Guadalupe River Basin Clean Rivers Program

2005

Steering
Committee Meeting

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Project Administration:

Progress Reports and Invoicing

Management of Sub-Agreements with

UGRA and PBS&J

Attendance on CRP meetings

Guadalupe River Basin Clean Rivers Program

2004 Activities and Deliverables

Quality Assurance:

- Develop and maintain Quality Assurance Project Plan
- Develop QAPP for special studies
- Coordinated Monitoring Meetings

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Water Quality Monitoring:

19 Monitoring Sites – Monthly (GBRA)
7 Monitoring Sites – Quarterly (GBRA)
1 Special monitoring – Bimonthly (GBRA)
10 Monitoring Sites – Quarterly (UGRA)
8 Sites Biological/Habitat Assessments (GBRA and UGRA) – Semi-annually (5); Annual (3)
8 Sites Metals – Annually (GBRA and UGRA)
19 Sites E. coli – May thru August (UGRA) weekly
3 Diurnal sites – GBRA and Wimberley Valley
6 Monitoring sites – Monthly (Wimberley Valley)

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Water Quality Monitoring (cont.):

Systematic site now a monthly routine site:

Plum Creek at Plum Creek Road

Bimonthly monitoring on Peach Creek

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Water Quality Monitoring (cont.):

Special monitoring study:

Nutrient study on Lakes Dunlap and McQueeney

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Data Management and Watershed Inventories:

Submit data files to TCEQ monthly

Data available on website in Excel or PDF

Events Inventory

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Data Analysis and Reporting:

Basin Highlights Report

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Public Participation and Outreach:

- Website
- Texas Watch
- Middle School Curriculum
- Presentations

Guadalupe River Basin Clean Rivers Program

2005 Activities and Deliverables

Special Studies:

None planned for 2005

Guadalupe River Basin Clean Rivers Program

- 2004-05 Budget
  - $271,046 + $41,500 + $8,700 = $320,616
  - 2 contract amendments

Guadalupe River Basin Clean Rivers Program

- Highlights of 2004-05 Work Plan:
  - Monitoring:
    - Systematic site on Plum Creek in Hays County has become routine monthly monitoring site
    - Systematic site added to Peach Creek due to potential water quality impacts from a hog farm (bimonthly)
    - Continue to work with participants in program – Village of Wimberley, UGRA
    - Diurnal monitoring on Lake McQueeney
    - Special data collection/nutrient study of upper lakes
    - Coordinate with other monitoring projects if possible

TNRCC Segment	1804												
TNRCC Station	14937												
Station Number 16	Peach Creek at FM 1680												
Latitude 29/38/24	Longitude 97/13/48												
		Date and 24 hour time											
	Parameter	9/15/03	11/4/03	1/12/04	3/8/04	5/20/04	7/14/04	9/13/04	11/9/04	1/7/05		Mean	Range
Parameter	Code	1048	1100	1323	1112	1103	1332	1012	1023	1101			
Flow (cfs)		278	<0.1	0.26	2.05	6.14	1.61	<0.1	14.7	5.2		4.99	<0.1 - 14.7
E. coli(org/100mL)	31648	9680	30	21	237	160	75	291	**	329		163	21-329
Suspended Solids(mg/L)	00530	364	35.7	9.9	32.9	31	6.1	12.6	18.9	8.8		19.5	6.1 - 35.7
Turbidity(NTU)	82079	328	30.7	53	60	37.4	12.1	15.5	25.9	11.4		30.8	11.4 - 60
pH	00400	8.37	8.06	8.14	7.63	8.18	7.89	7.61	7.99	8.05		7.94	7.61 - 8.14
Temperature(C)	00010	23.4	20.8	10	16.6	24.2	26.5	23.9	16.4	12.2		18.8	10 - 26.5
Dissolved Oxygen(mg/L)	00300	6.33	1.02	6.55	7.12	6.2	2.81	1	8.23	8.66		5.20	1 - 8.66
Conductivity(umhos/cm)	00094	144	282	612	456	541	807	691	341	991		590	282 - 991
Total Phosphorus(mg/L)	00665	0.95	0.74	0.36	0.23	0.38	0.23	0.35	0.22	0.12		0.33	0.12 - 0.74
Nitrate-N(mg/L)	00620	1.6	0.03	0.16	0.23	0.26	0.35	0.06	0.08	0.13		0.16	0.03 - 0.35
Chloride(mg/L)	00940	8.5	9.3	57.7	50.1	42.1	85.3	61.4	33.3	134		59.2	9.3 - 134
Sulfate(mg/L)	00945	21	4.8	40.3	56.1	59.9	114	38.8	44.6	181		67.4	4.8 - 181
Total Hardness(mg/L)	00900	55.5	68.3	120	118	132	228	140	99.5	268		146.7	68.3 - 268
Ammonia-N(mg/L)	00610	0.07	<0.02	0.07	0.08	0.06	0.07	0.08	0.02	0.08		0.07	<0.02 - 0.08
Chlorophyll a(mg/m^3)	32211	<1	19	<5	5.3	12.9	<5	9.7	<1	1.6		9.7	<1 - 19
Pheophytin(mg/m3)	32218	18	5	<3	<3	<3	<3	<3	<3	<3		5.0	<3 - 5

