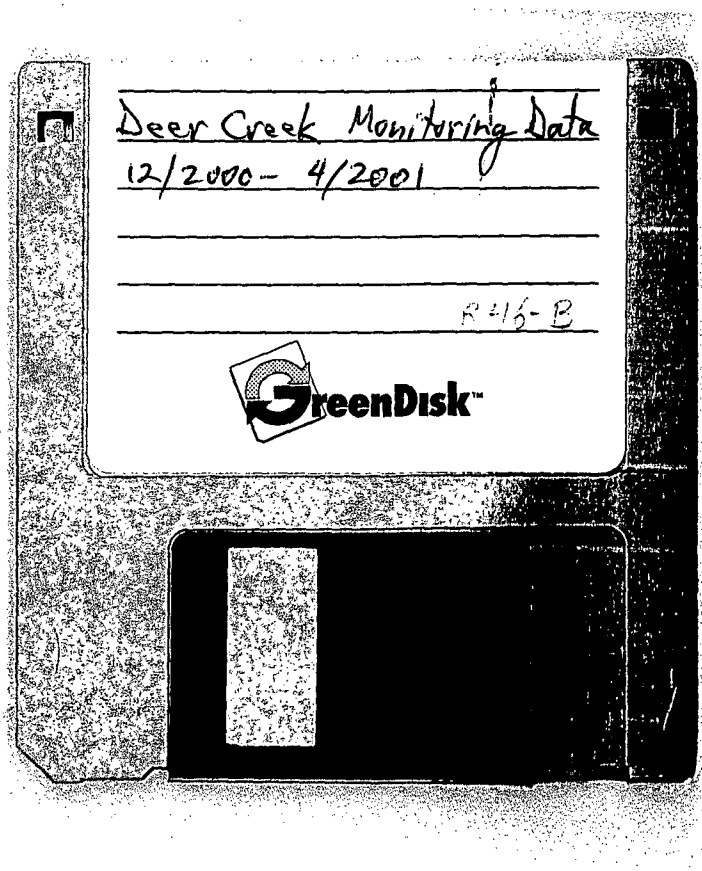

Deer Creek Monitoring Data
12/2000 - 4/2001
R-16-B
GreenDisk™

R4b-A JK

May 11, 2001

To: California Regional Water Quality Control Board
Central Valley Region

From: Joanne Hild email:jshild@pacbell.net
John van der Veen email: jjvdveen@jps.net
Friends of Deer Creek
132 Main Street
Nevada City, CA 95959 530-265-4860

Reference: Public Solicitation of Water Quality Information

Deer Creek

Group name: Friends of Deer Creek; 132 Main St.; Nevada City, Ca. 95959
Friends of Deer Creek is a citizen-based group working under funds from Proposition 204. The organization is a non-profit using the grant over the next three years for the following projects:

1) Monitoring Deer Creek water quality using chemical, physical and biological (Rapid Stream Bioassessment- benthic macroinvertebrates) parameters. Physical parameter data for the past 5 months is included in this packet.
2) Storm Drain project monitoring sediment and oil & grease from six sites in Nevada City. Data and initial report is included in this packet.
3) Restoration project in Little Deer Creek. Removal of concrete lining and planting of native plants. Monitoring.

Training: In the spring 2000, every citizen monitor was required to attend 3 training sessions for physical/chemical parameters and 3 training sessions for benthic macroinvertebrate sampling using EPA Rapid Stream Bioassessment protocols. John van der Veen, a chemist working with Friends of Deer Creek, was the chief trainer for the physical/chemical parameters and Joanne Hild, biologist and Monitoring Coordinator for Friends of Deer Creek, trained the volunteers in Rapid Stream Bioassessment.

Volunteers have been training once a month for the past 3 months to identify benthic Macroinvertebrates using the rapid stream bioassessment protocols. This will continue twice/month starting in June. Joanne has attended Jim Harrington's macroinvertebrate training and a Macroinvertebrate identification training session this spring at Sierra College sponsored by the State Water Resources Control Board. Joanne trained the monitors to do Streamwalks at 2 additional training sessions.

John and Joanne attended a training session for Trainers given by Dominic Gregorio from the State Water Resources Control Board. They also attended the "Train the Trainers" workshop in Lake Tahoe sponsored by the SWRCB.

Data: Each data point included in this report has been represented by a mean computed from 3 samples. A standard deviation is also given for each mean. Data is taken to the hundredth decimal place and rounded to the tenth decimal place.

Quality Assurance: The Deer Creek Quality Assurance Plan is described in the Proposition 204 monitoring QAP for three watersheds in the region (Bear River, Deer Creek and Yuba River) and approved by the State Water Quality Control Board. As part of the approval, QAP intercalibration sessions are held twice yearly and all instrumentation is calibrated prior to each site visit.

