River and Stream Ambient Monitoring Report for Water Year 2001

October 2002

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River and Stream Ambient Monitoring Report for Water Year 2001

by
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October 2002

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Abstract

The Washington State Department of Ecology (Ecology) collected monthly water quality information at 86 stream monitoring stations during Water Year (WY) 2001 (October 1, 2000 through September 30, 2001). We also collected 30-minute interval temperature data at 46 sites from June through September 2001. The principal goals of this ongoing monitoring program are to characterize the rivers and streams of Washington State and to track changes in water quality.

This report is intended to document methods and data quality, and to present the data for WY 2001. A description of the Ecology long-term monitoring program and access to historical data can be found on the Ecology internet web site at http://www.ecy.wa.gov/ under "Environmental Info." and "Watersheds".

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Introduction

The Washington State Department of Ecology (Ecology) and its predecessor agency have operated a long-term ambient water quality monitoring program since 1959. The current program consists of monthly water quality monitoring for conventional parameters at about 82 stations on rivers and streams within Washington State. (The actual number of stations varies slightly depending on funding and special projects.) In addition, in 2001 we implemented a program to collect 30-minute interval temperature data at long-term stations from June through September.

The principal goals of this program are to characterize stream water quality and to evaluate spatial and temporal changes in water quality (trends). Within Ecology, the data generated by the Freshwater Monitoring Unit (FMU) are used to determine if designated uses are supported (e.g., Ecology, 1998), refine and verify TMDL models, develop water quality based permits, prepare 305(b), 303(d), and other management reports, provide water quality information necessary to prioritize grant awards, and conduct miscellaneous site-specific evaluations. Our data are provided free to the public and are widely used by academics, consultants, local government entities, schools, and others interested in the quality of Washington's flowing waters.

The purpose of this report is to describe the Water Year (WY) 2001 monitoring program, discuss data quality, and present results. More detailed analyses and interpretations of ambient monitoring data are reported elsewhere. The FMU analyzes results at specific stations in response to requests by clients (e.g., Hallock, 1996). A generalized assessment of water quality at particular stations is provided online (http://www.ecy.wa.gov/programs/eap/fw_riv/rv_main.html) in the form of a water quality index (WQI). The WQI and trends at long-term stations are reported in "Condition of Freshwaters in Washington State for the Year 2000" (Plotnikoff et al., 2001). Other programs conduct some analyses of their own; for example, the Ecology Water Quality Program applies its own data reduction procedures prior to producing Washington's 305(b) and 303(d) reports.

Methods

Sampling Network

The ambient monitoring network in WY 2001 consisted of monthly water collection at two types of stations: (1) long-term and (2) regional or basin stations.

1. Long-term stations are monitored every year to track water quality changes over time (trends) and to assess inter-annual variability, as well as to collect current water quality information. These stations are generally located near the mouths of major rivers, below major population centers, upstream from most anthropogenic sources of water quality problems, or where major streams enter the state. We monitor 64 long-term stations.

2. Basin stations are generally monitored for one year only (although they may be re-visited every five years) to collect current water quality information. These stations are selected to support the waste discharge permitting process, TMDL assessments, and allow expanded coverage over a long-term network. Sampling was focused in the following basins during WY 2001: Esquatzel/Crab Creek, Okanogan, Island/Snohomish, and South Puget Sound. Some basin stations are selected to target known problems and may not necessarily reflect ambient conditions.

The locations of stations monitored during WY 2001 are presented in Table 1. Appendix A lists current and historical monitoring locations and the years they were monitored by Ecology and its predecessor agencies. Historical data for these stations are available from the FMU on request. Also, a description of our long-term monitoring program, access to historical data, and previous annual reports can be found on the Ecology internet web site at http://www.ecy.wa.gov/ under "Environmental Info." and "Watersheds."

Sample Collection and Analysis

The majority of water samples were collected as single surface grab samples from highway bridges. Twelve water quality constituents were monitored at all stations monthly in WY 2001 (Table 2). Sample collection and analytical methods are described in earlier annual reports (e.g., Hallock, et al., 1998), our field monitoring protocols (Ward, 2000), the FMU quality assurance documents (Hopkins, 1996 and Ehinger, 1995), and Manchester Environmental Laboratory's (MEL) Laboratory User's Manual (Ecology, 1994).

Any long-term monitoring program will experience changes in sampling or analytical procedures that can potentially affect results. Normally, changes will result in improved precision or reduced bias. Most changes will have only a minor affect on a synoptic analysis of the data but even improvements in procedures can mislead the unwary analyst of long-term trends. We made no changes to collection or analytical procedures in WY 2001. Minor changes to quality control (QC) procedures and laboratory technology are discussed in Appendix B. All earlier known and suspected changes to methods and procedures during the history of the stream monitoring

program, as well as large-scale environmental changes that may affect a trend analysis are documented in Appendix B.

Table 1. Ecology stream ambient monitoring stations for Water Year 2001. (Status: L=long term; B=basin).

Station		Status	Station		Status
01A050	Nooksack R @ Brennan	L	27B070	Kalama R nr Kalama	L
01A120	Nooksack R @ No Cedarville	L	27D090	EF Lewis R nr Dollar Corner	L
03A060	Skagit R nr Mount Vernon	L	31A070	Columbia R @ Umatilla	L
03B050	Samish R nr Burlington	L	32A070	Walla Walla R nr Touchet	L
04A100	Skagit R @ Marblemount	L	33A050	Snake R nr Pasco	L
05A070	Stillaguamish R nr Silvana	L	34A070	Palouse R @ Hooper	L
05A090	SF Stillaguamish @ Arlington	L	34A170	Palouse R @ Palouse	L
05A110	SF Stilly nr Granite Falls	L	34B110	SF Palouse R @ Pullman	L
05B070	NF Stillaguamish @ Cicero	L	35A150	Snake R @ Interstate Br	L
05B110	NF Stillaguamish nr Darrington	L	35B060	Tucannon R @ Powers	L
07A090	Snohomish R @ Snohomish	L	36A070	Columbia R nr Vernita	L
07C070	Skykomish R @ Monroe	L	37A090	Yakima R @ Kiona	L
07C120	Skykomish R nr Gold Bar	B	37A205	Yakima R @ Nob Hill	L
07D050	Snoqualmie R nr Monroe	L	37E120	Wide Hollow Creek @ Randall Park	B
07D100	Snoqualmie R. abv Carnation	B	37G120	Ahtanum Cr. @ 62nd Ave	B
07D130	Snoqualmie R @ Snoqualmie	L	38G120	Cowiche Cr. @ Zimmerman rd	B
07D150	M F Snoqualmie R nr Ellisville	B	39A050	Yakima R @ Harrison Bridge	B
07E055	Sultan R @ Sultan	B	39A060	Yakima R @ Ellensburg	B
07Q070	Raging R @ Fall City	B	39A090	Yakima R nr Cle Elum	L
08C070	Cedar R @ Logan St/Renton	L	41A070	Crab Cr nr Beverly	L
08C110	Cedar R nr Landsburg	L	41A110	Crab Cr nr Moses Lake	B
09A080	Green R @ Tukwila	L	41D070	Rocky Ford Creek @ Hwy 17	B
09A190	Green R @ Kanaskat	L	41G070	Rocky Coulee Wasteway @ K NE Rd	B
10A050	Puyallup R @ Puyallup (USGS)	B	41H050	Moses Lake S. Outlet	B
10A070	Puyallup R @ Meridian St	L	42A070	Crab Cr below Adrian	B
10C095	White River @ R Street	B	45A070	Wenatchee R @ Wenatchee	L
10D070	Boise Cr @ Buckley	B	45A110	Wenatchee R nr Leavenworth	L
11A070	Nisqually R @ Nisqually	L	46A070	Entiat R nr Entiat	L
13A060	Deschutes R @ E St Bridge	L	48A070	Methow R nr Pateros	L
16A070	Skokomish R nr Potlatch	L	48A140	Methow R @ Twisp	L
16C090	Duckabush R nr Brinnon	L	49A070	Okanogan R @ Malott	L
17A060	Big Quilcene R nr mouth	B	49A190	Okanogan R @ Oroville	L
17C070	Jimmycomelately Cr near Mouth	B	49B070	Similkameen R @ Oroville	L
18A050	Dungeness R nr Mouth	B	49B110	Similkameen R. @ Chopaka Br. B. C.	B
18A070	Dungeness R nr Sequim	B	53A070	Columbia R @ Grand Coulee	L
18B070	Elwha R nr Port Angeles	L	54A120	Spokane R @ Riverside State Pk	L
20B070	Hoh R @ DNR Campground	L	55B070	Little Spokane R nr Mouth	L
22A070	Humptulips R nr Humptulips	L	56A070	Hangman Cr @ Mouth	L
23A070	Chehalis R @ Porter	L	57A150	Spokane R @ Stateline Br	L
23A160	Chehalis R @ Dryad	L	60A070	Kettle R nr Barstow	L
24B090	Willapa R nr Willapa	L	61A070	Columbia R @ Northport	L
24F070	Naselle R nr Naselle	L	62A090	Pend Oreille @ Metaline Falls	B
26B070	Cowlitz R @ Kelso	L	62A150	Pend Oreille R @ Newport	L

Table 2. Water quality constituents monitored monthly in Water Year 2001 as part of Ecology's river and stream ambient monitoring program.

Standard constituents monitored at all stations:		
conductivity	suspended solids, total	phosphorus, total
oxygen, dissolved	turbidity	ammonia, total
pH	fecal coliform bacteria	nitrate + nitrite, total
temperature	soluble reactive phosphorus	nitrogen, total

Continuous Temperature Monitoring

In the summer of 2001, the EM&TS began collecting continuous temperature data at 30-minute intervals at most of the long-term ambient monitoring stations. The purpose of this monitoring is to collect continuous temperature data that may be used for trend analyses and to determine compliance with current and proposed water quality standards.

Two Onset Stow Away TidbiT® temperature loggers were deployed at each station, one in water and one in air. All loggers were shaded with a PVC pipe and installed in a location representative of the surrounding environment. Stream loggers were installed about six inches off the stream bottom to minimize potential influence from groundwater inflow. Loggers were placed in a free flowing location at a depth to avoid exposure to air resulting from low flows.

We deployed the loggers in June and July and retrieved them in September. Detailed protocols will be written and referenced in future annual reports.

Quality Assurance

MEL's Quality Assurance (QA) Program includes the use of quality control charts, check standards, in-house matrix spikes and laboratory blanks, along with quarterly performance evaluation samples. For a more complete discussion of laboratory quality assurance, see MEL's Quality Assurance Manual (Ecology, 1988b) and Laboratory User's Manual (Ecology, 1994).

The QA program for field sampling consisted of three parts: (1) adherence to a procedures manual for sample/data collection and periodic evaluation of sampling personnel, (2) instrument calibration methods and schedules, and (3) the collection of a field QC sample twice during each sampling run. Our QA program is described in detail in Ehinger (1995).

The following three types of field QC samples were collected.

- Duplicate (Sequential) Field Samples - These consisted of an additional sample collection made approximately 15-20 minutes after the initial collection at a station. These samples represent the variability due to short-term in-stream processes, sample collection and processing, and laboratory analysis.

- Duplicate (Split) Field Samples - These consisted of one sample (usually the sequential duplicate) split into two containers that are processed as individual samples. This eliminates the in-stream variability and isolates the variability to that due to field processing and laboratory analysis.

- Field Blank - These consisted of the submission and analysis of deionized water. The expected value for each analysis is the reporting limit for that analysis. Significantly higher results would indicate that sample contamination had occurred during field processing or during laboratory analysis.

QC samples were submitted semi-blind to the laboratory (they were identified as QC samples, but sample type (duplicate, split, or blank) and station were not identified).

Ninety-three field QC samples were processed, 7 field blanks and 86 field splits and sequential samples. In addition, the laboratory analyzed some field QC samples in duplicate (*i.e.*, lab split samples). The central tendency of the variance of pairs of split field samples was summarized by calculating the square root of the mean of the sample-pair variances (root-mean-square - RMS). These figures provide an unbiased (and higher) estimate than other commonly used statistics (for example, mean or median of the standard deviations).

A two-tiered system was used to evaluate data quality of individual results. The first tier consisted of four automated checks: holding time, variability in field duplicates, reasonableness of the result, and stoichiometric balance of nutrient species. Results exceeding pre-set limits were flagged. The second tier QC evaluation was a manual review of the data flagged in the first tier. Data were then coded from one through nine (one = data meets all QA requirements, nine = data are unusable). Data with quality codes greater than four are generally not distributed outside the agency.

The quality of the continuous temperature data was assessed by calibration checks utilizing a certified reference thermometer before and after a deployment. In addition, the data were compared to field temperature measurements taken at deployment and retrieval with a calibrated alcohol thermometer. Results were also compared to the monthly measurements collected during normal monitoring surveys. All data were reviewed graphically and anomalies were deleted prior to loading the results into the database.

Results and Discussion

The primary purpose of this report is to present the results of Ecology's stream monitoring in WY 2001. Appendix C contains results for each station monitored in WY 2001. Raw data are available in computer formats on request and the most recent published WY's data are posted on Ecology's World Wide Web pages (http://www.ecy.wa.gov/).

A station-by-station data analysis is not within the scope of this report. Individual results exceeding the water quality criteria in Washington's Water Quality Standards (Washington Administrative Code, Chapter 173-201A) are identified in reports on our web site (http://www.ecy.wa.gov/programs/eap/fw_riv/monthly/riv_excds.html). The numeric criteria from the Water Quality Standards are presented in Table 3.

Table 3. Water quality criteria used to evaluate monitoring results. (Results outside the ranges indicated are considered to exceed the criterion.) WAC 173-201A-130 identifies exceptions to the standard criteria for some stream segments.