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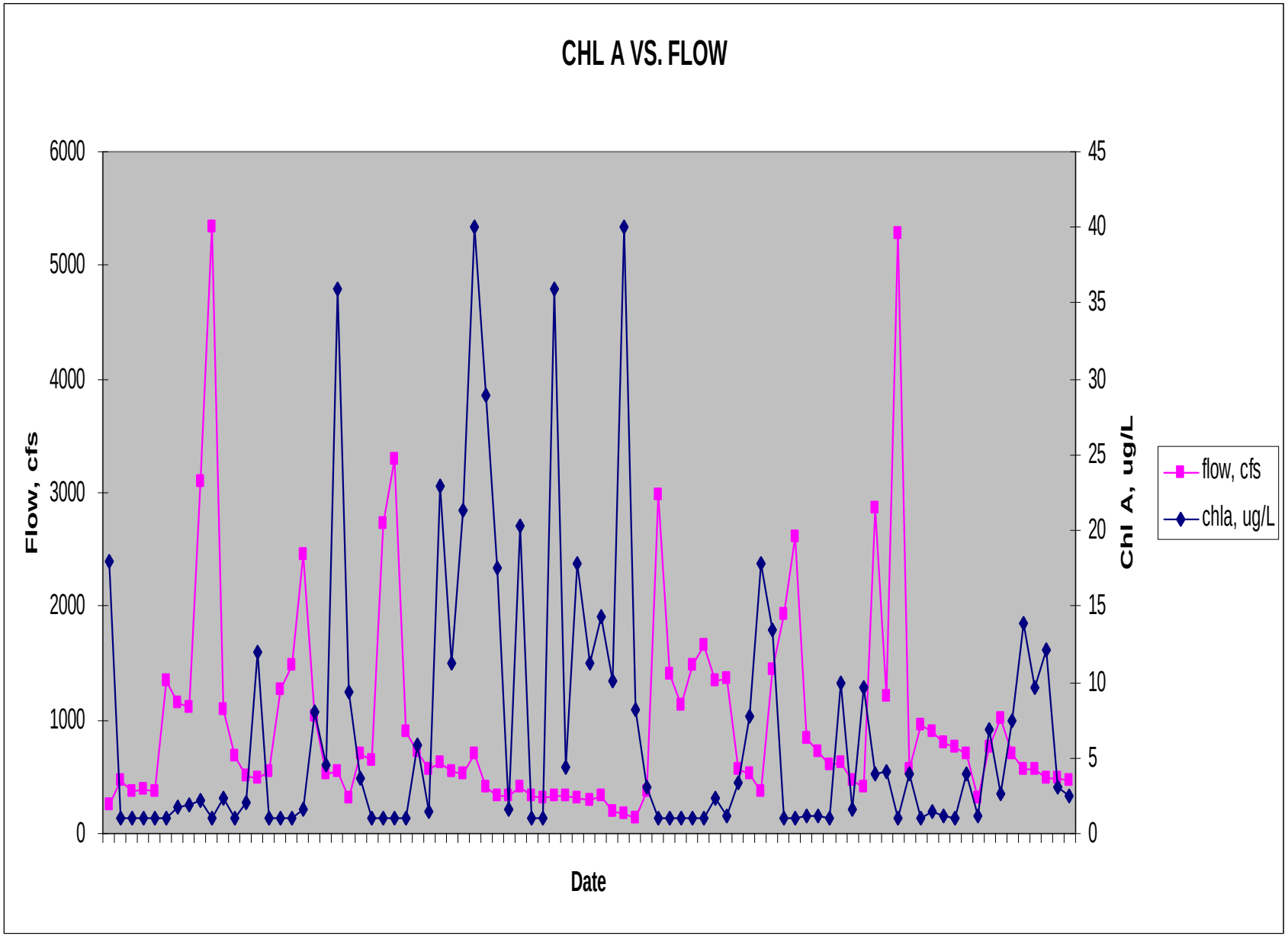
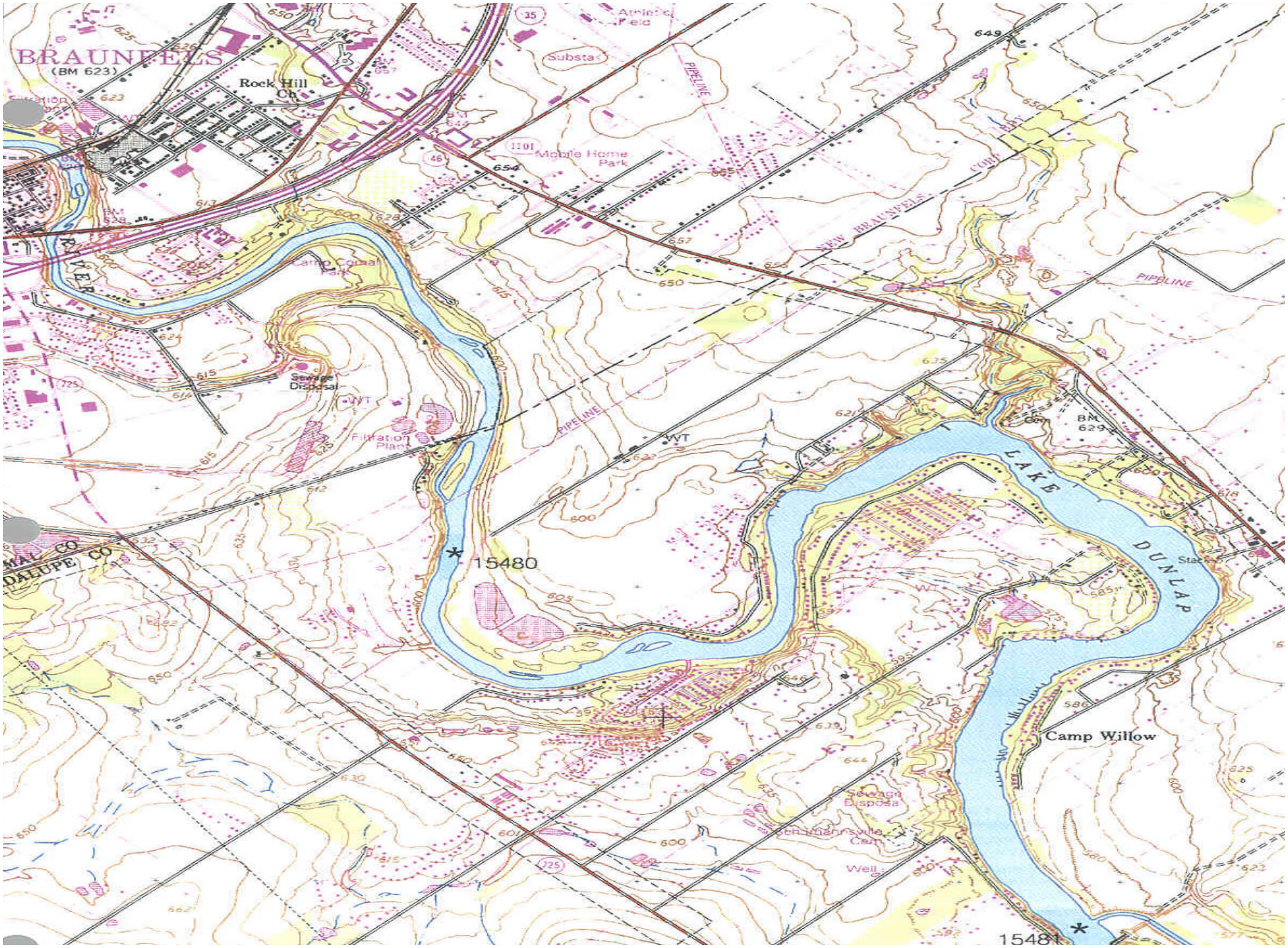
Pheophytin(mg/m3)	32218	18	5	<3	<3	<3	<3	<3	<3	<3		5.0	<3 - 5