R-46-B

Deer Creek Monitoring Data Report
December, 2000 – April, 2001

Citizen monitoring data obtained starting mid-December, 2000 was taken at sites from the headwater area of the watershed to Deer Creek's confluence with the Yuba River just below Englebright Dam. The waters' course includes a Nevada Irrigation Dam at Scotts Flat, passing through the city of Nevada City with a sewer treatment plant, flowing into a second lake at Lake Wildwood with its sewer treatment plant and finally at the confluence seeing a mining operation pulling "blue stone" from the stream for decorative stone. Also at numerous points along the stream path are water diversion canals. All this happens in a short 32-mile course the stream takes through the watershed.

The monthly site sampling data is shown in the attached table. The data shows a steady decline in water quality as measured by pH, Turbidity, and Conductivity. The average pH at the upper sites varies around 6.5 – 7.5. At the lower sites the average pH varies from about 7.5 – 8.9. Along with rising pH values Stream Walk data sheets show increasing amounts of algae, fish kills during the summer months and high amount of foaming below treatment plants. Very high conductivity readings in the lower sections below Lake Wildwood are also a concern and need further studies. Macroinvertebrates studies are just beginning but stream conditions at the sample sites indicate that below Lake Wildwood there is very little coble available for a healthy macroinvertebrate habitat. The stream is almost completely scoured exposing the serpentine bedrock. Very few fish have been observed in this section of the stream.

The available data is sparse and not too much inference can be taken as of this date. However, the data does raise a concern of an impacted stream in the lower reaches and around Nevada City (see attached storm water report). Visual observations also indicate high levels of sediment during storm events coming from major tributaries into the main stem of Deer Creek. Squirrel Creek is a major tributary, which has been observed to run very muddy while the main stem is relatively clear. New sites will be chosen during the summer of 2001 to evaluate where the up stream sediment load might originate.

Deer Creek Monitoring Data
December 2000 - April 2001

SITE #1

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/21/00	12:00	7.6	0.00	1.3	0.60	4.3	0.15	34.9	0.00	12.3	0.18
1/18/01	10:00	7.0	0.12	0.2	0.03	1.4	0.22	19.8	0.00	12.8	0.10
2/8/01	14:00	7.3	0.23	0.1	0.03	1.4	0.00	21.2	0.00	14.1	0.33
3/15/01	14:00			0.7	0.10	5.1	0.34	38.8	1.82	11.5	0.07
4/19/01	13:00	6.1	0.44	0.9	0.09	6.2	0.19	38.7	0.06	11.8	0.33

SITE #2

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/13/00	14:30	7.7	0.12			6.6	0.00	73.2	0.29	12.8	0.31
1/17/01	14:00	7.6	0.06	0.4	0.09	2.0	0.03	68.3	0.00	13.4	0.02
2/14/01	14:30	6.7	0.30	2.6	0.01	2.9	0.13	62.6	2.05	12.2	0.10
3/14/01	14:45	7.0	0.10	1.1	0.23	8.6	0.18	67.5	0.10	9.9	0.15
4/9/01	13:30	7.6	0.00	4.5	0.10	7.8	0.04	61.0	0.12	12.6	0.51

SITE #3

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/9/00	15:15	7.9	0.00	1.5	0.05	7.3	0.20	67.0	0.10	10.9	0.10
1/13/01	14:45	7.5	0.10	3.7	0.21	6.4	0.73	64.4	0.00	12.2	0.03
2/16/01	10:30	7.1	0.15	5.9	0.23	3.7	0.25	70.5	0.15	11.9	0.22
3/10/01	13:15	7.3	0.06	3.6	0.06	7.8	0.09	59.9	0.00	9.4	0.19
4/14/01	9:00	6.9	0.06	1.9	0.06	7.0	0.05	65.8	0.35	11.5	0.30

SITE #4

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/9/00	9:35	7.9	0.00	1.1	0.05	7.0	0.18	104.1	0.29	11.6	0.17
1/13/01	9:30	7.6	0.00	4.0	0.18	5.5	0.18	78.6	0.12	12.6	0.30
2/17/01	9:25	7.6	0.06	8.4	0.21	4.1	0.05	50.9	0.12	10.7	0.50
3/10/01	9:30	7.2	0.06	4.2	0.15	6.2	0.04	82.8	0.44	10.2	0.22
4/14/01	9:25	7.4	0.06	1.9	0.26	7.7	0.19	99.0	0.35	10.9	0.15

Deer Creek Monitoring Data
December 2000 - April 2001

SITE #5

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/13/00	9:45	8.0	0.15	2.4	0.07	6.4	0.15	117.4	0.56	13.8	0.19
1/17/01	10:00	7.9	0.06	1.9	0.15	6.0	0.10	70.4	0.06	13.4	0.27
2/14/01	9:30	7.7	0.00	13.0	0.00	2.9	0.05	63.8	0.17	11.1	0.06
3/14/01	10:00	7.9	0.06	2.0	0.12	7.7	0.17	115.1	0.25	11.7	0.08
4/18/01	10:30	7.8		1.2	0.10	11.8	0.13	139.7	0.00	8.4	1.10