Class	Temperature	Oxygen	pH	Fecal Coliform 10 Percent	Fecal Coliform Geometric mean
AA	<=16°C	>9.5 mg/L	6.5<=pH<=8.5	<=100	<=50
A	<=18°C	>8.0 mg/L	6.5<=pH<=8.5	<=200	<=100
B	<=21°C	>6.5 mg/L	6.5<=pH<=8.5	<=400	<=200

Continuous Temperature Monitoring

Seasonal maximums and the maximum seven-day average of daily maximums are listed in Table 4. Of the 46 monitored stations, the seasonal maximum at most stations (38) exceeded water quality criteria. The temperature criteria are currently under review.

Table 4. Temperature Monitoring (30-Minute Intervals; °C) - Summary for Water Year 2001.

Station		Deployment Maximum Max[b]	Deployment Maximum Date/Time	Max 7-day Mean[a] Max[b]	Max 7-day Mean[a] Date[c]	Deploy	Retrieve
01A050	Nooksack R. @ Brennan	17.7	08/12 18:30	17.4	08/12	07/01	09/28
01A120	Nooksack R @ No Cedarville	18.0	08/10 18:30	17.6	08/12	07/26	09/18
03B050	Samish R nr Burlington	17.4	08/10 19:00	16.8	08/10	07/26	09/18
04A100	Skagit R @ Marblemount	13.7	07/26 18:00	13.2	08/12	07/26	09/18
05A070	Stillaguamish R nr Silvana	22.4	08/12 20:00	21.6	08/12	06/21	09/19
05A090	SF Stillaguamish @ Arlington	23.5	08/12 18:00	22.6	08/12	06/21	09/18
05B070	NF Stillaguamish @ Cicero	21.2	08/12 18:31	20.7	08/12	06/21	09/18
05B110	NF Stillaguamish nr Darrington	18.5	08/12 17:00	18.2	08/12	06/21	09/18
07C070	Skykomish R @ Monroe	20.4	08/12 21:01	20.0	08/12	07/23	09/19
07D050	Snoqualmie R nr Monroe	21.1	08/12 19:01	20.7	08/13	07/23	09/17
07D130	Snoqualmie R @ Snoqualmie	19.9	08/12 21:01	19.3	08/11	07/23	09/17

Table 4. Continued.

Station		Deployment Maximum Max[b]	Date/Time	Max 7-day Mean[a] Max[b]	Date	Deploy	Retrieve
08C070	Cedar R @ Logan St/Renton	19.6	08/12 17:31	19.1	08/11	07/23	09/19
08C110	Cedar R nr Landsburg	13.3	07/23 17:01	12.6	08/11	07/23	09/17
09A190	Green R @ Kanaskat	19.0	08/12 17:32	18.6	08/10	07/23	09/21
11A070	Nisqually R @ Nisqually	16.9	08/10 17:30	16.5	08/10	07/25	10/01
13A060	Deschutes R @ E St Bridge	19.9	08/10 18:30	19.4	08/10	06/25	10/01
16A070	Skokomish R nr Potlatch	15.8	07/09 18:00	15.2	07/06	06/26	10/01
16C090	Duckabush R nr Brinnon	14.0	08/13 16:30	13.8	08/12	06/26	10/01
18B070	Elwha R nr Port Angeles	16.8	09/14 17:00	16.6	08/11	06/25	10/01
20B070	Hoh R @ DNR Campground	16.5	08/10 20:31	16.0	08/11	06/25	10/01
22A070	Humptulips R nr Humptulips	20.2	08/12 18:30	19.4	08/11	06/25	10/01
23A070	Chehalis R @ Porter	23.0	08/12 18:30	22.3	08/11	06/25	10/01
23A160	Chehalis R @ Dryad	22.8	08/12 18:30	21.7	08/12	06/27	10/03
24B090	Willapa R nr Willapa	23.1	08/12 17:30	22.	08/11	06/27	10/03
24F070	Naselle R nr Naselle	19.4	08/12 17:00	18.7	08/11	07/25	10/03
26B070	Cowlitz R @ Kelso	19.9	08/09 18:30	19.1	08/10	07/25	10/03
27B070	Kalama R nr Kalama	20.7	08/12 19:30	20.2	08/10	06/27	10/03
27D090	EF Lewis R nr Dollar Corner	25.1	08/10 17:00	24.4	08/10	07/25	10/03
32A070	Walla Walla R nr Touchet	28.7	07/12 19:31	27.6	08/13	07/11	09/25
34A170	Palouse R @ Palouse	28.0	07/10 19:31	26.9	08/13	07/10	09/25
34B110	SF Palouse R @ Pullman	24.2	07/10 17:31	22.2	07/13	07/10	09/25
35B060	Tucannon R @ Powers	27.2	07/12 18:01	25.9	08/13	07/11	09/25
37A205	Yakima R @ Nob Hill	23.2	08/16 19:31	22.9	08/13	06/04	09/25
39A090	Yakima R nr Cle Elum	21.4	08/15 17:00	20.9	08/14	06/04	09/23
41A070	Crab Cr nr Beverly	28.4	08/13 20:00	28.	08/13	06/04	10/10
45A070	Wenatchee R @ Wenatchee	26.6	08/11 09:00	24.5	08/13	06/05	09/24
45A110	Wenatchee R nr Leavenworth	19.3	07/13 17:00	18.8	07/10	06/05	10/10
46A070	Entiat R nr Entiat	24.8	08/11 16:59	24.	08/10	06/06	09/24
48A070	Methow R nr Pateros	24.4	08/13 17:00	23.4	08/10	06/06	09/24
48A140	Methow R @ Twisp	21.1	08/11 17:30	20.6	08/09	06/06	09/24
49A190	Okanogan R @ Oroville	26.3	08/15 18:30	25.8	08/14	06/06	10/09
49B070	Similkameen R @ Oroville	24.7	07/27 15:00	23.4	07/27	06/06	10/03
55B070	Little Spokane R nr Mouth	18.3	07/10 20:30	17.2	07/13	07/10	09/25
56A070	Hangman Cr @ Mouth	27.0	07/10 18:30	25.4	07/12	07/09	09/25
57A150	Spokane R @ Stateline Br	26.1	08/15 19:32	25.8	08/14	07/10	09/25
60A070	Kettle R nr Barstow	24.3	08/12 17:00	23.2	08/08	07/09	09/24

[a] This is the seven-day period with the highest average of daily maximum temperatures.
[b] There may be other dates or other seven day periods with the same maximum.
[c] Date shown is middle of seven day period.

Quality Assurance

Because the variability of many parameters increases with increasing mean concentration, the RMS values of some variables are presented according to concentration ranges (Table 5). The true value of variability within QC types, in order of decreasing variability, should be field sequential samples > field split samples > lab split samples. In practice, the estimates of the variability are strongly influenced by extreme values (which are related to mean value of the sample pair), especially when sample size is small. The analysis is further complicated because

all data below the reporting limit are censored by MEL, effectively producing a variance of zero between any two samples that are below this limit. This skews the variability estimate downward for the lowest concentration ranges. In general, variability of QC types followed the expected pattern. Variances were generally low and similar to that experienced in previous years. The high variance for fecal bacteria >50 colonies/100 mL was, for both the lab split and the field sequential samples, due very high counts for a single pair of samples and not due to consistently poor replication. In any case, high variance among bacteriological replicates is expected.

The expected results of the analyses of the blank samples were 'below reporting limits' for all concentrations and turbidity, and less than three μS (micro Siemans) for specific conductivity. Temperature, dissolved oxygen, pH, and fecal coliform were not measured on blanks. All measurements on blank samples were reported as 'less than the reporting limits' (Table 6). Mean conductivity of blank samples was 2.0 μS (standard error=0.9 μS).

Laboratory staff assessed the remaining elements of the laboratory QA program through a manual review of laboratory quality control charts, check standards, in-house matrix spikes, and laboratory blanks. Results were within acceptable ranges as defined by MEL's Quality Assurance Manual (Ecology, 1988b) or were either re-run or coded as deemed appropriate by laboratory staff (e.g., as an estimate, "J").

In December, 2000, the automated QC review identified an unusual number total nitrogen (TN) results that were less than the nitrate+nitrite result for the same sample. MEL reported that internal QC for both analyses looked good, but that their automated digestion procedure may have a low bias. A low bias may apply to TN data collected from October through February. Except for December data, however, MEL deemed the bias to be small enough that the data did not need to be qualified. December TN results were coded as estimates (Lee, 2001).

QC (calibration check) results for continuous temperature monitoring data loggers were used to verify the accuracy of each logger before and after deployment. If a pre-survey calibration check indicated a logger failed to be within the logger accuracy (either 0.2 °C for water or 0.4 °C for air) when compared to a certified reference thermometer then the logger was rejected and not deployed. If a logger failed a post-survey calibration check then the results may be rejected or possibly adjusted. Water level changes at a few stations exposed the water temperature logger to air or, in one case, a summer rain event flooded an air temperature logger. These problems were readily apparent during the graphical review of the data and the affected results were removed prior to loading the data into the database.

Table 5. Root mean square of the standard deviation of sequential samples, field splits, and laboratory splits. *n* = number of sample pairs.

		Field Sequential		Field Split		Lab Split	
Variable	Range	RMS	Sample size, *n*	RMS	Sample size, *n*	RMS	Sample size, *n*
Temperature (C)	all	0.10	*43*	NA	-	NA	-
PH	all	0.10	*42*	NA	-	NA	-
Dissolved oxygen	all	0.15	*43*	0.09	*40*	NA	-
Specific conductivity (mS)	all	1.28	*43*	NA	-	NA	-
Turbidity (NTU)	≤10 >10	0.93 1.0 [a]	*40* *2*	0.16 2.04	*39* *3*	0.03 0.29	*146* *35*
Suspended solids (mg L^{-1})	≤10 >10	1.79 4.47 [a]	*37* *3*	NA	-	0.30 3.16	*80* *35*
Total phosphorus (µg L^{-1})	≤50 >50	1.88 1.79 [a]	*35* *7*	1.75 2.09	*35* *7*	0.74 1.94	*88* *18*
Soluble reactive P (µg L^{-1})	≤50 >50	0.35 [a] 1.95	*37* *5*	0.23 3.12	*38* *4*	0.17 6.49	*138* *21*
Total Nitrogen (µg L^{-1})	≤500 >500	7.29 [a] 103	*31* *11*	11.3 17.1	*30* *12*	2.62 47.4	*81* *27*
NO_3/NO_2-N (µg L^{-1})	≤500 >500	1.11 [a] 65.8	*32* *10*	1.00 34.5	*31* *11*	0.97 51.6	*87* *27*
NH_3-N (µg L^{-1})	≤20 >20	0.94 [a] 3.26	*37* *5*	1.22 2.77	*39* *3*	0.18 2.38	*63* *8*
Fecal coliform (# 100 mL^{-1})	≤50 >50	3.37[a] 318	*32* *6*	NA	-	2.85 105	*99* *15*

[a] One sample pair was excluded from the sequential analysis for lab parameters because of a likelihood of an error in labeling of the QC sample.

Table 6. Results of blind blank (deionized water) sample submission.

Variable	reporting limit	# above reporting limit (mean, std. dev.)	sample size, *n*
Specific conductivity (µS)	NA	NA (2.0, 0.9)	*7*
Turbidity (NTU)	0.5	0	*7*
Suspended solids (mg L^{-1})	1.0	0	*3*
Total phosphorus (µg L^{-1})	10	0	*7*
Soluble reactive P (µg L^{-1})	5	0	*7*
Total Nitrogen (µg L^{-1})	10	0	*7*
NO_3/NO_2-N (µg L^{-1})	10	0	*7*
NH_3-N (µg L^{-1})	10	0	*7*

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Appendix A

Station description and period of record
for Ecology's River and Stream
Ambient Monitoring Program

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Monitoring History for Environmental Assessment Program Ambient Monitoring Stations

Station Number	Name	Long-term or Rotating	Water Year Sampled <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
01A050	Nooksack R. @ Brennan	L		X XX XX	XXXXXXXXXX	XXXXXXXXXX	XX
01A070	Nooksack R @ Ferndale	R	XXXXXXXX	XX X X			
01A090	Nooksack R nr Lynden	R		X X X			
01A100	Nooksack R @ Hannegan Road	R					
01A120	Nooksack R @ No Cedarville	L	X XXXXXXXX X	XX X XX	XXXXXXXXXX	XX X XXXXX	XX
01A140	Nooksack R above the MF	R				X	
01B050	Silver Cr nr Brennan	R				XX	
01D070	Sumas R nr Huntingdon BC	R		X X XXX	XXXXXXXXXX	XXX X	
01D080	Sumas R @ Jones Road	R					
01D090	Sumas R @ Sumas	R		X X			
01D120	Sumas R nr Nooksack	R				X	
01E050	Whatcom Cr @ Bellingham	R		X X		X	
01E070	Whatcom Cr @ Lake Outlet	R		X			
01E090	Whatcom Lake nr Bellingham	R	XXX X	X			
01F070	SF Nooksack @ Potter Rd	R				X	
01G070	MF Nooksack R	R				X	
01H070	Terrell Cr. nr Jackson Rd.	R					
03A050	Skagit R @ Conway	R		X X			
03A060	Skagit R nr Mount Vernon	L	X XXXXXXXX X	X XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
03A070	Skagit R nr Sedro Woolley	R		X X X			
03A080	Skagit abv Sedro Woolley	R					X
03B045	Samish R. nr Mouth	R				X	X
03B050	Samish R nr Burlington	L	X XXXXXXXX X	XX X XXX	XXXXXXXXXX	XX X XXXXX	XX
03B070	Samish R nr Hoogdal	R		X			
03B080	Samish R. nr Prairie	R				X	
03C060	Friday Cr Blw Hatchery	R		X		X X	
03C080	Friday Cr at Alger	R		X			
03D050	Nookachamp Ck nr Mouth	R				X	X

