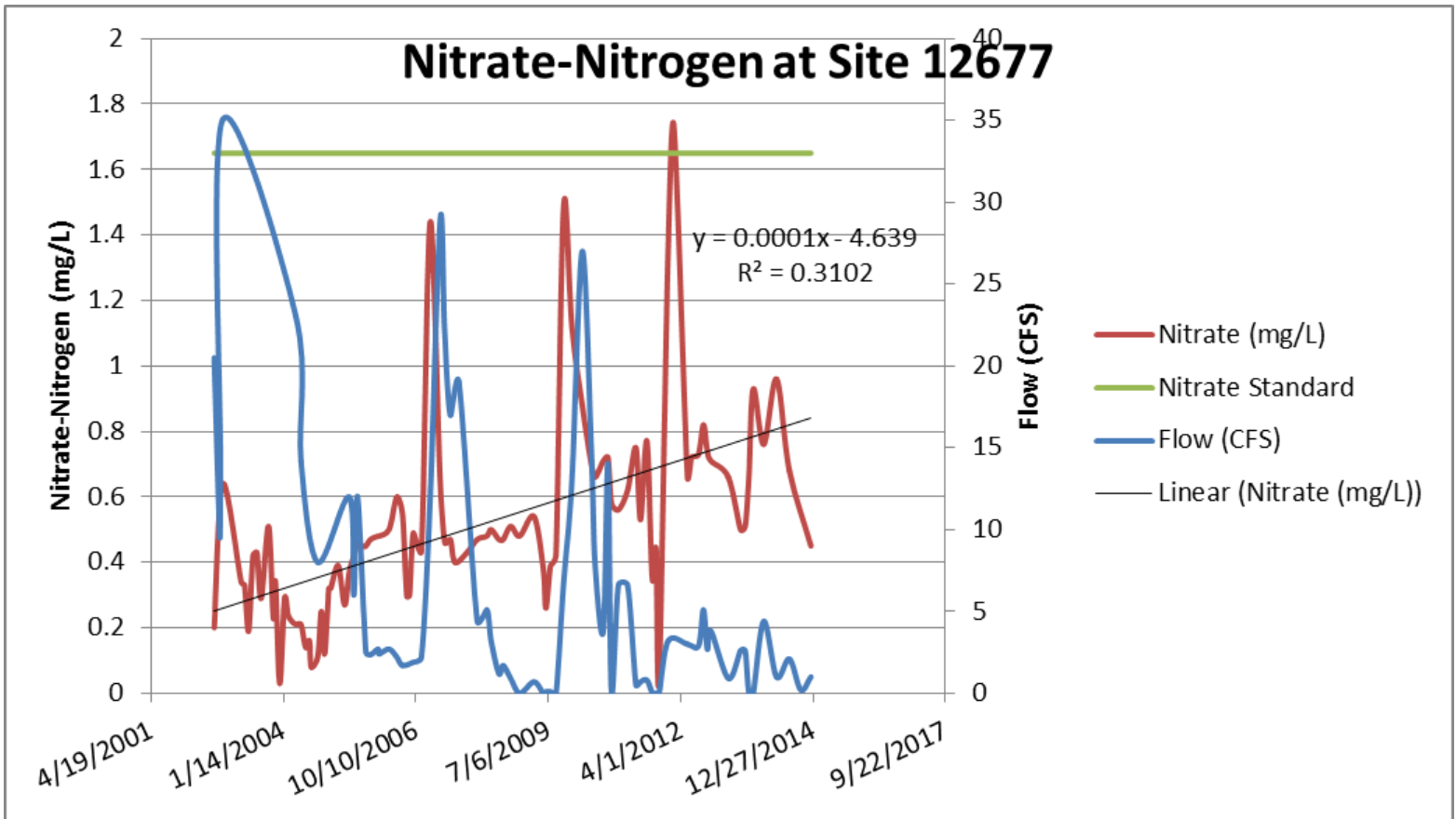
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# Nutrients at Jacob's Well



P < 0.000 (Minitab)

# THANK YOU

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