SITE #6

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/12/00						7.7	0.21				
1/15/01	13:45	8.2	0.12	2.4	0.04	4.8	0.15	133.1	0.17	13.4	0.03
2/20/01	9:45	7.4	0.06	40.0	0.00	6.0	0.04	45.0	0.00	10.5	0.13
3/13/01	12:45	6.9	0.00	2.2	0.06	11.2	0.13	118.3	0.12	10.5	0.18
4/17/01	10:30	7.9	0.00	0.5	0.06	13.2	0.19	170.9	0.06	13.0	0.35

SITE #7

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/9/00	9:38	7.6	0.00	5.1	0.19	11.7	0.26	622.7	2.89	9.7	0.17
1/13/01	10:20	8.8	1.79	3.7	0.01	10.6	0.09	468.3	0.76	10.1	0.05
2/17/01	10:00	7.8	0.12	7.2	0.06	7.1	0.19	137.6	0.96	11.4	0.04
3/10/01	9:30	7.2	0.10	12.0	0.00	9.8	0.23	119.5	1.07	10.5	0.22
4/14/01	14:50	8.4	0.17	2.9	0.55	16.1	0.18	146.9	0.83	10.7	0.19

SITE #8

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/12/00	15:20	8.8	0.12	1.3	0.11	10.8	0.06	479.3	5.28	14.1	0.28
1/15/01	14:00	8.2	0.06	6.3	0.50	7.1	0.53	145.5	0.00	13.2	0.14
2/15/01	15:30	7.1	0.06	7.1	0.12	8.2	0.20	131.4	0.06	12.2	0.19
3/12/01	15:30	8.7	0.00	9.7	0.06	13.2	0.17	119.6	0.21	11.2	0.26
4/14/01	14:40	8.5	0.06	2.4	0.35	14.4	0.12	126.5	0.06	7.6	0.57