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
03E050	Joe Leary Slough nr Mouth	R					X
03F070	Hill Ditch @ Cedardale Rd	R					X
04A060	Skagit R @ Concrete	R		X X XXX	XXXXXXXXXX	XX X	
04A100	Skagit R @ Marblemount	L	X XXXXXXXX X	X XX	XXXXXXXXXX	XXXXXXXXXX	XX
04A140	Skagit R @ Newhalem	R		X X			
04B070	Baker R @ Concrete	R	XXXX	XXX	XXXXXXXXXX	XX X	
04B150	Baker Lake @ Boulder Cr	R		XXXXX	X		
04C070	Sauk R nr Rockport	R		XXX	XXXXXXXXXX	XX X	
04C110	Sauk R @ Darrington	R	X XX				
04E050	Finney Cr near Birdsview	R				X	
05A050	Stillaguamish R @ Stanwood	R		X			
05A055	Hat Slough nr Stanwood	R		X			
05A070	Stillaguamish R nr Silvana	L	X XXXXXXXXXX	XX X XXX	XXXXXXXXXX	XXXXXXXXXX	XX
05A090	SF Stillaguamish @ Arlington	L		X X XX	XXXXXXXXXX	XX X XXXXX	XX
05A110	SF Stilly nr Granite Falls	L	X XXXXXXX	X		X XXXXX	XX
05B070	NF Stillaguamish @ Cicero	L	XXXXXXXX	XX X XX	XXXXXXXXXX	XX X XXXXX	XX
05B090	NF Stillaguamish R @ Oso	R		X			
05B110	NF Stillaguamish nr Darrington	L		X		X XXXXX	XX
07A090	Snohomish R @ Snohomish	L	X XXXXXXXX X	XX X XXX	XXXXXXXXXX	XXXXXXXXXX	XX
07A109	Snohomish R nr Monroe NE	R		X			
07A110	Snohomish R nr Monroe SW	R		X			
07A111	Snohomish R nr Monroe (USGS)	R		XX X	XX		
07B055	Pilchuck R @ Snohomish	R		X X XX	XXXXXXXXXX	XXX X	
07B090	Pilchuck R nr Lake Stevens	R		X			
07C070	Skykomish R @ Monroe	L		X X XXX	XXXXXXXXXX	XXXX XXXXX	XX
07C090	Skykomish R @ Sultan	R		X X			
07C120	Skykomish R nr Gold Bar	R	X XXXXXXXXXX	X XX	XXXXXXXXXX	XXX	X
07C170	Skykomish R nr Miller R	R		X			
07D050	Snoqualmie R nr Monroe	L		X		XX XXXXX	XX

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
07D070	Snoqualmie R nr Carnation	R		X XX XXX	XXXXXXXXXX	XXX X	
07D100	Snoqualmie R. abv Carnation	R					X
07D130	Snoqualmie R @ Snoqualmie	L	X XXXXXXXXXX	X XXX	XXXXXXXXXX	XXX XXXXX	XX
07D150	M F Snoqualmie R nr Ellisville	R				X	X
07E055	Sultan R @ Sultan	R	XXXXXXXX X	XX X		X	X
07F055	Woods Cr @ Monroe	R		X X		X X	
07G070	Tolt R nr Carnation	R	XXXXXXXXXX	X		X	
07M070	S F Snoqualmie R at North Bend	R				X	
07N070	N F Snoqualmie R near Ellisville	R				X	
07P070	Patterson Ck nr Fall City	R				X X	
07Q070	Raging R @ Fall City	R				X	X
07R050	French Cr nr Mouth	R				X	
08A070	McAleer Cr nr Mouth	R		X			
08A090	Upper McAleer Cr	R		X			
08B070	Sammamish R @ Bothell	R	X XXXXXXXXXX	XX X X XX	XXXXXXXXXX	XXXXX X	
08B110	Sammamish R @ Redmond	R		X		X	
08B130	Issaquah Cr nr Issaquah	R	XXX X	XX X X		X	
08C070	Cedar R @ Logan St/Renton	L	X XXXXXXX	X X X XX	XXXXXXXXXX	XXXXXXXXXX	XX
08C080	Cedar R @ Maplewood	R				X	
08C090	Cedar R @ Maple Valley	R		X		X	
08C110	Cedar R nr Landsburg	L	X XXX	X XX	XXXXXXXXXX	XX XXXXXX	XX
08D070	Mercer Slough nr Bellevue	R		X			
08E090	Kelsey Cr @ Monitor Site	R		X			
08E110	Upper Kelsey Cr	R		X			
08F070	May Cr nr Mouth	R		X			
08G070	Valley Cr nr Mouth	R		X			
08H070	Thornton Cr nr Mouth	R		X			
08H100	North Branch Thornton Cr	R		X			
08J070	West Branch Thornton Cr	R		X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
08J100	Swamp Creek abv Lynnwood	R				X	
08K070	Ship Canal @ Ballard	R					
08K071	Bear Cr. below Cottage Lake Cr.	R					
08K090	Ship Canal @ Freemont	R				X	
08K100	North Creek nr Everett	R				X	
08K110	Ship Canal @ University	R					
08K130	Ship Canal @ Montlake	R					
09A060	Duwamish R @ Allentown Br	R			XXXXXXXXXX	XX	
09A070	Duwamish R @ Foster	R	X XXXXXXXX				
09A080	Green R @ Tukwila	L				XXXXXXXXX	XX
09A090	Green R @ 212th St nr Kent	R		X XX	XXXXXXXXXX	XX X	
09A110	Green R @ Auburn	R	XXXXX X	XX			
09A130	Green Abv Big Soos/Auburn	R	X XXXXXXXXXX	X		X	
09A150	Green R nr Auburn	R		X			
09A170	Green R nr Black Diamond	R		X			
09A190	Green R @ Kanaskat	L	X XX	X XX	XXXXXXXXXX	XXXXXXXXXX	XX
09B070	Big Soos Cr blw Hatchery	R		X X			
09B090	Big Soos Cr nr Auburn	R	XXXX	XX		X X	
09C070	Des Moines Cr nr Mouth	R		X		X	
09C090	Des Moines Cr @ So 200th	R		X			
09D070	Miller Cr nr Mouth	R		X			
09D090	Miller Cr @ Ambaum Blvd SW	R		X			
09E070	Mill Creek @ Orillia	R			XXXXXX	X X	
09E090	Mill Creek - Kent on W Valley Hwy	R			XXXXXX	X	
09F071	Newaukum Cr nr Mouth	R					
09F150	Newaukum Creek nr Enumclaw	R				X	
09G071	Springbrook Cr. @ N. end Longacres	R					
09H090	Black R @ Renton	R				X	
10A050	Puyallup R @ Puyallup	R	X XXXXXXXX X	XXX XXXXX	XXX		X

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
10A070	Puyallup R @ Meridian St	L		X X XX	XXXXXXXXXX	XXXXXXXXXX	XX
10A090	Puyallup R @ McMillin	R		X X			
10A110	Puyallup R @ Orting	R	X XXX XXXXXX	XXX X XX	XXXXXXXXXX	XX X X	
10B070	Carbon R nr Orting	R	XX	XX		X	
10B090	Carbon R @ Fairfax	R		X			
10C070	White R @ Sumner	R		XX XX	XXXXXXXXXX	XX X X	
10C085	White R nr Sumner	R	X	X X		X	
10C090	White R @ Auburn	R	XXXXX	X X			
10C091	White R @ Auburn - A	R					
10C095	White River @ R Street	R				X	XX
10C110	White R blw Buckley	R		X			
10C130	White R @ Buckley	R				X	
10C140	White R nr Buckley	R		X			
10C150	White R nr Greenwater	R		X			
10D070	Boise Cr @ Buckley	R	XXX	X			X
10D090	Boise Cr nr Enumclaw	R	XXX				
10E050	Salmon Creek nr Mouth	R					
10E070	Salmon Cr @ Sumner	R		X			
10F070	So Prairie Cr nr Crocker	R		X			
10F090	South Prairie Ck nr S. Prairie	R				X	
10G060	Hylebos Creek at Mouth	R					
11A070	Nisqually R @ Nisqually	L		X X XX	XXXXXXXXXX	XXXXXXXXXX	XX
11A080	Nisqually R @ McKenna	R	X XXXXXXXXXX	X		XX X	
11A090	Nisqually R abv Powell Cr	R		X XX	XXXXXXXXXX	X	
11A110	Nisqually R @ LaGrande	R		X			
11A140	Nisqually R @ Elbe	R		X X XX	X		
12A070	Chambers Cr nr Steilacoom	R	XXXXX	XX X	XXXXXX	XX X X	
12A100	Chambers Cr blw Steilacoom Lk	R	XX	X		XXX	
12A110	Clover Cr abv Steilacoom Lk	R	XXX	X		XXXX	

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
12A130	Clover Cr nr Parkland	R	XX				
12A140	Clover Creek nr Waller Road	R					
12B070	Leach Cr nr Steilacoom	R	XXX	X			
12C070	Flett Cr @ Custer Rd	R	XXX	X			
12D050	Ponce de Leon Ck nr mouth	R				XXX	
13A050	Deschutes R @ Tumwater	R	XXXXX X	X X			
13A060	Deschutes R @ E St Bridge	L		XX	XXXXXXXXXX	XXXX XXXXX	XX
13A080	Deschutes R nr Olympia	R		X X X			
13A150	Deschutes R nr Rainier	R	X XXX	X X XX	XXXXXXXXXX	XX X	
14A060	Goldsborough Cr @ Shelton	R				X X	
14A070	Goldsborough Cr nr Shelton	R	XXX X	X			
15A070	Dewatto R nr Dewatto	R		XXX		X	
15B050	Chico Cr nr Chico	R				X	
15B070	Chico Cr nr Bremerton	R	XXXXX	X			
15C070	Clear Cr @ Silverdale	R				X	
15D090	Tahuya R nr Belfair	R				X	
15E070	Union R nr Belfair	R				X	
16A070	Skokomish R nr Potlatch	L	XXXXXXXX X	X XXX XX	X XXXXXX	XXXXXXXXXX	XX
16B070	Hamma Hamma R nr Mouth	R	XXXXXX X	X X			
16B110	Hamma Hamma R nr Eldon	R		XX		X	
16B120	Hamma Hamma R above Cabin Creek	R					
16C070	Duckabush R @ Mouth	R	XXXXXXXX X	X X			
16C090	Duckabush R nr Brinnon	L		XXX		XXXXXX	XX
16D070	Dosewallips R @ Brinnon	R	X XXXXXXXXX	X XXX		X	
16E070	Finch Cr @ Hoodsport	R				X X	
17A060	Big Quilcene R nr mouth	R					XX
17A070	Big Quilcene R nr Quilcene	R	X XXXXXX	XXX		X X	
17B070	Chimacum Cr nr Irondale	R				X	
17B090	Chimacum Cr @ Hadlock	R		X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
17B100	Chimacum Cr @ Chimacum	R				X	
17B110	Chimacum Cr nr Chimacum	R		X			
17C070	Jimmycomelately Cr near Mouth	R					XX
18A050	Dungeness R nr Mouth	R					X
18A070	Dungeness R nr Sequim	R	X XXXXXXX	XXX		X X	XX
18B070	Elwha R nr Port Angeles	L	X XXXXXXX X	XXX		XXXXXX	XX
18B080	Elwha R @ McDonald Br (USGS)	R		XXXXX	XX		
19A070	Pysht R nr Pysht	R		XXX			
19B070	Hoko R nr Mouth	R		X			
19B090	Hoko R nr Sekiu	R		XX			
20A090	Soleduck R nr Forks	R		XXX		X	
20A130	Soleduck R nr Fairholm	R	XXXXXXXX X	X			
20B070	Hoh R @ DNR Campground	L	XXXXXXXXXX	X XXX XX	X	XXXXXX	XX
20C070	Ozette R @ Ozette	R	X XX				
20D070	Dickey R nr La Push	R				X	
21A070	Queets R @ Queets	R	XXXXXXXXXX	X X		X	
21A080	Queets R nr Clearwater (USGS)	R		XX	XX		
21A090	Queets R abv Clearwater	R		XX			
21B090	Quinault R @ Lake Quinault	R	X X XXXXXX	X XXX XX	X	X	
21C070	Clearwater R nr Queets	R		XX			
21D070	NF Quinault R @ Amanda	R		XXXXXXXXX	XX		
22A070	Humptulips R nr Humptulips	L	X XXXXXXXXX	X XXX XX	XXXXXXXXX	XXXXXXXXX	XX
22B070	WF Hoquiam R nr Hoquiam	R	XXXXX	XX		X	
22C050	Chehalis R nr Montesano	R		XX XX	XXXXXXXXX	XXX	
22C070	Chehalis R nr Fuller	R		X X			
22D070	Wishkah R nr Wishkah	R	XXXXX	XX X			
22F090	Wynoochee R nr Montesano	R	X XXXXXXX X	X XX X			
22G070	Satsop R nr Satsop	R	XXXXXXXXX	XX X XXX	XXXXXXXXX	XX X	
22H070	Cloquallum Cr nr Elma	R	XXXX	X X X			