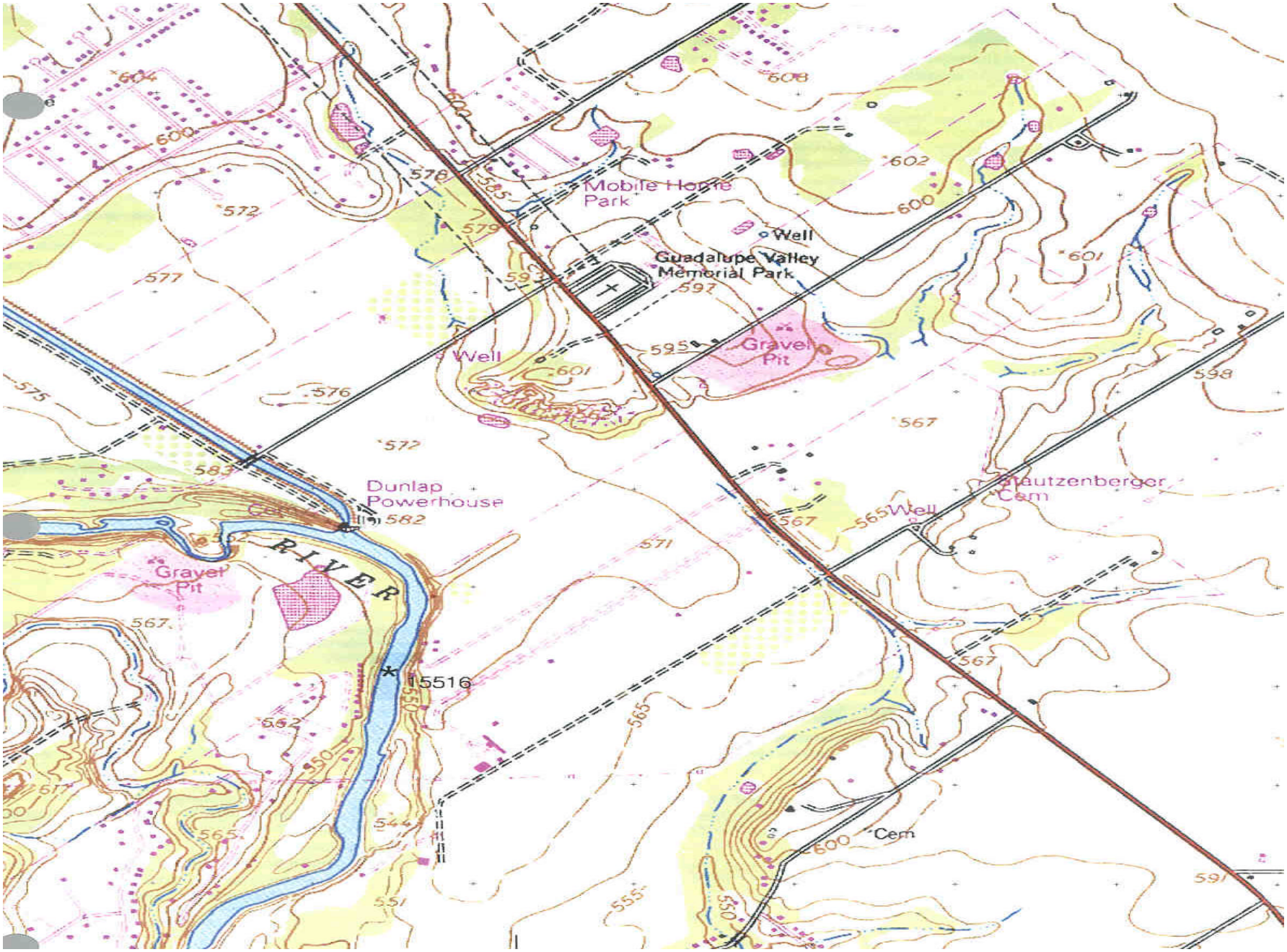
Guadalupe River Basin Clean Rivers Program

Special Nutrient Monitoring Study on Lakes Dunlap and McQueeney

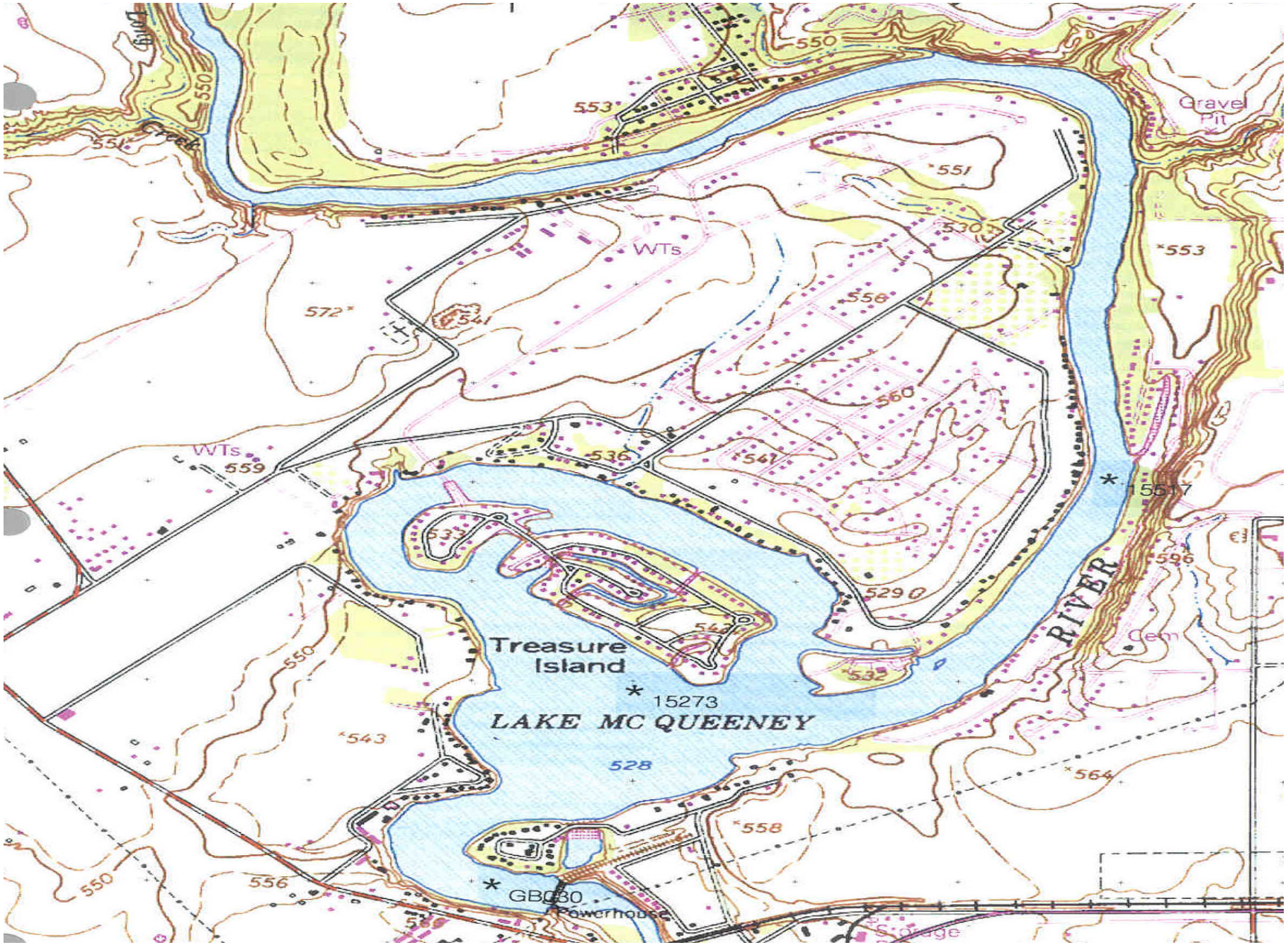
- 2 sites added to Lake Dunlap
- 4 sites added to Lake McQueeney
- All current parameters plus Total Kjeldahl Nitrogen
- Monitoring monthly April through October, bimonthly November through March


CHL A VS. FLOW
Flow, cfs
Chl A, ug/L
Date
6000
5000
4000
3000
2000
1000
0
45
40
35
30
25
20
15
10
5
0
flow, cfs
chla, ug/L


BRAUNFELS
(BM 623)
Rock Hill Ch
Mobile Home Park
Camp Comal Park
Sewage Disposal
Filtration Plant
PIPELINE
NEW BRAUNFELS CORP
LAKE DUNLAP
15480
15481
Camp Willow
Sewage Disposal
Schumannsville Cem
Well
Stack
BM 629
RIVER
MAL CO
DALUPE CO