Deer Creek Monitoring Data
December 2000 - April 2001

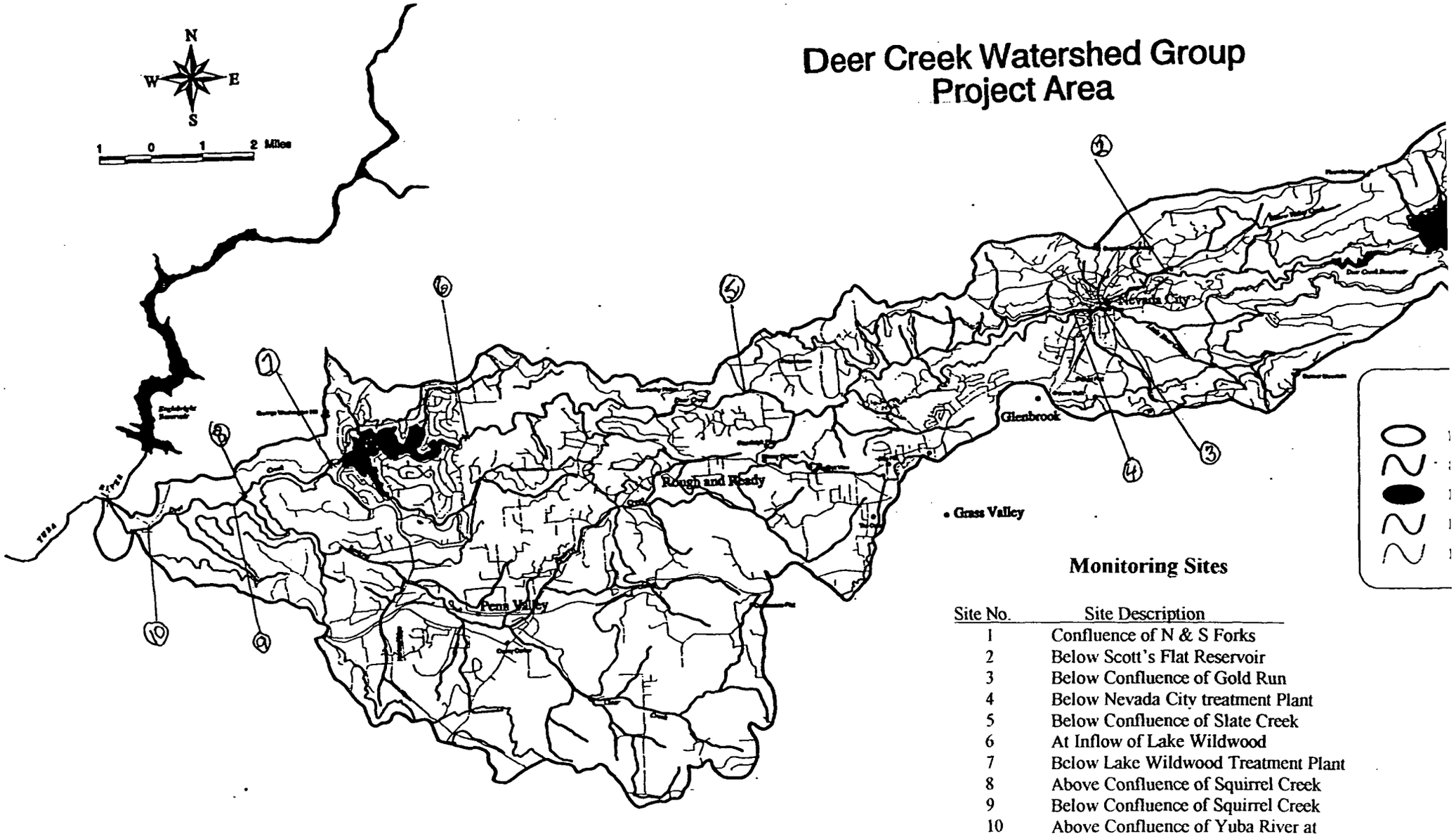
SITE #9

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/11/00	13:30	8.9	0.06	0.6	0.15	8.7	0.28	258.4	0.54	12.1	0.35
1/15/01	11:10	8.2	0.03	9.2	0.64	5.5	0.09	144.4	0.06		
2/12/01	10:16	7.8	0.00	20.0	1.73	6.0	0.06 foan	69.5	0.58	10.8	0.44
3/12/01	9:30	7.9	0.03	6.9	0.00	9.3	0.08	126.4	0.40	10.1	0.20
4/16/01	13:40	8.9	0.03	1.5	0.06	16.2	0.14	144.8	0.55	11.3	0.33

SITE #10

Date	Time	pH		Turbidity		H2O Temp		Conductivity		Disolved H2O	
		$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
12/13/00	11:05	8.5	0.00	0.8	0.12	8.2	0.11	229.6	0.00	14.6	0.61
1/17/01	13:00	8.3	0.00	2.5	0.21	5.0	0.22	95.8	0.06	14.6	0.85
2/14/01	11:20	8.0	0.00	18.7	1.15	6.4	0.12	74.1	0.12	10.6	0.23
3/14/01	13:00	9.1	0.00	5.5	0.06	13.8	0.24	125.9	0.21	10.7	0.006
4/18/01	14:15	9.4	0.00	0.9	0.03	18.4	0.16	159.7	0.06	10.0	0.10