Station Number	Name	Long-term or Rotating	Water Year Sampled <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
22J070	Wildcat Cr nr McCleary	R		X			
23A070	Chehalis R @ Porter	L	X XXXXXXXXXX	XXXX XXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
23A100	Chehalis R @ Prather Rd	R				XXX	
23A110	Chehalis R @ Galvin	R		X X X			
23A120	Chehalis R @ Centralia	R		XX	XXXXXXXXXX	XX X	
23A130	Chehalis R @ Claquato	R				X	
23A140	Chehalis R @ Adna	R		X X X			
23A160	Chehalis R @ Dryad	L	X XXXXXXX	XX	XXXXXXXXXX	XXXXXXXXXX	XX
23B050	Newaukum @ Mouth	R				X	
23B070	Newaukum R nr Chehalis	R	XXXXXXXX	X X X		X	
23B090	SF Newaukum R @ Forest	R		X			
23C070	NF Newaukum R @ Forest	R		X			
23D055	Skookumchuck R @ Centralia	R				X X	
23D060	Skookumchuck R nr Frost Prairie	R					
23D070	Skookumchuck R nr Centralia	R	X X				
23E070	Black River @ Moon Road Bridge	R				XX X XXX	
23F070	Mill Ck nr Bordeaux	R				X	
23G070	SF Chehalis R @ Curtis	R				X	
24B090	Willapa R nr Willapa	L	XX X	XXXXX XXXX	XX XXXXXX	XXX XXXXX	XX
24B130	Willapa R @ Lebam	R	X XX X	XX	XXXXXXXXXX	XXX	
24C060	SF Willapa R @ Fuller St	R					
24C070	SF Willapa R @ South Bend	R		X			
24D070	North R nr Raymond	R		X XX		XX	
24D090	North R @ Artic	R				X	
24E070	North Nemah R @ Nemah	R		X X			
24F040	Naselle R @ Mouth	R		X			
24F055	Naselle R @ Naselle	R		X			
24F070	Naselle R nr Naselle	L	XX X	X X XXXX	X	X XXXXX	XX
24G070	Bear Branch nr Naselle	R	X	X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
24H070	Middle Nemah R nr Nemah	R		X			
24J070	South Namah R nr Nemah	R		X			
25A070	Columbia R @ Cathlamet	R	XX	X X			
25A075	Columbia R @ Bradwood	R		XXXXXX			
25A110	Columbia R @ Fisher Is Lt	R	XXXXX				
25A115	Columbia R nr Longview	R	XX	X X			
25A150	Columbia R blw Longview Br	R	X	X			
25B070	Grays R nr Grays River	R		X XX		X	
25C070	Elochoman R nr Cathlamet	R	X	X XX		X	
26B070	Cowlitz R @ Kelso	L	XXXXXXX	XX X XX	XXXXXXXXX	XXXXXXXXXX	XX
26B100	Cowlitz R @ Castle Rock	R	XXX	X XXXX			
26B150	Cowlitz R @ Toledo	R	XXXXX	X X XX	X	X	
26B180	Cowlitz nr Kosmos B Cispus	R	X XXXXXXXX				
26B190	Cowlitz R nr Randle	R	X	X X X			
26B200	Cowlitz R nr Kosmos	R		X			
26C070	Coweeman R @ Kelso	R	XXXXX	XX X	XXXXXX	XXX X	
26C080	Coweeman R av Goble Cr	R				X	
26C090	Coweeman R nr Rose Valley	R		X X			
26D070	Toutle R nr Castle Rock	R	XXXXXXXX X	X X X XX	XXXXXXXXX	XXX	
26D090	Toutle R @ Tower Rd	R					
26E070	Cispus R nr Kosmos	R		X	XXX		
27A070	Columbia R @ Kalama	R	XX	X XX			
27A110	Columbia River (above Kalama?)	R					
27B050	Kalama R @ Kalama	R	XXXXXXXXX	X			
27B070	Kalama R nr Kalama	L		XX XX	XXXXXXXXX	XXX XXXXX	XX
27B080	Kalama R blw Upper Hatchery	R					
27B090	Kalama R @ Upper Hatchery	R		X			
27B110	Kalama R @ Pigeon Springs	R		X			
27C070	Lewis R @ Woodland @ I-5	R	XXXXX X	X XX			

| Station Number | Name | Long-term or Rotating | Water Year Sampled | | |

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
30A100	Columbia R nr Maryhill	R					
30B060	Klickitat R nr Lyle	R				XX	
30B070	Klickitat R nr Pitt	R	XXX	X XXXXXXX	X		
30C070	Little Klickitat nr Wahkiacus	R		X		XX	
31A070	Columbia R @ Umatilla	L	X	XXXXX		XXXXXXXXX	XX
31A090	Columbia R @ McNary Dam	R	X XXXXXXXXXX				
31A130	Columbia R nr Yakima R Mouth	R	X				
32A070	Walla Walla R nr Touchet	L	X XXXXXXX	XX XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
32A090	Walla Walla R nr Lowden	R		XX			
32A100	Walla Walla at east Detour Road Br	R				X	X
32A110	Walla Walla R @ College Pl	R		XX XX			
32B070	Touchet R @ Touchet	R		X XX XX	XXXXXXXXXX	XXX X	
32B080	Touchet at Sims Road	R				X	X
32B090	Touchet R nr Luckenbill Rd	R					
32B100	Touchet R @ Bolles	R		XX		X	X
32B120	Touchet R nr Dayton	R		XX			
32B130	Touchet R @ Dayton	R	X X			XX	
32B140	Touchet R above Dayton	R				X	
32C070	Mill Cr @ Mission St	R		X XX			
32C110	Mill Cr @ Tausick Way	R		X X		X	
32D050	Yellowhawk Cr nr mouth	R					
33A010	Snake R nr Mouth	R	X				
33A050	Snake R nr Pasco	L	XXXXXXX X	X		XXXXXXXXX	XX
33A05X	Snake R @ Burbank	R					
33A070	Snake R blw Ice Harbor Dam	R	X	X XXXXXX	XXXXXXXXXX	XX	
33A100	Snake R blw Lower Monumental Dam	R					
34A070	Palouse R @ Hooper	L	X XXXXXXXXXX	X XXXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
34A085	Palouse R @ Shields Rd Bridge	R				X	
34A090	Palouse R nr Diamond	R		X X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
34A110	Palouse R abv Buck Canyon	R		X XX			
34A120	Palouse R at Colfax	R					
34A170	Palouse R @ Palouse	L		X		XXXXXXXX	XX
34B070	SF Palouse R nr Colfax	R		X XX			
34B085	SF Palouse R at Armstrong Rd	R					
34B090	SF Palouse R nr Pullman	R		X X			
34B110	SF Palouse R @ Pullman	L		X X XX	XXXXXXXXXX	XXX XXXXX	XX
34B130	SF Palouse R blw Sunshine	R		X			
34B140	SF Palouse R @ Busby	R				X	
34B150	SF Palouse R nr Moscow ID	R					
34C060	Paradise Cr at Mouth	R				X	
34C070	Paradise Cr nr Pullman	R		X			
34C100	Paradise Cr @ Border	R				X	
34D070	SF Palouse Trib Whitman Fm	R		X			
34E070	Rock Creek at Revere	R				X	
34E100	Rock Creek at Escures Property	R					
34F070	Missouri Flat Creek @ Pullman	R					
34F090	Pine Cr @ Rosalia	R				X	
34G070	Snake R @ Lyons Ferry	R					
34H070	Pleasant Valley Cr blw St John	R					
35A070	Snake R @ Central Ferry	R					
35A100	Snake R blw Lwr Granite Dam	R		X			
35A110	Snake R at Lwr Granite Dam	R					
35A150	Snake R @ Interstate Br	L	XXXXX XX			XXXXXXXXX	XX
35A200	Snake R nr Anatone	R		XXXXXXXX			
35B060	Tucannon R @ Powers	L		X XX	XXXXXXXXXX	XXX XXXXX	XX
35B110	Tucannon R nr Delaney	R	X X				
35B150	Tucannon R nr Marengo	R				X	
35C070	Grande Ronde R nr Anatone	R		X	XXX	X	

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
35D070	Asotin Cr @ Asotin	R		X		X X	
35E070	Clearwater R @ US12/95	R				X	
35F070	Pataha Ck @ Archer Rd	R				X	
35F110	Pataha Cr @ Rosy Grade	R					
36A055	Columbia R @ Port of Pasco	R		X			
36A060	Columbia R @ Pasco	R	XX				
36A065	Columbia R @ Richland	R		X			
36A070	Columbia R nr Vernita	L	XX XX	X X XXX XX	XXXXXXXXXX	XX XXXXXX	XX
37A040	Yakima R @ I-182	R					
37A060	Yakima R @ VanGiesen Br	R		X XX			
37A070	Yakima R nr Richland	R		X			
37A090	Yakima R @ Kiona	L	X XXX XXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
37A095	Yakima 2 mi blw Prosser	R				X	
37A100	Yakima below Prosser	R				X	
37A110	Yakima R @ Prosser	R		X XX			
37A130	Yakima R @ Mabton	R		X XX		X	
37A149	Yakima R @ Granger No Side	R		X			
37A150	Yakima R @ Granger So Side	R		X			
37A152	Yakima above Granger Drain	R					
37A170	Yakima R nr Toppenish	R		X XX		X	
37A190	Yakima R @ Parker	R		X XXXXXXX	XXXXXXXXXX	XXX	
37A200	Yakima R abv Ahtanum Cr (USGS)	R		XX X	XX		
37A205	Yakima R @ Nob Hill	L				XXXXX	XX
37A210	Yakima R nr Terrace Height	R		XX XX		X	
37B060	Satus Cr @ Satus	R		XX			
37C060	Toppenish Cr nr Satus	R		XX			
37D080	Marion Drin nr Granger	R		XX			
37E070	Wide Hollow Cr @ Union Gap	R		X X		X	
37E090	Wide Hollow Cr @ Goodman	R		X X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
37E120	Wide Hollow Creek @ Randall Park	R					X
37F070	Sulfur Ck Wasteway @ McGee Rd	R				X	
37G120	Ahtanum Cr. @ 62nd Ave	R					X
38A050	Naches R @ Yakima on US HWY 97	R	XXXXXXX			X XX	X
38A061	Naches River @ Nelson Bridge	R					
38A070	Naches R @ Yakima	R		X X			
38A110	Naches R @ Naches	R	X X	X			
38A130	Naches R nr Naches	R	XXXX				
38B070	Tieton R @ Oak Creek	R	XXXX			X	
38C070	Rattlesnake Cr nr Nile	R	XX				
38D070	Bumping R @ American R	R	XX				
38E070	American R @ American R	R	XX				
38F070	Little Naches nr Cliffdell	R	XXX			X	
38G120	Cowiche Cr. @ Zimmerman rd	R					X
39A041	Yakima River below Roza Dam	R					
39A050	Yakima R @ Harrison Bridge	R				XX	XX
39A051	Yakima River @ Umtanum	R					
39A060	Yakima R @ Ellensburg	R				XX	XX
39A070	Yakima R nr Thorp	R		X X			
39A080	Yakima R @ Cle Elum	R	X XXXXXXXXXX	X			
39A090	Yakima R nr Cle Elum	L		X X		XXX XXXXX	XX
39B070	Cle Elum R nr Cle Elum	R		X X			
39B090	Cle Elum R nr Roslyn	R				X	
39C070	Wilson Cr @ Thrall	R	XXXX	X X X		X	
39D070	Teanaway R nr Cle Elum	R	XXXXX			X	
39D090	Teanaway R at Highway 970	R					
39E071	Cabin Creek nr Easton	R					
41A070	Crab Cr nr Beverly	L	X XXXXXXXXXX	XXX XX XX	XXXXXXXXXX	XX XXXXXX	XX
41A075	Crab Cr nr Smyrna	R	XXX				

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
41A090	Crab Cr nr Othello	R		X			
41A101	Crab Creek @ McMannon Road	R					
41A110	Crab Cr nr Moses Lake	R	X		XXXX	X X	X
41B071	Winchester Wasteway @ Gage	R					
41C071	Frenchman Hills Wasteway @ Gage	R					
41D070	Rocky Ford Creek @ Hwy 17	R				X	X
41E070	Sand Hollow Creek on Hwy 26	R				X	
41F100	Rocky Ford Coulee Drain	R				X	
41G070	Rocky Coulee Wasteway @ K NE Road	R					X
41H050	Moses Lake S. Outlet	R					X
42A070	Crab Cr below Adrian	R					X
43A070	Crab Cr @ Irby	R	X			X	
43A100	Crab Ck @ Marcelus Road	R				X	
43A150	Crab Ck @ Bluestem Road	R				X	
43B090	Lake Ck @ Coffeepot Road	R				X	
44A070	Columbia R blw Rock Is Dam	R		X XX XX	XXXXXXXXXX	XX	
45A070	Wenatchee R @ Wenatchee	L	XXXXXXXX X	X X XX XX	XXXXXXXXXX	XXXXXXXXXX	XX
45A085	Wenatchee R nr Dryden	R		X			
45A100	Wenatchee R @ Leavenworth	R		X			
45A110	Wenatchee R nr Leavenworth	L	X XXXXXXXX	XX	XXXXXXXXXX	XXXXXXXXXX	XX
45B070	Icicle Cr nr Leavenworth	R		X		X	
45C070	Chumstick Cr nr Leavenworth	R				XXX	X
45D070	Brender Cr nr Cashmere	R				XXX	X
45E070	Mission Cr nr Cashmere	R				XXX	X
46A070	Entiat R nr Entiat	L	X XXXXXXX	X XX XX	XXXXXXXXXX	XX XXXXXX	XX
47A070	Chelan R @ Chelan	R	XXXXXXXX X	X X XX XX	XXXXXXXXXX	XX X	
47B070	Columbia R @ Chelan Station	R				X X	
48A070	Methow R nr Pateros	L	X XXXXXXX	X XX XX	XXXXXXXXXX	XXXXXXXXXX	XX
48A130	Methow R nr Twisp	R		X XX	XXXXXXXXX		