Mobile Home Park
Well
Guadalupe Valley Memorial Park
Gravel Pit
Well
Dunlap Powerhouse
Gravel Pit
RIVER
15516
Stautzenberger Cem
Well
Cem



Treasure Island
LAKE MC QUEENEY
15273
15517
GB030
Powerhouse
RIVER
Gravel Pit
Cem
Storage
WTs
WTs
Creek
550
553
551
530
553
572
541
558
560
536
541
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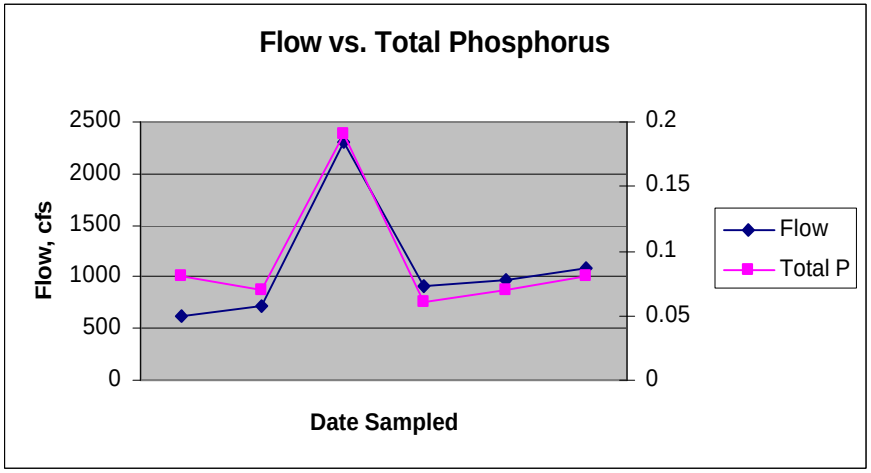
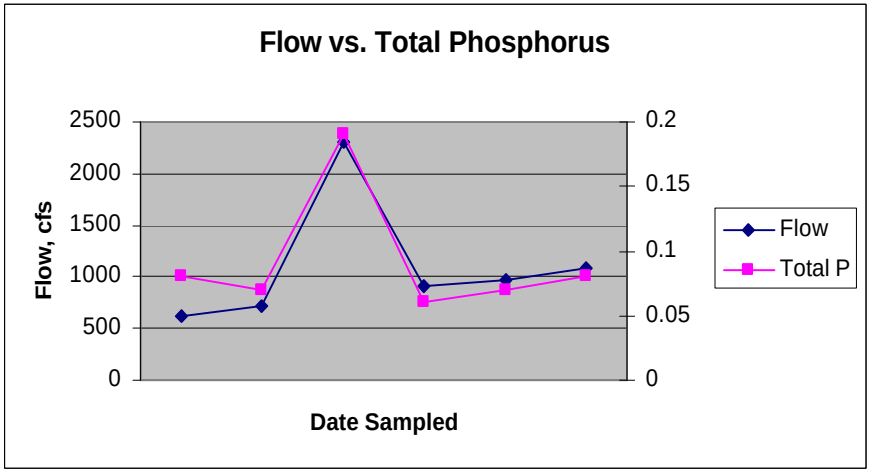


Upstream – Lake Dunlap



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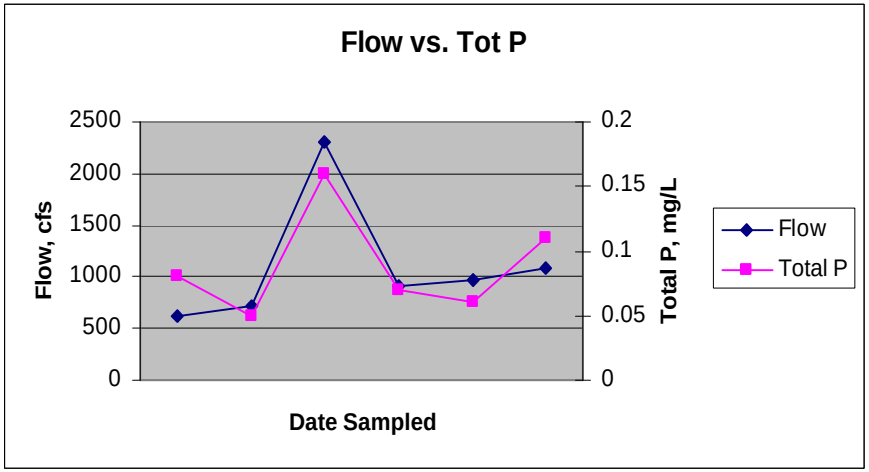
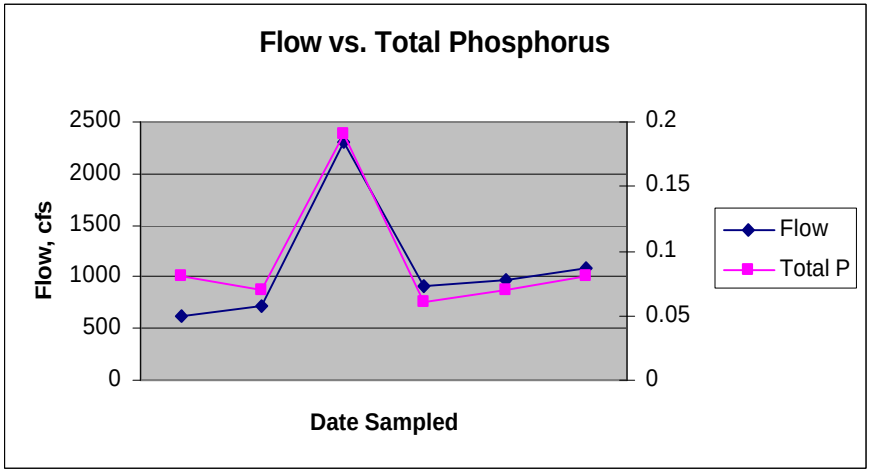


AC’s Place – Lake Dunlap



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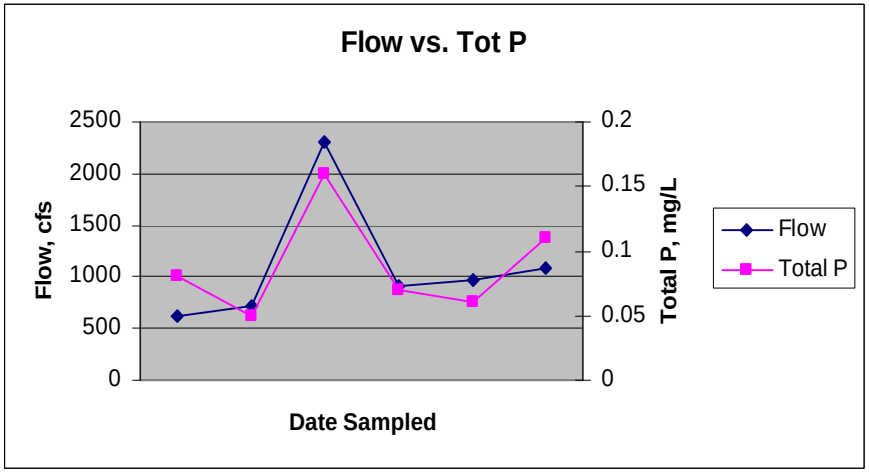