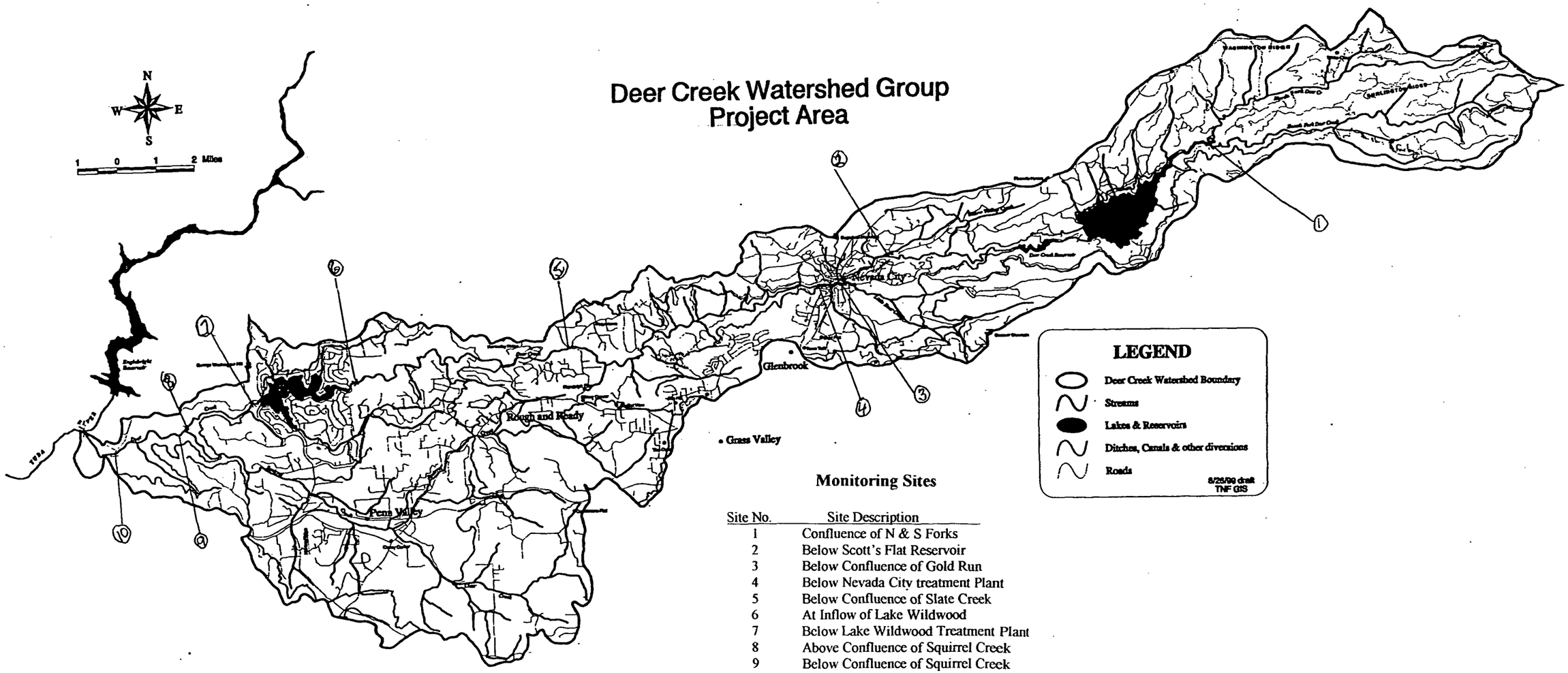
Deer Creek Watershed Group Project Area



Monitoring Sites

Site No.	Site Description
1	Confluence of N & S Forks
2	Below Scott's Flat Reservoir
3	Below Confluence of Gold Run
4	Below Nevada City treatment Plant
5	Below Confluence of Slate Creek
6	At Inflow of Lake Wildwood
7	Below Lake Wildwood Treatment Plant
8	Above Confluence of Squirrel Creek
9	Below Confluence of Squirrel Creek
10	Above Confluence of Yuba River at USGS gauging station

Deer Creek Watershed Group
Project Area



LEGEND

- Deer Creek Watershed Boundary
- Streams
- Lakes & Reservoirs
- Ditches, Canals & other diversions
- Roads

8/25/99 draft
TNF GIS

Monitoring Sites

Site No.	Site Description
1	Confluence of N & S Forks
2	Below Scott's Flat Reservoir
3	Below Confluence of Gold Run
4	Below Nevada City treatment Plant
5	Below Confluence of Slate Creek
6	At Inflow of Lake Wildwood
7	Below Lake Wildwood Treatment Plant
8	Above Confluence of Squirrel Creek
9	Below Confluence of Squirrel Creek
10	Above Confluence of Yuba River at USGS gauging station

Report on Storm Drain Data
Fall/Winter of 99/00

By John van der Veen
Friends of Deer Creek

Summary

They took storm drain water samples at six locations within the city of Nevada City during the Fall 99/00 storm season. Samples were analyzed for sediment and oil&grease. Initial results indicate that the Fall storm drain runoff within Nevada City is the major contributor to the sediment load in Deer Creek. Sediment loads during the early Fall rains could affect the Fall spawning of brown trout.

History

In 1996 the voters approved the Proposition 204 Safe, Clean, Reliable Water Supply Act that provided funding to counties to study, monitor and improve watershed health. In 1997 a group of local, state and federal agencies and environmental organizations began meeting to discuss the application of a grant under Prop. 204. The group wrote and signed a Memorandum of Understanding to jointly seek the funds. Friends of Deer Creek and the City of Nevada City collaborated to write and obtain approval for a grant to:

- Improve the fish habitat on Little Deer Creek within Pioneer Park.
- Study and evaluate remedies for storm water contamination of Deer Creek within Nevada City.
- Develop a Coordinated Resource Management Plan for the Deer Creek watershed.
- Study the water quality by monitoring the watershed using volunteer monitors.

The project was approved in the Fall of 1999 and funded in late Spring of 2000. Friends of Deer Creek obtained a grant from NID to begin storm drain sampling during the Fall of 1999. Their grant allowed for the volunteers to begin obtaining baseline data essential for understanding the nature of the contamination. Rain gauging equipment was also donated by NID and High Sierra Electronics. Software was donated by Automata, Inc. High Sierra Electronics also donated labor time to make all the systems operational.

Methods

A storm event for sampling was chosen to be any rain event that produced a half inch of rain within the first four hours or less. This value was taken to assure sufficient runoff to be able to sample during the storm. Samples were taken immediately after the first half inch of rain was recorded by the rain gauge. The rain gauge data was tracked by a computer that gave an alarm whenever the half inch rain level was reached. Volunteers were on call and notified whenever an alarm was reached. Temperature and the amount of rain fall in .01 inch increments were recorded by the automated computer system.

Storm drains were sampled using a five-gallon plastic pail placed into the flow of the water

flowing out of the drain. Several samples were taken from streams and these samples were taken by placing the bucket into the middle of the stream capturing the water about 4-6 inches below the surface. Flow rates were not estimated. The five-gallon sample was then transferred to two sample jars. One a one liter plastic bottle for Total Suspended Sediment (TSS) and the other a glass jar with Teflon lined lid for oil&grease. Each sample is labeled to identify the location, time, date, sampler and type of analysis. The oil&grease samples were immediately placed into an ice chest with frozen "blue ice" for holding until fixed by the laboratory. Each sample set was also recorded onto the sample log and Chain of Custody form. See the appendix for examples of forms, label and checklist used during sampling.