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
48A140	Methow R @ Twisp	L			X	XX X XXXXX	XX
48A170	Methow R @ Weeman Br	R		X			
48A190	Methow R blw Gate Cr	R		X XX	X		
48B070	Chewack R @ Winthrop	R		X			
48C070	Andrews Cr nr Mazama	R		XXXXXXXX	XX		
49A050	Okanogan R nr Brewster	R	X	XXXXXXX X	X		
49A070	Okanogan R @ Malott	L		XXX	X X XX XX	XX XXXXXX	XXXXXXXXXX	XX
49A090	Okanogan R @ Okanogan	R		X XX	XXXXXXXXX	X	
49A170	Okanogan R @ Janis	R		X			
49A180	Okanogan R @ Tonaskat	R				X	
49A190	Okanogan R @ Oroville	L		XXXXXXX	XX XX	XXXXXXXXXX	XX X XXXXX	XX
49B070	Similkameen R @ Oroville	L		XXXXXXX	XX XX	XXXXXXXXXX	XXXXXXXXXX	XX
49B090	Similkameen R @ Nighthawk	R				X	
49B110	Similkameen R. @ Chopaka Br. B. C.	R					XX
50A070	Columbia R nr Brewster	R		X			
50A090	Columbia R @ Bridgeport	R		X			
51A070	Nespelem R @ Nespelem	R			XXXXXXXXXX	XX X	
52A070	Sanpoil R @ Keller	R		XXXXXXX	X XX XX	XXXXXXXXXX	XX X	
52A110	Sanpoil R 13 mi S. Republic	R				X	
52A170	Sanpoil R blw Republic	R		X			
52A190	Sanpoil R abv Republic	R		X		X	
52B070	Lake Roosevelt from Keller Ferry	R				X	
53A070	Columbia R @ Grand Coulee	L		X XX XX	XXXXXXXXXX	XX X XXXXX	XX
54A050	Spokane R @ Mouth	R				XXXX	
54A070	Spokane R @ Long Lake (USGS)	R	X	XXXXXXX X	XXXXXXXXXX	XX	
54A089	Spokane R 2 mi blw Ninemile dam	R		XX			
54A090	Spokane R @ Ninemile Br	R		X X			X
54A120	Spokane R @ Riverside State Pk	L		XXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XX
54A130	Spokane R @ Fort Wright Br	R		X X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
55B070	Little Spokane R nr Mouth	L		X X XXX	XXXXXXXXXX	XX XXXXXX	XX
55B075	Little Spokane @ Painted Rocks	R				X	
55B080	Little Spokane R nr Griffith Spring	R				XX	
55B082	Little Spokane R abv Dartford Creek	R				XX X	
55B085	Little Spokane nr Dartford	R	XXXXXXX				
55B090	Little Spokane R abv Wandermere	R		X			
55B100	Little Spokane R abv Deadman Creek	R				XX X	
55B200	Little Spokane @ Chattaroy	R				X X	
55C065	Deadman Cr nr Mouth	R				X	
55C070	Peone (Deadman) Creek abv L Deep Cr	R				XX	
55D070	Deer Cr nr Chattaroy	R				X	
55E070	Dragoon Cr nr Chattaroy	R				X	
56A070	Hangman Cr @ Mouth	L		X X XXX	XXXXXXXXXX	XX X XXXXX	XX
56A200	Hangman Creek @ Bradshaw Road	R				X	
57A120	Spokane R @ Spokane	R		X			
57A130	Spokane R @ Mission St Br	R		X X			
57A145	Spokane R @ Trent Br	R		X			
57A150	Spokane R @ Stateline Br	L	X XXXXXX X	XX X X		XXXXXXXXX	XX
57A190	Spokane R nr Post Falls	R		XXXXXXX	XXXXXXXXXX	XX	
59A070	Colville R @ Kettle Falls	R	XXXXXXXXXX	X X XX XX	XXXXXXXXXX	XX X	
59A080	Colville R abv Kettle Falls	R				X	X
59A110	Colville R @ Blue Creek	R		X			X
59A130	Colville R @ Chewelah	R		X			
59B070	Little Pend Oreille @ Hwy 395	R					X
60A050	Kettle R @ Hedlund Bridge	R	X				
60A070	Kettle R nr Barstow	L	XXXXXXX X	X X XX XX	XXXXXXXXXX	XX XXXXXX	XX
61A070	Columbia R @ Northport	L	X XXXXXXXXXX	XXXXXXXXXX	XX	XXXXXXXXX	XX
61B070	Deep Ck nr Mouth	R				X	X
61C070	Onion Cr nr Northport	R				X	

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
61D070	Sheep Cr nr Northport	R				X	
62A070	Pend Oreille R @ Waneta BC (USGS)	R	XXX				
62A080	Pend Oreille R @ Border	R		XXXXXX	XX		
62A090	Pend Oreille @ Metaline Falls	R	X XXX			XX XX	XX
62A150	Pend Oreille R @ Newport	L	X XXXXXXX X	X XX	XXXXXXXXXX	XXXXXXXXXX	XX

Appendix B

Historical changes in sampling and laboratory procedures, and large-scale environmental changes potentially affecting water quality

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This appendix is intended to record changes in methods and procedures used by the Ambient Monitoring Section, Freshwater Monitoring Unit to collect and analyze stream water quality data. Other environmental changes that may potentially affect water quality over a large area are also recorded here. Many of the changes listed below are anecdotal and may or may not have affected data quality. Comments prior to October 1988 are based on interviews with individuals involved with the earlier program. Comments after that date have usually been recorded as the changes occurred.

GENERAL

Jun to Sep 1985: Laboratory moved from SWRO to Manchester.

Oct 1988: Implemented QA/QC program (Source: Memo from Hallock, D, October 17, 1988)

Prior to WY91: Samples were sent to contract labs from time to time. These occurrences are not all recorded here. Records are confusing and only available from bench sheets archived by Manchester Environmental Laboratory.

1994: The use of Polyacrilamide (PAM) to control erosion from rill irrigation is becoming widespread in eastern Washington. Water quality affects are unknown.

1996: Began monitoring discharge at some stations ourselves (mostly basin stations), rather than contracting with USGS.

1997: Contracts for about 80% of the 1.045 million acres in Washington in the Conservation Reserve Program are scheduled to expire. (See http://pnwsteep.wsu.edu)

NUTRIENTS

General: Prior to 1980, samples were analyzed by USGS labs.

1966-1969: One gallon of sample was collected in glass jars and held at room temperature for indefinite periods without preservative.

1970-1973: Unknown methods; may have been preserved with HgCl. Filtered in field.

1973: Lab moved from Tacoma to Salt Lake City.

1973-1974: Chilled, no preservative. Held as long as one week. Filtered in field; kept in brown poly bottle.

1972-1974?: For a short time, TP and NO3 may have been added by filters (probably 72-74). Source: Joe Rinnella, USGS.

9/30/78: Lab moved to Arvada, CO.

~1978: Chilled. Brown poly bottle (the brown poly bottle may have been introduced later). 30 day holding time for NO2+NO3 implemented (status of other nutrients is unknown). (Source of methods prior to 1979: pers. comm. Joe Rinnella, USGS, and Skinner, Earl L. "Chronology of Water Resources Division activities that may have affected water quality values of selected constituents in Watstore, 1970-86. Provisional Report Feb 1989.)

1979: For a while, the USGS lab reported nutrient results to the nearest 0.01 units. Values below 0.005 were reported as 0.00. USGS decided to change all Watstore data = 0 to 0.01K back to 1973 for NO2+NO3. Decision on other nutrients is unknown but they may also have been changed. Most of the 0s in our database have been converted to 0.01K (K-below the detection limit) but a few 0s may remain in the older data.

1980: USGS requires NO2+NO3 be preserved with HgCl. Status of other nutrients is unknown. Ecology requirements are unknown.

6/1/80 to 1986: Nutrients analyzed by Pat Crawford at SWRO.

Aug 1985: High phosphate values, presumably a result of lab error. (Coded '9-do not use' in our database). Source: Trends in PS, 1988, Tetra Tech, App. B.

1986 to Apr 1987: Analyzed by various people, mostly Helen Bates, Steve Twiss, and Wayne Kraft at Manchester.
June, 1985: Switched from Technicon to Rapid Flow Analysis (Alpkem) autoanalyzers
Apr 1987 to present: Analyzed by various people at Manchester.
Jan 1987 to Jul 1987: NO3, NH3, and TP analyzed by contract lab,
Mar 1990: Began using MFS cellulose acetate filters for field filtration of nutrients. Previously use Millipore, type HA (cellulose nitrate?).
17 Sep 90-12 Oct 90: All nutrient samples were contracted out.
Oct 1990: Dissolved ammonia (P608) and dissolved nitrate+nitrite (P631) were added to the Marine network. Totals (P610 and P630) were dropped.
Feb 1991: All nutrients went to contract lab.
Mar 1991: All nutrients went to contract lab.
~1993: Began collecting nutrients in acid-washed poly-bottle passenger rather than in the stainless-steel bucket used for oxygen determinations.

Jul 1994: The phosphorus content in detergents is restricted statewide (SSB 5320). Phosphorus use had been limited in Spokane County one (?) year earlier.
Oct 2000: Nitrate+nitrite method changed from EPA 353.2 to SM 4500NO3I because the later method is more specific. Actual procedures were not changed.
Oct 2000: TP methods changed from EPA 365.1 to SM4500PI. The former method specifies a manual digestion, while the later correctly refers to the in-line digestion used by MEL's Lachat instrument.
October 2001 through February, 2002: A low bias may apply to TN data. Except for December data, MEL deemed the bias to be small enough that the data did not need to be qualified. December TN results were coded as estimates (Lee, 2001).

SUSPENDED SOLIDS
General: Filters were usually used, but sometimes Gooch crucibles were used.
Feb 1978: Began collecting as passenger to oxygen sampler (was previously collected as aliquot of oxygen sampler). (Source: memo from Bill Yake, Jan 30, 1978)
Mid-1985 Amount filtered change from 250 (?) to 500 ml.
17 Sep 90-12 Oct 90: Suspended sediment samples were contracted out.
Apr 1991: Began collecting 1000 ml of sample.

CONDUCTIVITY
Feb 1978: Began calibrating twice monthly using 40, 70, 140, and 200 µmho/cm standards. (Source: memo from Bill Yake, Jan 30, 1978)
Oct 1991:All meters were re-calibrated Oct 11, 1991. One conductivity meter was not calibrated above 500 µmhos/cm (and could not be calibrated). This meter had last been calibrated about 1 year earlier. Most meters read higher than the 100 µmhos/cm standard.
Oct 1994: Switched from Beckman model Type RB-5 (which could not be field calibrated) to Orion Model 126 meter, calibrated daily.
1998: Orion meter calibration began drifting during the day. Sometimes meter could only be calibrated to within 4 µmhos of the standard. When this occurred, some samplers would correct the data, others would not. This problem has re-occurred from periodically through the present. Now, these data are coded "J" (estimate).

FECAL COLIFORM BACTERIA

General: for some period in the early 1980s, field personnel may have analyzed some samples

Oct 7, 1975 to Nov 1981: fecal data from eastern Washington may be questionable during this period.

1980 to Mar 1988: No changes; analyzed by Nancy Jensen and others at Manchester.

Mar 1988: Switched to new filter with slightly better recovery.

TURBIDITY

1970s: EPA specified a 2100A turbidimeter. Formerly, turbidity units were FTU

Sept 1993: Lab began using a new turbidimeter, Hach model "Ratio X/R."

FIELD PH

Oct 7, 1975 to Nov 1981: pH data from eastern Washington are questionable during this period.

Feb 1978: Began calibrating meter twice monthly. Previous procedures unknown. (Source: memo from Bill Yake, Jan 30, 1978)

1986: Changed to Beckman digital pH meter with gel probe.

Dec 91: Changed to Orion model 250A meter with "spare water" liquid probe (uses 1M KCl, rather than 4M). Calibrate daily and check calibration three times during the sampling day.

TEMPERATURE

Feb 1978: Switched from thermometer in bucket to thermister in river. (Source: memo from Bill Yake, Jan 30, 1978)

Spring 1994: Switched to YSI 300 meter (accuracy +/- 0.4C)

Jan 1, 2001: Began calibrating thermisters prior to each run rather than annually. Some thermisters were found to be as much as 1-2 °C low.

OXYGEN

Oct 1, 1977 Began measuring barometric pressure to calculate percent saturation. Previous saturation calculations were presumably based on elevation.

March 1989: Began applying correction factor to results of Winkler analyses based on titration with sodium biiodate to correct sodium thiosulfate normality to 0.025. Previously, thiosulfate was standardized upon preparation, but not during use.

BAROMETRIC PRESSURE

___ 1995: Began calibrating barometer prior to each run using an on-site mercury barometer rather than pressure as reported by the Olympia airport.

CHLOROPHYLL

15 Mar 90: Switched to fluorometric method (from spectrophotometric). New method has lower detection limit (0.02 µg/L) but less accuracy. (Source: Memo from Despina Strong, April 12, 1990)

HARDNESS

7/1/91: Began using 125 ml bottle with HNO3 as preservative. (Previously, aliquot from unpreserved general chemistry bottle was used.)

METALS

May, 1994: Implemented low-level dissolved metals monitoring at selected stations. Metals results prior to this date are questionable unless well above detection limits.

Appendix C

Water Year 2001 raw data for Ecology's
River and Stream Ambient Monitoring Program

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Data listed in this appendix are available in electronic format by contacting

Ecology Central Region:	Chris Coffin (509 454-4257; ccof461@ecy.wa.gov)
Ecology Eastern Region:	Jim Ross (509 456-2874; jros461@ecy.wa.gov)
Ecology Northwest Region:	Bill Ward (360 407-6621; bwar461@ecy.wa.gov)
Ecology Southwest Region:	Chad Wiseman (360 407-6682; cwis461@ecy.wa.gov)

Ambient monitoring data from the most recent complete Water Year are available over the Internet on Ecology's web pages (http://www.ecy.wa.gov/). Look under "Environmental Info." and then "Watersheds."

The first two digits of each station number is the Water Resource Inventory Area (WRIA) number. This number can be used to identify which Water Quality Management Areas (WQMA) or "basin" each station is in, according to the table, below:

Basin	WRIAs	Basin	WRIAs
Cedar/Green	8-9	Nooksack/San Juan	1-2
Columbia Gorge	27-29	Okanogan	48-53
Eastern Olympics	13-14, 16-19	Puyallup/Nisqually	10-12
Esquatzel/Crab Creek	36, 42-43	Skagit/Stillaguamish	3-5
Horseheaven/Klickitat	30-31	Spokane	54-57
Island/Snohomish	6-7	Upper and Lower Snake	32-35
Kitsap	15	Upper Columbia/Pend Oreille	58-62
Lower Columbia	24-26	Upper Yakima	38-39
Lower Yakima	37	Wenatchee	40, 44-47
Mid Columbia	41	Western Olympics	20-23

Remarks codes in historical data are defined below. Only "U" and "J" were used in WY 2001.