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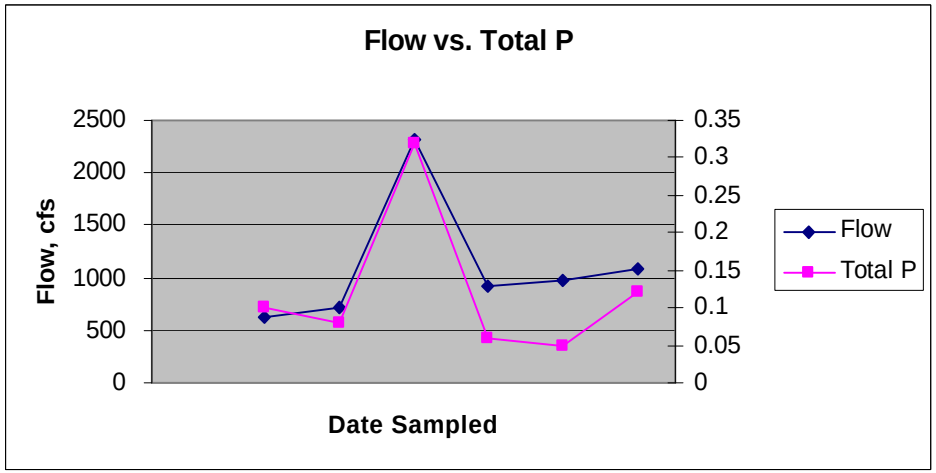
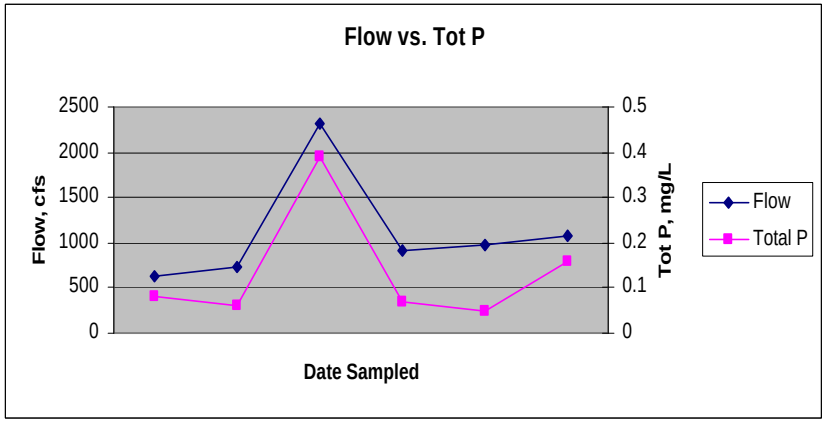
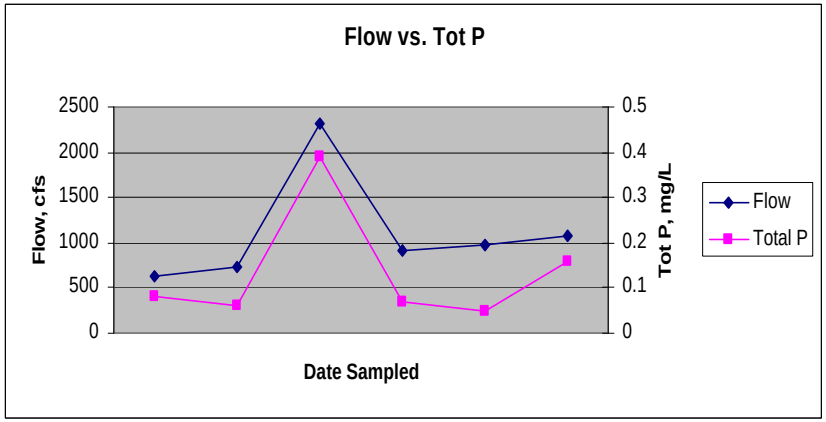


At Dam – Lake Dunlap



Below Dunlap – L. McQueeney



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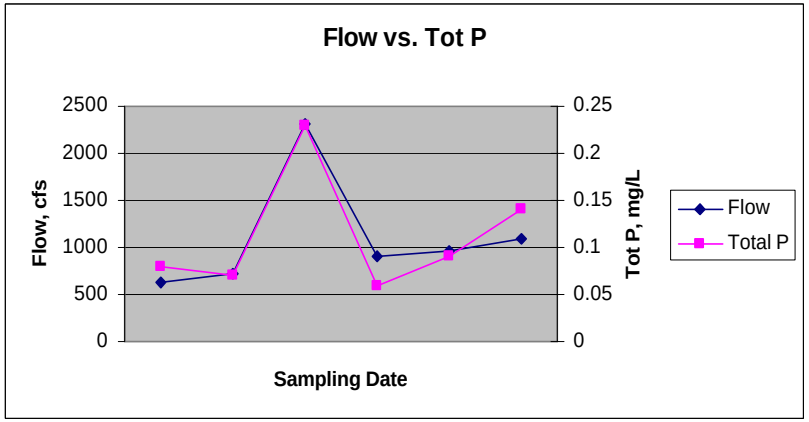
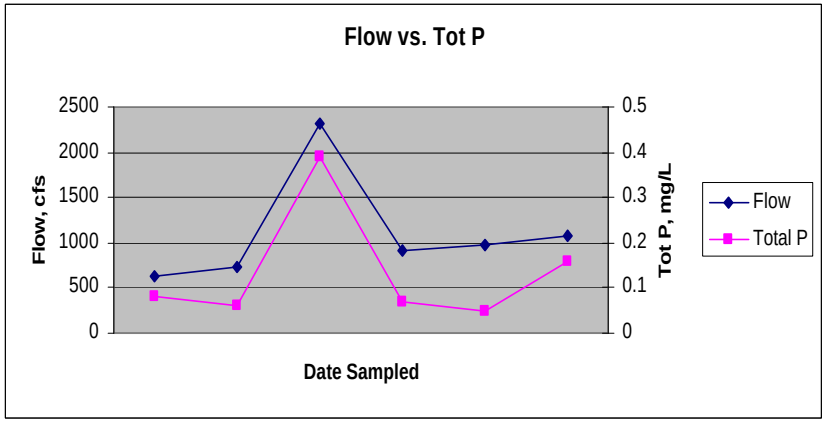


At Lakeridge – L. McQueeney



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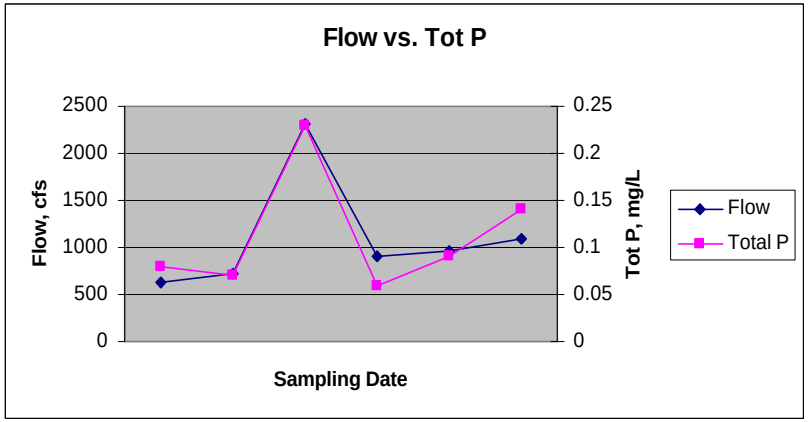