Sample Locations:

Sample locations were determined with the City Engineer. Sites were chosen which gave a broad spectrum of the city's runoff. Six sites were chosen for evaluation.

Storm Water Sampling Sites

Site	Location
Nevada Street	East side of the street at the Nevada Street bridge. Collects all water coming down the East side of Nevada Street.
Broad Street	North side of Broad Street at the end of the Nevada Street bridge. Collects all the waters coming down the north side of Broad Street.
Nevada Street Ravine	Channel exiting above Nevada Street bridge next to Deer Creek Inn. Collects water from Rood Center through North end of town.
Freeway Culvert	Large approximate 4' diameter culvert just West of the freeway bridge. Collects water from the freeway and also contains spring water from Manzanita Diggings.
Pine St. Bridge	North side of Pine Street bridge at its base about 150'. Collects water along Pine Street and Spring Street.
N. Queen by RR Car.	Gold Run Creek at the parking lot next to the Railroad Car. Collects water all along the Gold Creek watershed.

Two sets of samples were also taken from Deer Creek. One above the Nevada St. Ravine at the back of the Cornerstone parking lot and the other below the Pine Street bridge about 200'. All samples were analyzed by Crammer Analytical Laboratory.

Results

Table 1 shows the first eleven storm events that produced any rain. Of the eleven events six met the criteria to be sampled. The storm on December 9th had sufficient precipitation but most of it was in the form of snow that has a much different runoff pattern and was not sampled. Note also that there was no major storm between December 10th and January 11th. During the Fall period the total accumulated rain fall was 11.4".

The sample analysis (Table 2) indicates that after the first storm event there was little Oil&Grease present in the samples. The values of <4 mg/L mean that the Oil&Grease in those samples was below the level of detection level that is 4 mg/L. All the data in Table 2 give the concentration of

the contamination within the sample. Most of the events sampled had significant accumulation of rain fall and dilution of the contamination by the large amount of run-off could account for some lower than expected Oil&Grease values. Of course there may be much less Oil&Grease contamination in Nevada City than in larger more urban cities and this is one of the reasons for doing the study.

The amount of sediment found in the samples appears to be the major contaminate. The Broad Street. Nevada St., and Pine Street Bridge samples show a fairly consistent moderate sediment load. The Nevada Street Ravine, Freeway Culvert and Gold Run Creek show a much heavier sediment load. While Little Deer Creek was not sampled, visual observation indicated that it also ran sediment loads with each storm event but obviously with unknown concentrations. The Deer Creek sediment loads measured on 1/11 and 2/11/00 indicate almost no contamination above the Nevada St. Ravine sampling point and major amounts below the Pine Street bridge.

Discussion

All the data we have to date are concentrations only. We also need to determine the flow of each of the sampling points to determine the total amount of sediment or oil&grease placed into Deer Creek with each storm event. The values might be in pounds too tons depending on how much water is flowing. During the next storm year we will attempt to determine flow rates as well as contamination concentrations and get a better estimate of the total magnitude of the problem. We will also need this type of information to engineer a solution.

However, it is clear something needs to be done. Sediment in runoff is a natural occurrence within all watersheds. The major concern is not that there is sediment but when it occurs. Normally in the Fall the ground absorbs most of the rain and until the ground is saturated little sediment is sloughed off into the streams. In fact almost all of the sediment found in Deer Creek in the Fall comes from Nevada City runoff. A potential problem with this sediment load is the spawning of Brown trout. Brown trout spawn in the Fall. The contamination from the Fall storms could interfere with the Brown Trout spawning season.

Part of the 204 Grant includes evaluating methods to remove oil&grease and sediment from storm waters. Sediment traps are currently being designed at U.S.C. and with others. During this next year we will be evaluating more baseline data and flow data to determine the best methods to try to remove a majority of the sediments from entering Deer Creek.

Table 1
Storm Rainfall Data

Storm Event	Date	Sample Time	Rain Fall (Inches)	Accumulated Rain Fall
1	10/27 - 10/28/99	7:00 PM	2.34	2.34
2	11/7 - 11/8/99	7:35 PM	1.80	4.14
3	11/10/99	NA	0.11	4.25
4	11/15/99	NA	0.23	4.48
5	11/16 - 11/17/99	7:22 PM	0.71	5.19
6	11/19 - 11/21/99	12:45 PM	1.61	6.8
7	11/30 - 12/2/99	2:44 AM	1.87	8.67
8	12/9 - 12/10/99	NA- Snow	0.9	9.57
9	12/12 - 12/13/99	NA	0.16	9.73
10	1/3 - 1/4/00	NA	0.03	9.76
11	1/11/00	9:50 AM	1.63	11.39