B,V	Analyte was found in the blank indicating possible contamination.
E	Result is an estimate due to interference
G, L	True result is equal to or greater than reported value
H	Sample was analyzed over holding time
J	The reported result is an estimate
K, U	The analyte was not detected at or above the reported result
N	Spike sample recovery outside control limits
P	Result is between the detection limit and the min. quantitation limit (applied to metals)
S	Spreader: one or more bacteria colonies were smeared, possibly obscuring other colonies
X	High background count of non-target bacteria, possibly obscuring additional colonies

Conventional Data Report

Nooksack R. @ Brennan

01A050

Class: A
Rivermile: 3.4
Latitude: 48 49 09.1
Longitude: 122 34 43.3
Waterbody: WA-01-1010

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/17/2000 13:30	9.2	2450	108	11.1	7.71	106	0.337	0.01 U	0.28	0.04	0.014	12	290
11/14/2000 14:05	4.3	1460	113	12.67	7.91	10	0.447	0.018	0.408	0.034	0.012	3.9	6
12/5/2000 13:50	2.5	1940	108	12.86	7.6	15	0.631	0.018	0.595	0.037	0.015	4.9	16
1/23/2001 14:05	3.8	2400	112	12.65	7.47	23	0.871	0.027	0.812	0.036	0.011	9.7	31
2/27/2001 14:00	5.6	1210	131	13.06	7.54	6	0.72	0.037	0.651	0.028	0.009	3.1	5
3/20/2001 13:50	6.7	3720	86	12.22	7.59	62	0.728	0.035	0.595	0.058	0.01	27	29
4/17/2001 13:40	10.5	2260	116	11.41	7.81								
Lab data coded "9" (labels may have been switched).													
5/22/2001 14:00	12.2	4310	79	11.26	7.72	41 J	0.307	0.025	0.25	0.032	0.007	15	9
6/19/2001 13:35	13.8	3370	89	10.6	7.6	18	0.272	0.01 U	0.221	0.024	0.007	6.5	17
7/17/2001 14:05	13.8	1900	92	10.91	7.78	10	0.141	0.01 U	0.108	0.017	0.005 U	10	13
8/21/2001 15:35	15.2	1190	107	9.69	7.72	24	0.28	0.021	0.218	0.042	0.01	19	90
9/18/2001 15:34	13.1	1150	112	11	7.49	17	0.312	0.013	0.255	0.045	0.011	19	22

Conventional Data Report

Nooksack R @ No Cedarville

01A120

Class: A
Rivermile: 30.8
Latitude: 48 50 30.5
Longitude: 122 17 32.3
Waterbody: WA-01-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000 12:45	8.4	3510	68	11.5	7.39	123	0.185	0.034	0.117	0.1	0.005 U	70	100
11/14/2000 13:00	3	1260	92	13.06	7.59	30 J	0.208	0.01 U	0.198	0.02	0.005 U	2.5 J	1 U
pH was 7.67 prior to recalibration													
12/5/2000 13:00	2.8	1600	87	13.36	7.48	14	0.326	0.01 U	0.316	0.024	0.005 U	3.5	1 U
1/23/2001 13:25	3.6	1970	86	13.16	7.53	8	0.378	0.01 U	0.365	0.021	0.005 U	6	3
pH was 7.36 prior to recalibration													
2/27/2001 13:20	4.4	1120	102	14.18	7.71	2	0.315	0.01 U	0.296	0.016	0.005 U	1.4	1 U
3/20/2001 13:00	6.8	3090	71	12.72	7.68	26	0.37	0.01 U	0.318	0.032	0.005 U	14	1 U
4/17/2001 12:45	8.4	2980	74	12.22	7.76	69	0.235	0.013	0.201	0.042	0.005 U	24	16
5/22/2001 13:10	11.6	4200	64	11.57	7.69	38 J	0.162	0.014	0.132	0.029	0.005 U	12	1 U
6/19/2001 12:25	12.2	3000	73	11.3	7.57	8	0.095	0.01 U	0.097	0.017	0.005 U	5.1	2
7/17/2001 13:30	11.4	1770	81	12.24	8.28	7	0.059	0.01 U	0.037	0.015	0.005 U	9	8
8/21/2001 15:00	12.2	1100	92	11.02	7.68	19	0.109	0.012	0.082	0.03	0.005 U	16	20
9/18/2001 13:37	11.4	1220	99	11.5	7.72	19	0.132	0.019	0.094	0.04	0.0034	0.9	3

Conventional Data Report

Skagit R nr Mount Vernon

03A060

Class: A
Rivermile: 15.9
Latitude: 48 26 43.0
Longitude: 122 20 02.0
Waterbody: WA-03-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000	15:00	10.3	10500	54	11.1	7.51	12		0.01 U	0.059	0.01 U	0.005 U	3.5	42
11/14/2000	15:30	7	12000	56	12.07	7.67	7	0.073	0.01 U	0.069	0.015	0.005 U	2.4	21
12/5/2000	15:30	5.5	7730	64	12.56	7.32	6	0.173	0.01 U	0.135	0.018	0.005 U	2	5
1/23/2001	15:40	4.7	8890	66	12.85	7.32	5	0.188	0.01 U	0.176	0.017	0.005 U	5	6
2/27/2001	15:20	5.3	6210	73	13.77	7.4	9	0.18	0.01 U	0.136	0.023	0.005 U	6.6	1
3/20/2001	15:25	6.6	11600	49	13.13	7.61	24	0.202	0.01 U	0.182	0.022	0.005 U	11	14
4/17/2001	15:30	10.4	7640	66	12.42	7.77	10	0.136	0.01 U	0.108	0.014	0.005 U	3.6	19
5/22/2001	15:20	13.2	12600	53	11.77	7.69	10 J	0.131	0.01 U	0.097	0.012	0.005 U	2.7	3
6/19/2001	15:15	14	13400	49	11	7.43	8	0.08	0.01 U	0.068	0.011	0.005 U	2.1	2
7/17/2001	15:35	12.1	9810	53	10.91	7.36	4	0.096	0.01 U	0.071	0.01 U	0.005 U	2.8	8
8/21/2001	16:55	14.2	7710	59	10.3	7.5	8	0.085	0.01 U	0.049	0.011	0.005 U	4.7	8
9/18/2001	17:00	13.7	6090	59	10.3	7.37	12	0.123	0.018	0.073	0.024	0.003 U	9.4	8

Conventional Data Report

Samish R nr Burlington

03B050

Class: A
Rivermile: 10.4
Latitude: 48 32 45.4
Longitude: 122 20 13.0
Waterbody: WA-03-2010

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/17/2000 14:20	10.6	99	97	10.8	7.59	13	0.638	0.01 U	0.519	0.03	0.009	5.7	440
11/14/2000 15:00	4.2	115	88	12.57	7.78	4	0.718	0.01 U	0.656	0.027	0.008	2.6	46
12/5/2000 14:35	3.8	150	81	12.76	7.47	3	0.776	0.018	0.656	0.03	0.007	3.2	39
1/23/2001 15:00	4.4	300	74	12.95	7.44	7	1.17	0.01 U	1.11	0.022	0.006	5	36
2/27/2001 14:50	5.6	150	80	13.16	7.42	5	1.04	0.01 U	0.994	0.023	0.006	3.8	18
3/20/2001 14:50	8.4	370	67	12.52	7.5	17	1.14	0.01 U	1.04	0.027	0.006	8.4	28
4/17/2001 14:40	10.5	240	72	12.02	7.66								
Lab data coded "9" (labels may have been switched). QC results could be used if needed.													
5/22/2001 14:45	14.6	190	73	10.35	7.66	13 J	0.725	0.013	0.596	0.033	0.007	6.4	45
6/19/2001 14:15	14.9	145	80	10.8	7.49	7	0.686	0.01 U	0.61	0.024	0.006	4.9	77
7/17/2001 15:00	12.5	47	106	11.02	7.82	3	0.707	0.01 U	0.606	0.013	0.005	1.3	440
8/21/2001 16:25	13.5	31	122	10.71	7.97	2	0.744	0.01 U	0.651	0.015	0.007	1.3	260
9/18/2001 16:30	13.4	34	112	10.5	7.7	3	0.649	0.014	0.548	0.023	0.0069	15	160

Conventional Data Report

Skagit R @ Marblemount

04A100

Class: AA
Rivermile: 78.2
Latitude: 48 31 37.0
Longitude: 121 25 40.0
Waterbody: WA-04-1090

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/17/2000 10:50	8.4	4950	41	11.6	7.27	3	0.079	0.01 U	0.068	0.01 U	0.005 U	2	8
11/14/2000 11:05	7.7	6760	56	11.68	7.64	4	0.051	0.01 U	0.051	0.01 U	0.005 U	1.2	1 J
12/5/2000 11:15	5.9	4110	58	12.46	7.6	2	0.058	0.01 U	0.058	0.01 U	0.005 U	0.6	1
1/23/2001 11:20	4.6	2990	59	12.85	7.32	1		0.01 U	0.074	0.01 U	0.005 U	0.5 U	1 UJ
2/27/2001 11:00	4.1	2700	63	13.67	7.7	1 U	0.087	0.01 U	0.064	0.01 U	0.005 U	0.5	1 U
3/20/2001 11:05	5.4	3900	52	13.43	7.68	3	0.113	0.01 U	0.09	0.01 U	0.005 U	0.6	1 U
4/17/2001 11:00	6.3	3020	56	13.03	7.56	4	0.091	0.01 U	0.07	0.01 U	0.005 U	0.9	1 U
5/22/2001 11:00	8.4	4200	36	12.99	7.5	25 J	0.112	0.01 U	0.091	0.01 U	0.005 U	1	1 U
6/19/2001 10:30	9.4	3020	33	12.2	7.43	1 U	0.068	0.01 U	0.061	0.01 U	0.005 U	0.7	1
7/17/2001 11:00	10.9	4600	38	11.53	7.36	2	0.065	0.01 U	0.052	0.01 U	0.005 U	1.2	3 J
8/21/2001 11:40	11.1	4730	51	11.53	7.7	1	0.083	0.01 U	0.052	0.01 U	0.005 U	1.3	1 U
9/18/2001 11:40	11	1860	54	12.1	7.75	1	0.097	0.01 U	0.059	0.01 U	0.003 U	0.5	1

Conventional Data Report

Stillaguamish R nr Silvana

05A070

Class: A
Rivermile: 11.1
Latitude: 48 11 49.5
Longitude: 122 12 32.0
Waterbody: WA-05-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000 15:50	9.9	2400	61	11.4	7.56	35	0.149	0.02	0.133	0.055	0.007	34	160
11/14/2000 16:10	3	1160	68	13.06	7.54	5	0.287	0.01 U	0.265	0.041	0.009	6.6	1 U
12/5/2000 16:20	3.4	2180	54	13.16	7.29	12	0.354	0.019	0.31	0.035	0.006	13	5
1/23/2001 16:25	3.9	2390	54	13.26	7.74	14	0.446	0.016	0.421	0.034	0.006	17	5
2/27/2001 16:20	4.9	1220	70	14.08	7.36	6	0.398	0.01 U	0.348	0.026	0.007	6.3	5
3/20/2001 16:15	6.5	5130	41	12.82	7.37	51	0.344	0.01	0.299	0.042	0.005 U	23	3
4/17/2001 16:30	8	5860	42	12.32	7.43	12	0.767	0.01 U	0.728	0.022	0.005	5.3	24
5/22/2001 16:20	14.5	3340	48	11.16	7.51	10 J	0.213	0.01 U	0.173	0.019	0.005 U	5.5	2
6/19/2001 16:00	15.5	5240	61	10.7	7.38	14	0.22	0.017	0.182	0.047	0.005	14	8
7/17/2001 16:30	15	1000	75	11.42	7.78	9	0.176	0.012	0.116	0.02	0.005 U	11	180 J
8/22/2001 11:50	14.8	4010	76	9.69	7.72	279	0.288	0.026	0.174	0.065	0.007	100	1100
9/19/2001 10:30	14.1	447.4	99	9.5	7.5	2	0.182	0.01 U	0.102	0.017	0.0042	1.1	8

Conventional Data Report

SF Stillaguamish @ Arlington

05A090

Class: A
Rivermile: 18.2
Latitude: 48 12 03.2
Longitude: 122 07 04.0
Waterbody: WA-05-1040

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000	8:30	8.9		56	11.3	7.55	36	0.168	0.01 U	0.136	0.029	0.005 U	16	120
11/14/2000	8:45	1.4		56	13.26	7.68	8	0.27	0.01 U	0.239	0.03	0.005 U	13	3 J
12/5/2000	8:00	2.2		46	13.26	7.26	32	0.283	0.029	0.275	0.061	0.005 U	35	6 J
1/23/2001	8:40	2.9		46	13.57	7.53	33	0.427	0.031	0.387	0.054	0.005 U	30	2 J
		pH was 7.22 prior to recalibration												
2/27/2001	8:35	2.4		58	14.59	7.52	9	0.4	0.015	0.369	0.029	0.005 U	13	4 J
3/20/2001	8:20	4.4		34	13.43	7.46	75	0.306	0.01 U	0.266	0.057	0.005 U	34	3 J
4/17/2001	8:25	8.4		46	12.12	7.46	122	0.336	0.019	0.282	0.065	0.005 U	33	43 J
5/22/2001	8:10	11.3		44	11.26	7.51	8	0.206	0.01 U	0.176	0.019	0.005 U	5.9	22 J
6/19/2001	8:00	11.9		50	11.1	7.48	46	0.217	0.01 U	0.179	0.07	0.005 U	49	34 J
7/17/2001	8:00	14.4		65	10	7.63	17	0.204	0.028	0.153	0.039	0.005 U	28	470 J
8/21/2001	8:45	16.5		85	9.48	7.7	5	0.239	0.01 U	0.17	0.015	0.005 U	3.2	96 J
9/18/2001	8:28	14		86	9.9	7.42	3	0.233	0.01 U	0.161	0.012	0.003 U	1.3	28 J

Conventional Data Report

SF Stillaguamish nr Granite Falls

05A110

Class: AA
Rivermile: 34.6
Latitude: 48 06 10.5
Longitude: 121 57 07.0
Waterbody: WA-05-1050