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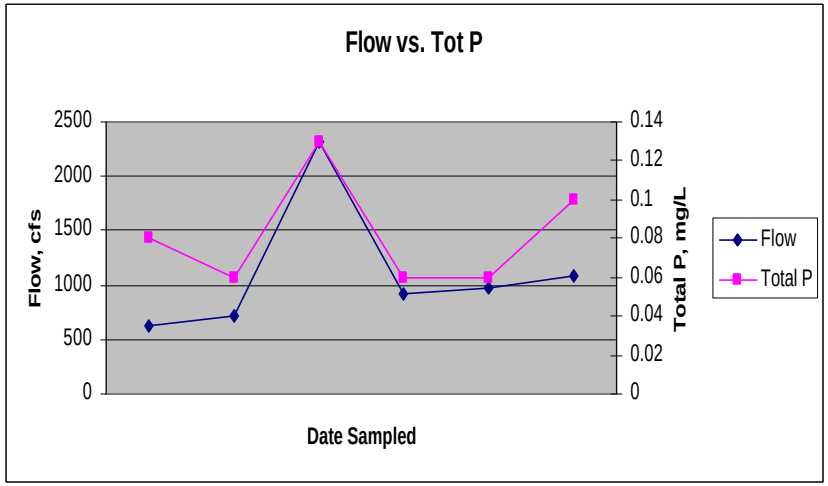
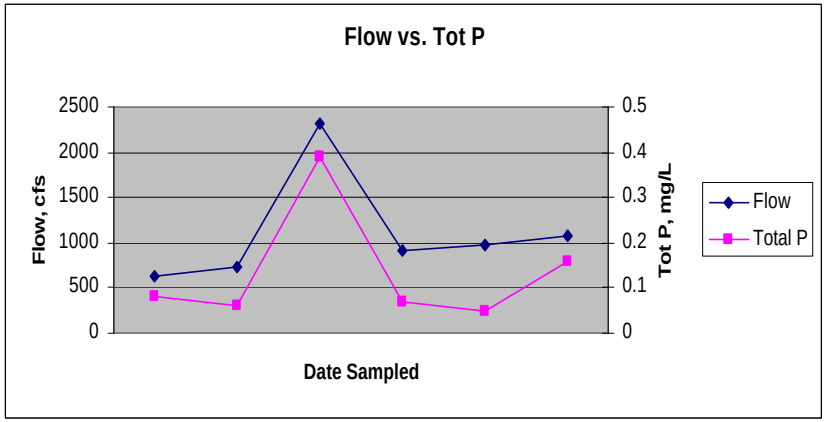


Hot Shots – L. McQueeney



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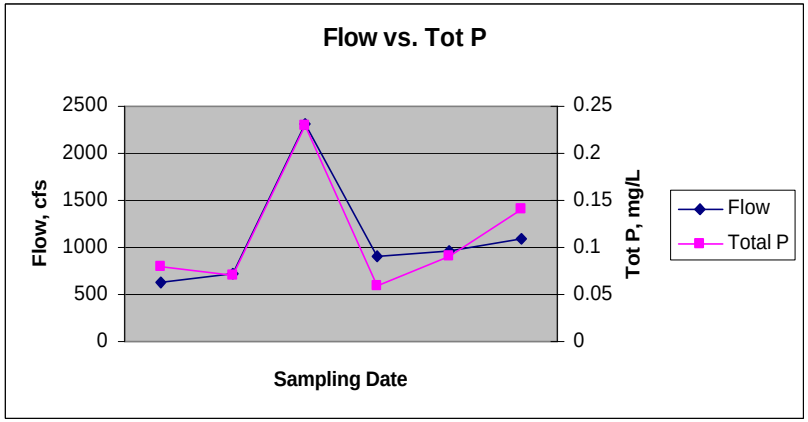

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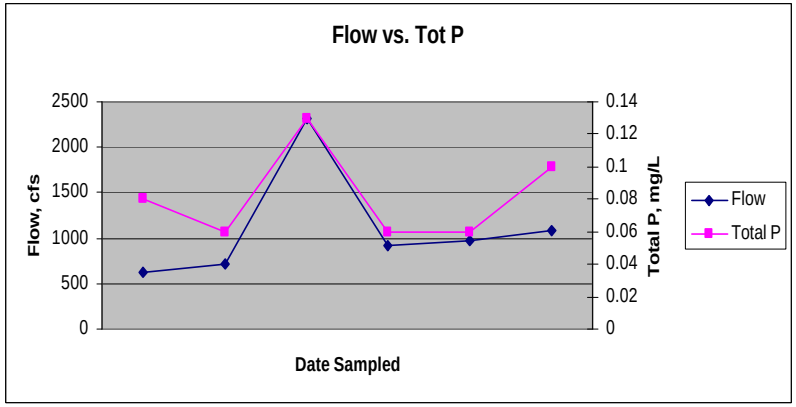

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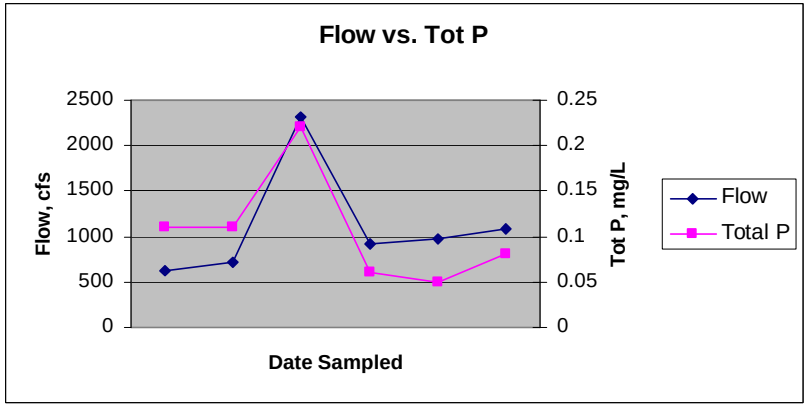
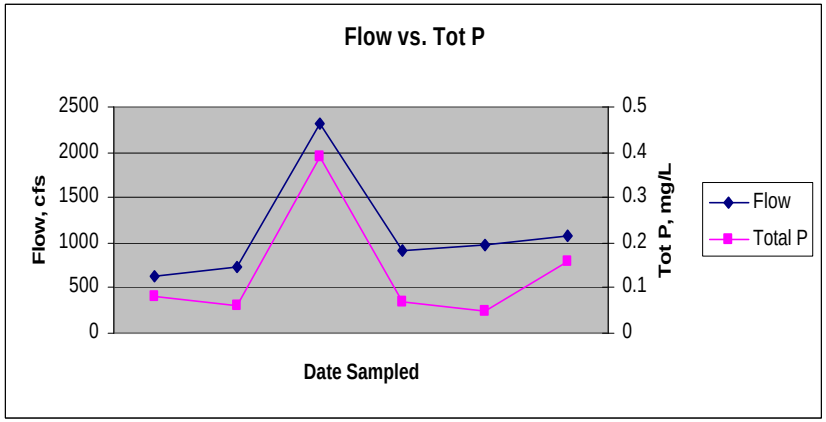