Figure 1

Accumulated Rain Fall

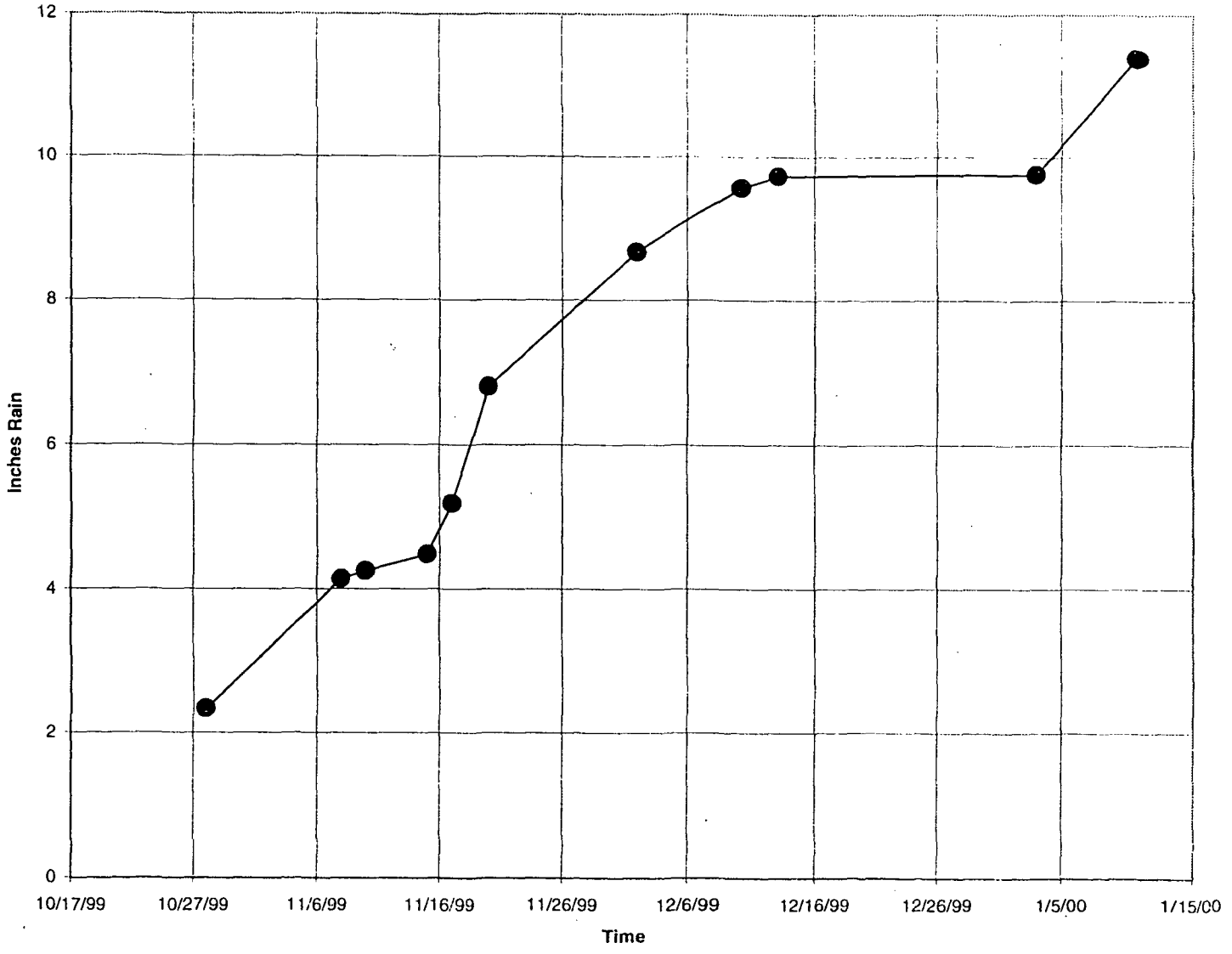


Table 2
Storm Sample Data

Date		10/28/99	11/8/99	11/17/99	11/19/99	11/30/99	1/11/00	2/11/00
Rain Amount		2.34	1.8	0.71	1.61	1.87	1.63	
Site	**Test**	(Results expressed in mg/L)						
Nevada St	Oil & Grease	9	5	6	<4	6	7	
	TSS*	152	87	37	69	32	92	
Broad St.	Oil & Grease	6	5	4	<4	<4	<4	
	TSS*	66	50	43	54	67	100	
Nevada St Ravine	Oil & Grease	4	<4	<4	<4	<4	<4	
	TSS*	143	104	110	177	81	123	
Freeway Culvert	Oil & Grease	4	<4	<4	<4	<4	5	
	TSS*	178	84	59	195	76	145	
Pine St Bridge	Oil & Grease	4	<4	<4	<4	<4	<4	
	TSS*	70	44	31	92	50	116	
N. Queen	Oil & Grease	<4	<4	<4	<4	<4	<4	
(Gold Run Creek)	TSS*	339	412	303	240	154	133	
Deer Creek								
Above Ravine	TSS*						3	4
Below Gualt Bridge	TSS*						205	31

*TSS - Total Suspended Sediment

Note: All the early Fall storms visually showed very little sediment above the Nevada Street ravine drain but always showed sediment flowing from the Ravine into Deer Creek. Little Deer Creek, Gold Run and the sampled Storm drains always had sediment loads (see above data).