At Dam – L. McQueeney



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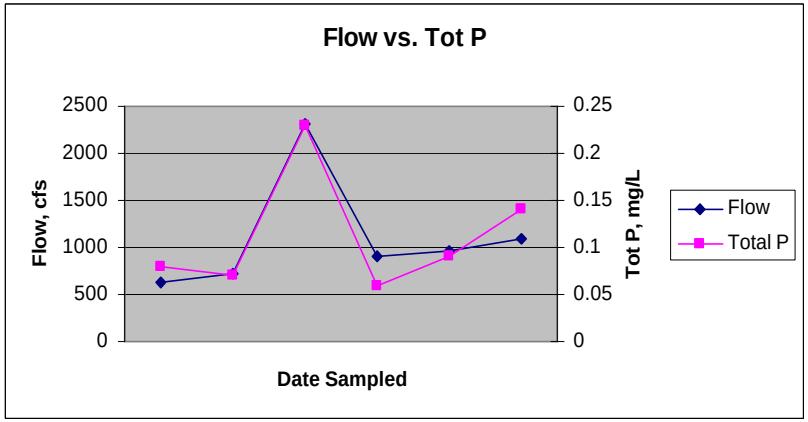

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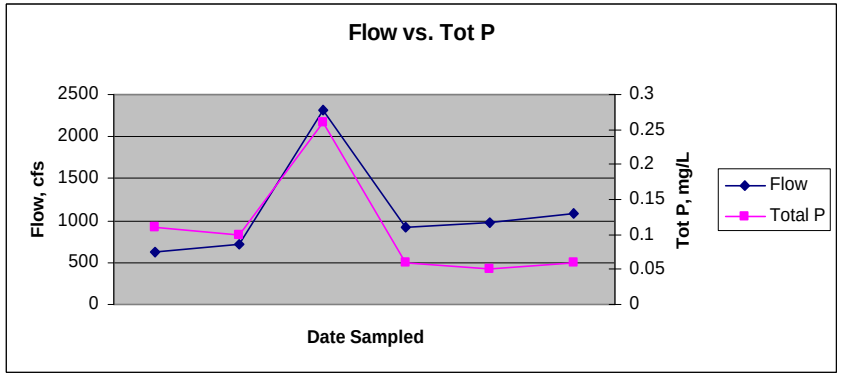
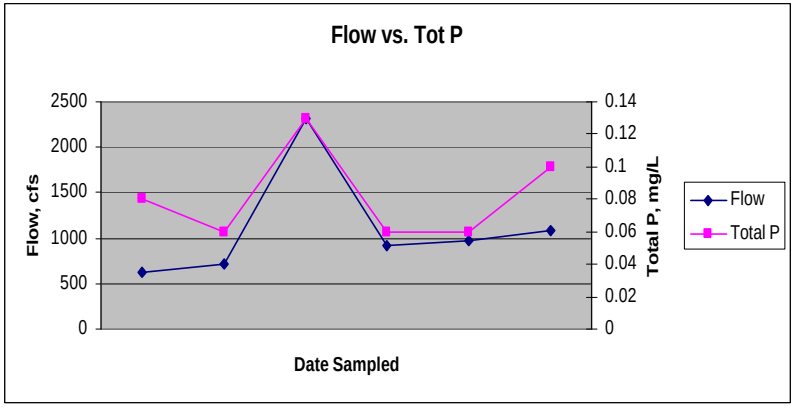


Treasure Island – L. McQueeney



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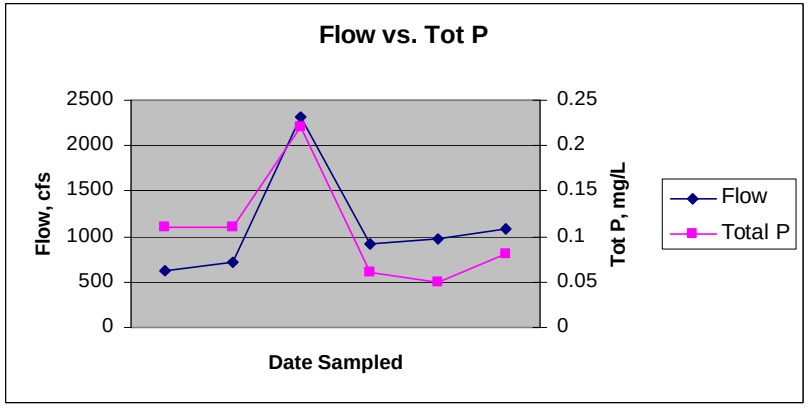

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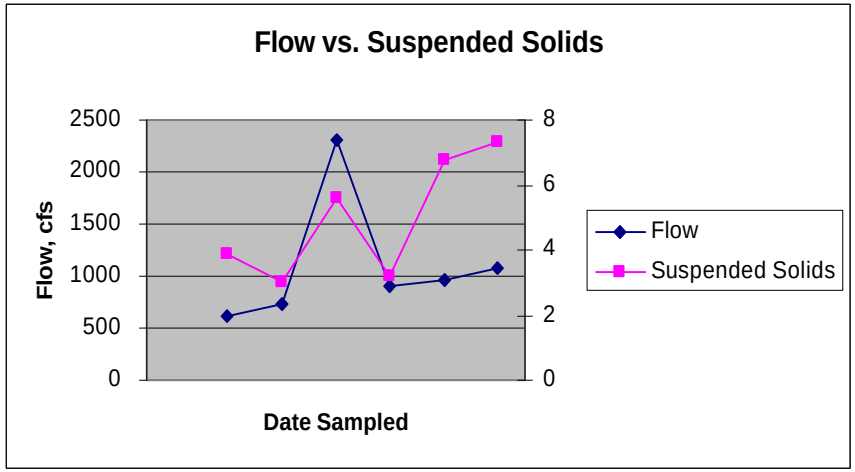

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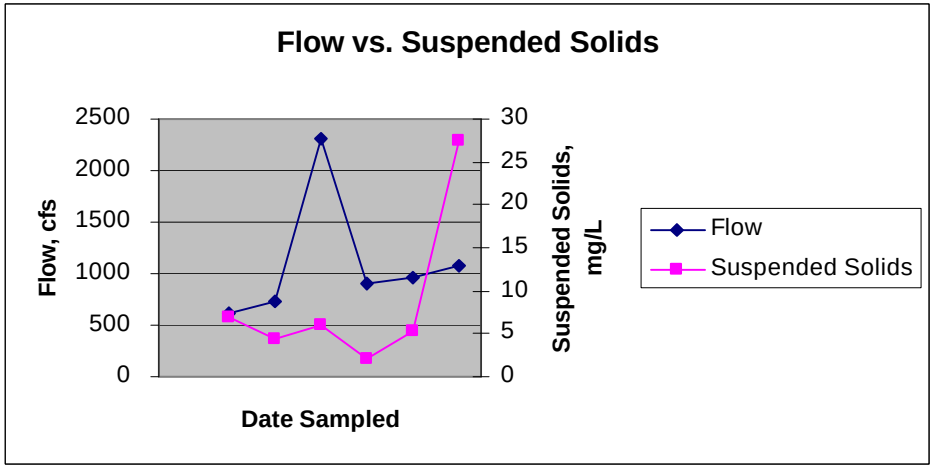