Appendix

FRIENDS OF DEER CREEK
Water Sampling Check List
(Rev. November 21, 1999)

A storm event is when the rain fall exceeds 0.5 inches in 3-4 hours. Track carefully.

Preparation:

- ☐ Sample Bottles Labeled-6 Plastic (Total Suspended Solids, TSS) & 6 Glass (Oil & Grease, O/G)
- ☐ Sample Bucket
- ☐ Sample Log Book
- ☐ Ice Chest with Ice or Coolant
- ☐ Pens (no pencils)
- ☐ Mark tops of Bottles with sample number
- ☐ Fill out Log sheet
- ☐ Flashlights
- ☐ Rain gear
- ☐ Watch
- ☐ Phone House on Pine Street
- ☐ Phone Team
- ☐ Fill out Log Sheet and Labels
- ☐ Watch Rain Gage

Taking Samples:

- ☐ Check Log for proper order of sampling
- ☐ Take bucket & wash out bucket with water from drain
- ☐ Pull sample in Bucket
- ☐ Take appropriate marked bottle
- ☐ Transfer bucket sample to glass jar and then plastic jug
- ☐ Log in time, place and type of sample to the appropriate bottle (rest of label already filled out)
- ☐ Log in time, place & type of sample to Log
- ☐ Put Oil/Grease sample (glass jar) into ice chest; plastic into box
- ☐ Be sure you have 6 samples sites and 12 samples total, all logged in
- ☐ Be sure to list all team members taking samples in log
- ☐ At end of taking samples, log in time and sign log.
- ☐ Fill out Chain of Custody and sign when at Lab.(be sure to write in time when submitting)
- ☐ Take samples to Crammer Engineering for analysis
- ☐ Be sure to pick up more bottles & jars, labels and new Chain of Custody document
- ☐ Record time, date, and rain fall at end of storm on Log (take after all rain has cleared area)
- ☐ Be sure to sign all documents
- ☐ Prepare bottles and jars for next storm event.
- ☐ Thank all members of the Team!
- ☐ Put away stuff

Date: _____ **Rain Event**

Storm Water Samples

Sample #	Location	Time	Test	Comments
_____- 1	Nevada Street			
_____- 2	" "			
_____- 3	Broad St. North side			
_____- 4	" " " "			
_____- 5	Nevada St Ravine			
_____- 6	" " "			
_____- 7	Freeway Culvert			
_____- 8	" "			
_____- 9	Pine St Bridge N. side			
_____- 10	" " " " "			
_____- 11	N Queen by RR car			
_____- 12	" " " " "			

Names of Sampling Team:

Comments:

Signature Sampler:_____

Date& Time:_____

Label Example

Cranmer Analytical Laboratory

LAB #	
CLIENT	
SAMPLE SITE	
ANALYSIS	
SAMPLED BY	
DATE	TIME

1188 E. Main Street / Grass Valley, CA 95945 /(530)273-7284

Cranmer
Analytical
Laboratory

1188 E. Main Street – Grass Valley, CA 95945
530-273-7284 FAX: 530-273-9507

CHAIN OF CUSTODY

Page _____ of _____

Preservation (P)
A = Cold
B = HNO_3
C = HCl
D = H_2SO_4
E = NaOH

Container
I = Intact
B = Broken
L = Leaked
* = Bubbles in VOA

Appearance
C = Clear
T = Turbid
S = Sediment

Client:	Phone:
Mailing Address:	FAX:
	PO #:
Project Name:	Project #:
Project Manager:	
Sampled By (sign):	(Print):
Special Instructions:	

ANALYSIS REQUIRED

CONTAINERS/PRESERVATION

RECEIPT

Lab No.	Sample Identity	Date	Time	Matrix	PLASTIC #	PLASTIC P	GLASS #	GLASS P	VOA #	VOA P	STERILE #	COOL?	CONTAINER	APPEARANCE

RELINQUISHED BY (SIGN)	PRINT NAME/COMPANY	DATE/TIME	RECEIVED BY (SIGN)	PRINT NAME/COMPANY

Rec'd at lab by: Date/Time:

Comments:

SHIPPED VIA ☐ FED X ☐ UPS ☐ CA O/N ☐ OTHER: _____

All hazardous waste samples will be returned to client or billed for disposal.