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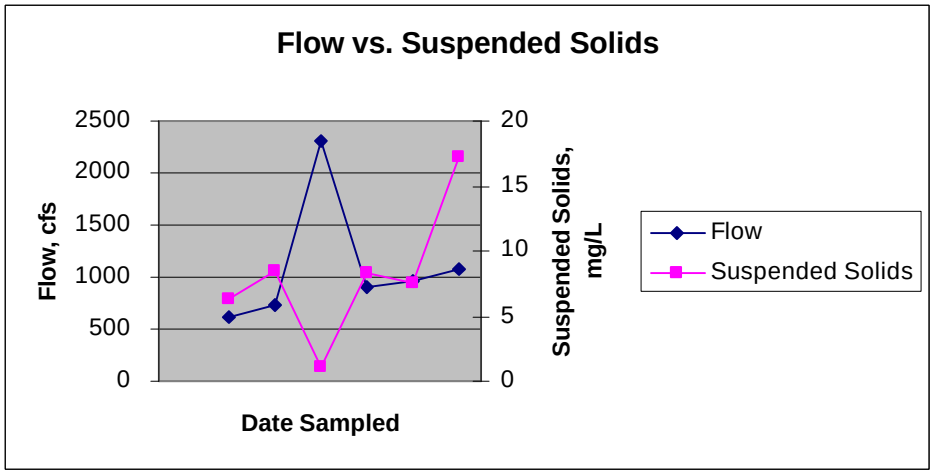

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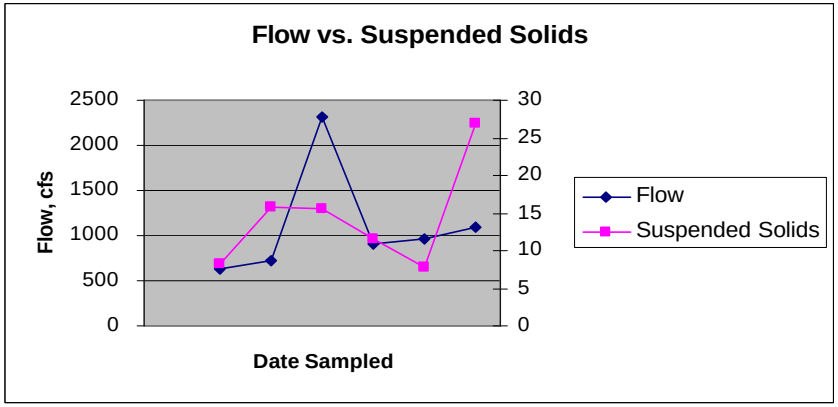

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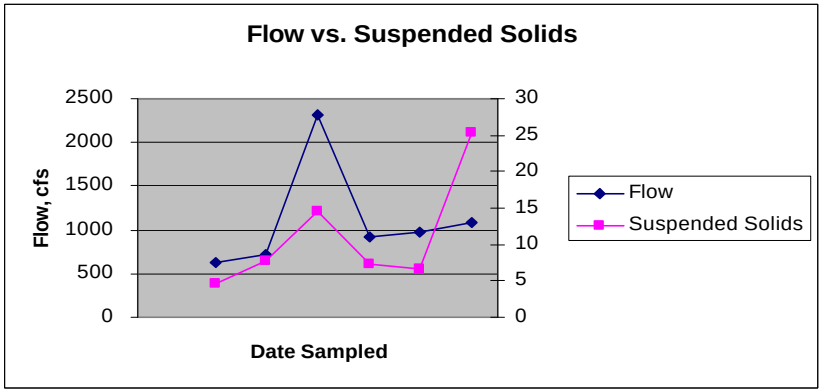

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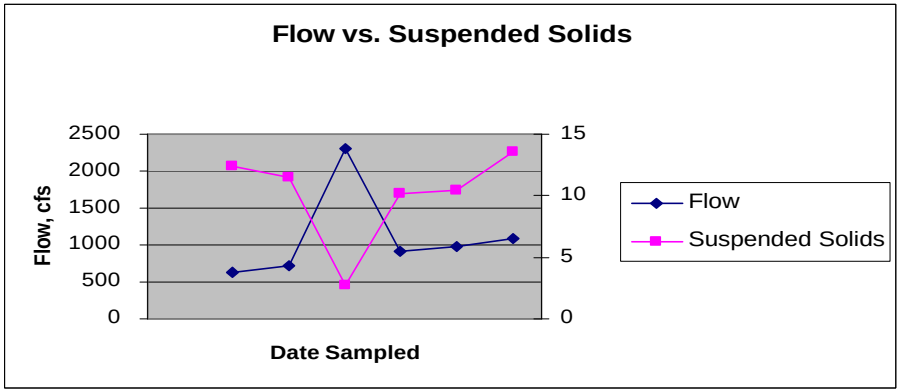

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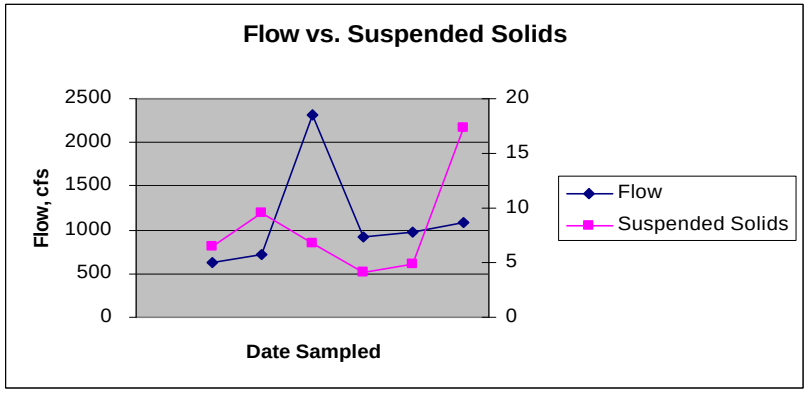

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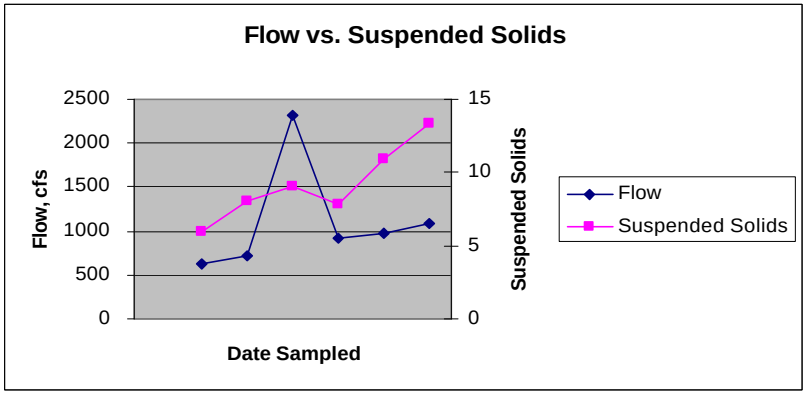

At Dam – L. McQueeney

Events Inventory thru Dec. 2004

- 4 spills (two semi-tractor/trailers; one train fuel tank; one oil field tank leak)
- Mtgs. With TCEQ on spill response
- Wash out of small hydro dam near Cuero
- Investigations of improper trash and solid waste disposal