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000 16:20	8.1		48	11.8	7.61	8	0.097	0.01 U	0.075	0.025	0.005 U	11	5
11/13/2000 15:10	1.9		47	13.56	7.52	21	0.152	0.016	0.122	0.064	0.005 U	27	3
12/4/2000 13:30	2.6		36	13.66	7.45	60	0.19	0.039	0.178	0.084	0.005 U	50	1 U
1/22/2001 15:40	3.5		35	13.87	7.46	118	0.212	0.01 U	0.16	0.127	0.005 U	75	1
2/26/2001 14:25	2.7		48	14.28	7.86	35	0.191	0.02	0.154	0.056	0.005 U	29	1
3/19/2001 15:50	4.8		24	13.83	7.36	304	0.21	0.038	0.165	0.11	0.005 U	75	7
4/16/2001 14:40	8		43	12.32	7.63	36	0.149	0.033	0.128	0.056	0.005 U	30	1 U
5/21/2001 16:10	11		37	12.08	7.54	13	0.107	0.013	0.085	0.021	0.005 U	9.4	1 U
	pH was 7.54 prior to recalibration												
6/18/2001 15:05	11.5		41	11.3	7.46	194	0.09	0.01 U	0.069	0.142	0.005 U	190	6
7/16/2001 14:30	13.4		50	10.71	7.76	81	0.121	0.01 U	0.05	0.092	0.005 U	91	100
8/20/2001 14:55	17		72	10	8.11	4	0.058	0.01 U	0.011	0.012	0.005 U	2.5	3
9/17/2001 14:05	14.3		69	10.8	7.98	2	0.073	0.01 U	0.018	0.011	0.003 U	2.3	21

Conventional Data Report

NF Stillaguamish @ Cicero

05B070

Class: A
Rivermile: 9.5
Latitude: 48 16 03.0
Longitude: 122 00 42.5
Waterbody: WA-05-1020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000	9:05	8.2	1240	57	11.4	7.58	35	0.196	0.01 U	0.143	0.044	0.005	19	130
11/14/2000	9:15	2	564	71	13.06	7.74	5	0.264	0.01 U	0.239	0.028	0.009	4.3	1 UJ
12/5/2000	8:50	2.6	1090	56	13.16	7.08	7	0.323	0.01 U	0.312	0.028	0.006	5.3	4 J
1/23/2001	9:25	3.3	1220	57	13.26	7.28	6	0.318	0.01 U	0.303	0.022	0.007	5.4	5 J
2/27/2001	9:05	2.9	616	73	14.28	7.66	3	0.275	0.01 U	0.246	0.021	0.007	2.1	3 J
3/20/2001	8:45	4.4	2570	42	13.43	7.52	30	0.314	0.01 U	0.264	0.031	0.005	14	1 J
4/17/2001	8:50	6.8	2520	45	12.82	7.38	122	0.237	0.038	0.169	0.089	0.005 U	65	36 J
5/22/2001	8:50	10	1690	47	11.67	7.57	7	0.182	0.01 U	0.139	0.019	0.005 U	4.7	20 J
6/19/2001	8:40	11.3	952	60	11.4	7.64	3	0.14	0.01 U	0.109	0.014	0.005	2.2	11 J
7/17/2001	8:25	12.5	508	80	10.4	7.77	2	0.102	0.01 U	0.059	0.012	0.005	2.2	110 J
8/21/2001	9:15	14.9	242	102	10.1	7.81	4	0.14	0.01 U	0.069	0.024	0.012	2.2	100 J
9/18/2001	9:17	13.5	268	101	10.1	7.6	2	0.118	0.01 U	0.049	0.018	0.0047	1	10 J

Conventional Data Report

NF Stillaguamish nr Darrington

05B110

Class: A
Rivermile: 30
Latitude: 48 16 48.7
Longitude: 121 42 04.2
Waterbody: WA-05-1020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/17/2000	9:50	7.6	300	44	11.6	7.31	8	0.12	0.01 U	0.092	0.01 U	0.005 U	1.2	33
11/14/2000	9:55	1.9	140	56	12.97	7.64	1	0.254	0.01 U	0.241	0.013	0.005 U	0.5	1 J
12/5/2000	9:50	2.7	360	45	12.8	7.33	2	0.297	0.01 U	0.287	0.013	0.005 U	0.7	1 J
1/23/2001	10:05	3.1	300	50	12.95	7.41	2	0.219	0.01 U	0.221	0.01	0.005 U	0.8	1 UJ
2/27/2001	9:50	2.6	165	60	13.97	7.54	3	0.22	0.01 U	0.202	0.012	0.005 U	0.5 U	2 J
3/20/2001	9:20	4	820	36	13.23	7.5	9	0.252	0.01 U	0.218	0.015	0.005 U	3.8	1 J
4/17/2001	9:30	6.2	695	41	12.82	7.43	18	0.151	0.01 U	0.12	0.014	0.005 U	7.5	12 J
5/22/2001	9:40	8.5	560	35	11.77	7.37	2	0.139	0.01 U	0.11	0.01 U	0.005 U	1.2	6 J
6/19/2001	9:20	9.5	220	41	11.8	7.49	1 U	0.114	0.01 U	0.085	0.01 U	0.005 U	0.6	7 J
7/17/2001	9:20	10.9	72	56	11.22	7.59	1 U	0.095	0.01 U	0.07	0.01 U	0.005 U	0.5 U	30 J
8/21/2001	9:55	12.2	41	81	11.22	7.95	1 U	0.119	0.01 U	0.075	0.011	0.006	1.6	32
9/18/2001	10:00	11.9	41	84	11.3	7.7	1	0.188	0.016	0.119	0.018	0.0057	0.5	29 J

Conventional Data Report

Snohomish R @ Snohomish

07A090

Class: A
Rivermile: 12.7
Latitude: 47 54 38.7
Longitude: 122 05 51.2
Waterbody: WA-07-1020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000	10:20	10.2	6320	43	10.7	7.16	4	0.18	0.01 U	0.176	0.014	0.005	3.7	87
		pH was 7.14 prior to recalibration												
11/15/2000	10:10	2.9	3900	49	12.67	7.37	2	0.277	0.01 U	0.255	0.016	0.005 U	1.1	3
12/6/2000	10:45	3.1	9960	48	12.46	6.8	3	0.408	0.01 U	0.385	0.019	0.005 U	1.6	9
1/24/2001	11:00	4.4	5520	48 J	12.85	7.48	3	0.525	0.01 U	0.5	0.013	0.006	3.5	10
2/28/2001	10:25	4.7	3460	55	13.06	7.33	2	0.433	0.01 U	0.389	0.016	0.005 U	1.5	1 J
3/21/2001	10:10	6	11000	37	12.42	7.33	11	0.439	0.01 U	0.372	0.019	0.005 U	5.7	9
4/18/2001	10:30	8.6	9600	43	11.71	7.34	10	0.332	0.01 U	0.278	0.016	0.005 U	4.5	31
5/23/2001	10:50	11.4	17500	29	11.47	7.21	22	0.152	0.01 U	0.12	0.012	0.005 U	6.3	55
6/20/2001	10:25	13.7	8220	39	11	7.28	6	0.147	0.01 U	0.124	0.01	0.005 U	2.3	11
		Lots of Cliff Swallows nesting under bridge												
7/18/2001	9:45	13.9	4190	49	11.22	7.37	4	0.197	0.01 U	0.142	0.01 U	0.005 U	1.5	110 J
8/22/2001	10:20	16.2	2260	61	9.28	7.41	3	0.248	0.027	0.158	0.011	0.005 U	1.3	80 J
9/19/2001	9:30	14.7	1890	61	9.2	7.2	3	0.288	0.046	0.168	0.016	0.003 U	1.9	40

Conventional Data Report

Skykomish R @ Monroe

07C070

Class: A
Rivermile: 25.6
Latitude: 47 51 08.0
Longitude: 121 57 28.8
Waterbody: WA-07-1160

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000 9:35	9.9	4440	31	11.1	7.17	6	0.148	0.01 U	0.113	0.011	0.005 U	3.3	28
11/15/2000 9:25	2.5	2950	39	13.36	7.44	1 U	0.149	0.01 U	0.142	0.011	0.005 U	0.7	1 UJ
12/6/2000 9:55	3	3440	39	12.86	7.42	6	0.229	0.01 U	0.225	0.01 U	0.005 U	1.1 J	1 U
1/24/2001 10:20	4.2	3420	3.9 J	13.06	7.63	1	0.229	0.01 U	0.231	0.01 U	0.005 U	1.1	1
2/28/2001 9:40	3.8	2370	45	13.57	7.39	2	0.224	0.01 U	0.197	0.01 U	0.005 U	1.1	1 UJ
3/21/2001 9:20	5.6	6120	32	12.62	7.52	3	0.257	0.01 U	0.222	0.013	0.005 U	2	1 U
4/18/2001 9:40	6.9	5810	33	12.32	7.29	4	0.187	0.01 U	0.155	0.011	0.005 U	2.8	5
5/23/2001 9:55	9	12200	22	12.18	7.2	15	0.11	0.01 U	0.076	0.011	0.005 U	7.9	32
6/20/2001 9:40	12	5720	30	11.4	7.32	2	0.074	0.01 U	0.051	0.01 U	0.005 U	1.1	14
7/18/2001 9:00	12.7	3020	37	10.71	7.35	2	0.089	0.01 U	0.056	0.01 U	0.005 U	0.8	14 J
8/22/2001 9:15	14.5	2070	45	9.89	7.46	2	0.135	0.01 U	0.082	0.01 U	0.005 U	1.2	72 J
9/19/2001 8:55	13.6	1910	45	9.9	7.17	6	0.181	0.018	0.098	0.012	0.003 U	2.3	7 J

Conventional Data Report

Skykomish R nr Gold Bar

07C120

Class: AA
Rivermile: 43.7
Latitude: 47 50 18.0
Longitude: 121 39 28.0
Waterbody: WA-07-1200

Date/Time		Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
		deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/18/2000	8:05	8.9	2750	33	11.7	7.2	10	0.14	0.01 U	0.143	0.016	0.005 U	2.6	84
11/15/2000	7:40	1.6	1420	39	13.66	7.33	1 U	0.123	0.01 U	0.127	0.01 U	0.005 U	0.5 U	1 UJ
		pH was 7.56 prior to recal.												
12/6/2000	8:30	3.7	1840	38	13.16	7.06	1 U	0.193	0.01 U	0.197	0.01	0.005 U	0.9	1 J
1/24/2001	8:30	3.8	1660	38 J	13.67	7.52	2	0.164	0.01 U	0.174	0.01 U	0.005 U	0.7	1 UJ
		pH was 7.92 prior to recalibration												
2/28/2001	8:25	3.3	1100	44	13.87	7.56	1 U	0.175	0.01 U	0.154	0.01 U	0.005 U	0.6	3 J
3/21/2001	8:10	4.8	4340	31	13.13	7.42	2	0.212	0.01 U	0.19	0.012	0.005 U	1.6	1 J
4/18/2001	8:25	6.2	3720	32	12.82	7.28	2	0.138	0.01 U	0.122	0.01 U	0.005 U	1.9	3 J
5/23/2001	8:00	7.2	10700	20	12.69	7.28	21	0.096	0.01 U	0.068	0.01 U	0.005 U	5.1	8 J
6/20/2001	8:00	10.1	4420	27	11.9	7.53	2	0.062	0.01 U	0.04	0.01 U	0.005 U	0.9	21 J
7/18/2001	7:40	12.1	1610	36	11.02	7.5	1 U	0.058	0.01 U	0.042	0.01 U	0.005 U	0.5 U	9 J
8/22/2001	8:00	13.8	1070	48	10.2	7.37	6	0.168	0.01 U	0.124	0.01 U	0.005 U	4	150 J
9/19/2001	7:17	13	494	54	10.7	7.34	1 U	0.114	0.01 U	0.079	0.01 U	0.003 U	0.5	6 J

Conventional Data Report

Snoqualmie R nr Monroe

07D050

Class: A
Rivermile: 2.7
Latitude: 47 48 14.3
Longitude: 122 00 06.0
Waterbody: WA-07-1060

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000 14:00	9.4	1050	52	11	7.36	3	0.273	0.01 U	0.236	0.016	0.005	2	18
11/13/2000 13:40	3.5	1560	52	12.57	7.38	2	0.374	0.01 U	0.341	0.019	0.005 U	1.6	2
12/4/2000 11:45	4	2700 J	45	12.46	7.21	5	0.498	0.01 U	0.48	0.026	0.007	2.9	12
1/22/2001 14:25	5.1	3500	51	12.44	7.3	13	0.624	0.011	0.585	0.024	0.007	6.5	44
2/26/2001 12:55	6	1490	58	12.95	7.34	2	0.517	0.01 U	0.472	0.018	0.005 U	1.9	1 U
3/19/2001 14:40	6.2		30	13.03	7.14	212	0.36	0.017	0.27	0.059	0.005 U	65	35
	Too windy for RP.												
4/16/2001 13:20	8.9		54	11.81	7.11	6	0.471	0.01 U	0.413	0.017	0.005 U	2.4	43
	Too windy for RP												
5/21/2001 15:00	10.7		39	11.97	7.23	6	0.273	0.01 U	0.23	0.015	0.005 U	3.3	11
	Too windy for tapedown												
6/18/2001 14:00	12.3		40	11.6	7.15	6	0.236	0.01 U	0.193	0.016	0.005 U	2.8	12
	Too windy for tapedowm												
7/16/2001 13:15	15.2		58	9.89	7.32	2	0.242	0.013	0.181	0.012	0.005	1.6	130
	Too Windy for RP												
8/20/2001 13:35	17.7		75	10	7.63	2	0.275	0.01 U	0.208	0.015	0.005	1.3	28
9/17/2001 12:53	16.3	330	73	10.1	7.42	2	0.265	0.01 U	0.187	0.018	0.0033	1.2	13

Conventional Data Report

Snoqualmie R. abv Carnation

07D100

Class: A
Rivermile: 25
Latitude: 47 38 24.4
Longitude: 121 55 35.5
Waterbody:

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000 13:20	9		48	11.2	7.36	3	0.235	0.01 U	0.208	0.013	0.005	1.6	20
11/13/2000 12:25	3.2		48	12.57	7.55	1	0.302	0.01 U	0.303	0.014	0.005 U	1.3	2
12/4/2000 10:45	3.7		41	12.76	7.36	3	0.367	0.01 U	0.353	0.019	0.005 U	1.7	4 J
1/22/2001 13:40	4.5		42	13.77	7.39	6	0.385	0.01 U	0.365	0.018	0.005 U	7.6	2
2/26/2001 11:45	5.4		53	12.95	7.22	1	0.393	0.01 U	0.365	0.016	0.005 U	1.6	3
3/19/2001 13:45	5.1		23	14.04	7.06	123	0.354	0.018	0.262	0.077	0.005 U	55	19
4/16/2001 12:35	9.1		49	11.81	7.22	3	0.37	0.01 U	0.325	0.015	0.005 U	1.7	2
5/21/2001 13:50	10.7		36	11.67	7.34	5	0.237	0.01 U	0.195	0.014	0.005 U	2.3	2
6/18/2001 13:00	12.3		37	11.4	7.13	4	0.205	0.01 U	0.163	0.012	0.005 U	1.9	13
7/16/2001 12:15	13.8		56	10	7.42	2	0.221	0.01 U	0.171	0.01 U	0.005 U	1.2	73
9/17/2001 12:07	15.4		73	10.2	7.31	2	0.248	0.01 U	0.174	0.017	0.003 U	1.6	37

Conventional Data Report

Snoqualmie R @ Snoqualmie

07D130

Class: A
Rivermile: 42.3
Latitude: 47 31 37.5
Longitude: 121 48 39.3
Waterbody: WA-07-1100

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000	10:25	8.1	749	41	11.2	7.31	1	0.212	0.01 U	0.194	0.01 U	0.005 U	1	14
11/13/2000	10:15	3.2	862	41	12.57	7.39	1	0.231	0.01 U	0.243	0.01	0.005 U	0.8	1 J
12/4/2000	8:50	3.6	1210	35	12.48	7.39	2	0.298	0.01 U	0.291	0.014	0.005 U	1.5	1 UJ
1/22/2001	11:40	3.6	1970	32	13.36	7.58	5	0.265	0.01 U	0.259	0.013	0.005 U	4.5	2 J
2/26/2001	10:00	3.8	868	46	13.06	7.07	1	0.297	0.01 U	0.28	0.014	0.005 U	0.8	1 U
3/19/2001	10:55	4.3	8360	21	13.73	7.03 J	70	0.292	0.01 U	0.239	0.048	0.005 U	27	5
4/16/2001	10:35	7.8	1420	41	11.81	7.15	2	0.272	0.01 U	0.245	0.011	0.005 U	1.4	3 J
5/21/2001	10:55	8.2	2690	29	12.08	7.11	3	0.197	0.01 U	0.155	0.012	0.005 U	1.6	1
6/18/2001	10:35	9.8	2390	32	11.7	7.18	3	0.163	0.01 U	0.131	0.01 U	0.005 U	1.4	5
7/16/2001	10:35	12	1090	46	10.51	7.31	2	0.2	0.01 U	0.161	0.01 U	0.005 U	1.3	140
8/20/2001	11:10	13.6	466	67	10	7.49	3	0.221	0.01 U	0.167	0.01 U	0.005 U	1.1	19
9/17/2001	10:06	13	417	64	10	7.15	2	0.259	0.01 U	0.206	0.014	0.0035	1.1	55

Conventional Data Report

M F Snoqualmie R nr Ellisville

07D150

Class: AA
Rivermile: 45.3
Latitude: 47 30 59.0
Longitude: 121 46 05.6
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000	11:40	8	450	27	11.5	7.26	2	0.106	0.01 U	0.094	0.01 U	0.005 U	1.1	2
11/13/2000	10:45	2.4		27	13.26	7.49	1 U	0.142	0.01 U	0.16	0.01 U	0.005 U	1.2	1 UJ
		Too Windy for RP												
12/4/2000	9:30	3.1	730	25	13	7.4	2	0.272	0.01 U	0.235	0.013	0.005 U	2.2	1 J
1/22/2001	12:10	3.6		24	13.77	7.54	6	0.222	0.01 U	0.218	0.014	0.005 U	7	2 J
		Too windy for tapedown												
2/26/2001	10:30	3.3	430	30	13.97	7.18	1	0.19	0.01 U	0.16	0.011	0.005 U	1.2	1 U
3/19/2001	11:30	4.3	6000 J	17	13.23	7.01 J	63	0.262	0.01 U	0.213	0.056	0.005 U	28	3
		RP measurement may be one foot higher than actual stage height. Flow unit needs to try to verify measurement using USGS results.												
4/16/2001	11:00	7.9	710	27	12.22	7.15	3	0.149	0.01 U	0.124	0.011	0.005 U	2.1	1 U
5/21/2001	11:50	8.9		19	12.79	7.19	4	0.103	0.01 U	0.081	0.011	0.005 U	3.7	1 U
		Too windy for tapedown												
6/18/2001	11:00	10	1310	20	11.9	7.13	3	0.087	0.01 U	0.059	0.01 U	0.005 U	1.8	4
7/16/2001	11:10	12.4	480	28	11.02	7.37	2	0.107	0.01 U	0.072	0.01 U	0.005 U	1.5	150 J
8/20/2001	11:30	15.3	230	43	9.59	7.61	15 J	0.094	0.01 U	0.044	0.011	0.005 U	1	9
9/17/2001	10:41	13.8	200	40	10.5	7.31	2	0.169	0.01 U	0.099	0.011	0.003 U	1.2	22

Conventional Data Report

Sultan R @ Sultan

07E055

Class: A
Rivermile: 0.11
Latitude: 47 51 39.5
Longitude: 121 49 10.2
Waterbody: WA-07-1170

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000 8:50	10.8		25	11.2	7.1	6	0.101	0.01 U	0.105	0.01 U	0.005 U	2.9	8
11/15/2000 8:40	5.2		31	12.57	7.52	1	0.12	0.01 U	0.111	0.01 U	0.005 U	1.4	2 J
	pH was 7.61 prior to recal.												
12/6/2000 9:15	3.9		30	13.06	7.13	2	0.16	0.01 U	0.162	0.01	0.005 U	2.4	1 UJ
1/24/2001 9:45	4.2		31 J	13.77	7.6	1	0.186	0.01 U	0.186	0.01 U	0.005 U	4.1	1 UJ
2/28/2001 9:10	3		31	14.69	7.42	1	0.197	0.01 U	0.166	0.01 U	0.005 U	1.6	1 UJ
3/21/2001 8:40	5.1		34	13.63	7.66	2	0.241	0.01 U	0.206	0.012	0.005 U	1.8	1 UJ
4/18/2001 9:05	7.3		36	12.82	7.42	2	0.208	0.01 U	0.174	0.01 U	0.005 U	1.5	7 J
5/23/2001 8:45	8.2		28	12.58	7.28	1	0.158	0.01 U	0.126	0.011	0.005 U	1	9 J
6/20/2001 8:45	9.7		31	12.1	7.36	1	0.124	0.01 U	0.095	0.01 U	0.005 U	0.7	6 J
	Fisherman upstream of station												
7/18/2001 8:20	9.9		32	11.93	7.48	1 U	0.127	0.01 U	0.092	0.01 U	0.005 U	0.6	13 J
8/22/2001 8:40	11.6		32	11.12	7.42	3	0.129	0.01 U	0.086	0.01 U	0.005 U	0.9	80 J
9/19/2001 8:05	13.2		30	10.8	7.22	4	0.14	0.01 U	0.081	0.01 U	0.003 U	2.2	7 J

Conventional Data Report

Raging R @ Fall City

07Q070

Class: A
Rivermile: 0.5
Latitude: 47 33 52.0
Longitude: 121 53 16.2
Waterbody:

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000 12:45	9		68	12	7.92	2	0.297	0.01 U	0.259	0.016	0.005	1.2	32
11/13/2000 11:50	3.7		49	14.45	7.67	2	0.684	0.01 U	0.682	0.014	0.005 U	0.8	3 J
12/4/2000 10:20	3.9		46	13.26	7.64	2	0.846	0.01 U	0.839	0.018	0.005 U	1	11 J
1/22/2001 13:00	4.8		40	13.46	7.34	2	0.783	0.01 U	0.767	0.014	0.005	1.2	22
2/26/2001 11:00	3.1		49	14.79	7.45	1	0.654	0.01 U	0.643	0.017	0.005 U	0.9	2
3/19/2001 13:20	7.2		33	12.32	7.24	30	0.851	0.01 U	0.775	0.025	0.005 U	8.6	3
4/16/2001 11:55	9.3		44	12.42	7.54	4	0.549	0.01 U	0.508	0.014	0.005 U	1.6	1
5/21/2001 13:15	12.5		47	11.57	7.75	4	0.416	0.01 U	0.361	0.017	0.009	1.9	140
6/18/2001 12:20	12.6		48	11.9	7.53	3	0.341	0.01 U	0.291	0.016	0.005 U	1.2	17
7/16/2001 11:45	12.7		55	10.91	7.74	56	0.404	0.01	0.304	0.03	0.006	17	1500 J
8/20/2001 12:10	15		97	12.04	9.26	3	0.149	0.01 U	0.058	0.014	0.005 U	1.2	8
	pH meter W/I 0.08 0f standard												
9/17/2001 11:27	13.5		91	12	8.32	2	0.295	0.01 U	0.22	0.02	0.004	1.5	82
	pH meter was W/I 0.3 of standard												

Conventional Data Report

Cedar R @ Logan St/Renton

08C070

Class: A
Rivermile: 1
Latitude: 47 29 09.0
Longitude: 122 12 28.0
Waterbody: WA-08-1143

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000	11:30	10.7	487	61	10.9	7.51	7	0.194	0.019	0.2	0.023	0.013	1.9	80
11/15/2000	11:20	4.4	420	64	13.16	7.61	2	0.254	0.01 U	0.236	0.029	0.012	0.8	14
12/6/2000	12:05	4.5	400	66	13.36	7.48	2	0.288	0.01 U	0.273	0.031	0.011	1.1	26
1/24/2001	12:25	6.5	360	78 J	12.75	7.62	2	0.382	0.01 U	0.372	0.019	0.011	1.3	19
2/28/2001	11:35		345	67	14.59	7.53	15	0.303	0.01 U	0.263	0.023	0.007	2.3	17
3/21/2001	11:10	7.4	400	69	13.03	7.92	24	0.493	0.01 U	0.436	0.029	0.011	2.6	16
4/18/2001	11:30	9.8	397	71	12.52	7.9	25	0.322	0.01 U	0.306	0.021	0.007	2.5	83
5/23/2001	12:30	14.1	487	63	11.87	7.9	6	0.22	0.01 U	0.175	0.015	0.007	1.2	14
6/20/2001	11:30	14.2	353	76	12.9	8.65	5	0.147	0.01 U	0.096	0.013	0.005 U	1.2	44
		pH calibration was good (within 0.02 of standard).												
7/18/2001	11:00	13	231	87	11.53	7.9	9	0.225	0.01 U	0.171	0.015	0.009	1.2	220
8/22/2001	13:50	13.1	406	85	11.02	7.93	9	0.277	0.01 U	0.205	0.022	0.009	3.7	890
9/19/2001	12:03	13.2	195	93	9.7	8.17	5	0.234	0.01 U	0.183	0.022	0.0076	1.3	77

Conventional Data Report

Cedar R nr Landsburg

08C110

Class: AA
Rivermile: 25.1
Latitude: 47 23 29.3
Longitude: 121 55 09.5
Waterbody: WA-08-1150

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000	9:30	9.4	547	45	11.1	7.66	3	0.12	0.01 U	0.111	0.01 U	0.005 U	0.7	4
11/13/2000	9:20	6.1	427	50	12.27	7.71	1 U	0.151	0.01 U	0.17	0.013	0.005 U	0.5 U	1 UJ
12/4/2000	8:20		418											
		No Access. Tree fell across road.												
1/22/2001	10:50	5.4	427	49	12.75	7.57	1	0.195	0.01 U	0.205	0.013	0.006	1.3	1 UJ
2/26/2001	9:10	5.1	355	50	12.95	7.41	1	0.195	0.01 U	0.175	0.016	0.005 U	0.9	1 U
3/19/2001	9:45	5.7	787	40	12.42	7.51 J	15	0.413	0.01 U	0.343	0.027	0.006	7.6	1 J
4/16/2001	9:30	7.6	432	49	12.02	7.69	2	0.201	0.01 U	0.178	0.013	0.005 U	0.9	1 J
5/21/2001	8:50	9.3	656	44	12.18	7.59	2	0.141	0.01 U	0.12	0.013	0.005 U	0.8	1 J
6/18/2001	9:40	9.9	475	57	11.7	7.6	3	0.155	0.01 U	0.134	0.013	0.005	0.7	1 J
7/16/2001	9:25	10.6	490	64	11.02	7.75	4	0.211	0.01 U	0.182	0.013	0.007	1.3	330 J
8/20/2001	10:05	10.1	278	83	11.42	8.05	1	0.203	0.01 U	0.177	0.013	0.007	0.5 U	3
9/17/2001	9:10	10.7	293	72	11	7.51	1 U	0.189	0.01 U	0.173	0.017	0.0054	0.8	5 J

Conventional Data Report

Green R @ Tukwila

09A080

Class: A
Rivermile: 12.4
Latitude: 47 27 56.0
Longitude: 122 14 47.9
Waterbody: WA-09-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000 12:00	11.7	735	79	9.9	7.37	8	0.238	0.01 U	0.23	0.033	0.014	3.7	140
11/15/2000 12:00	3.4	531	102	12.27	7.39	2	0.361	0.01 U	0.311	0.044	0.012	1.4	8
12/6/2000 12:50	3.5	495	115	11.95	7.18	2	0.482	0.021	0.444	0.053	0.012	1.4	25
1/24/2001 12:55	5.6	647	127 J	11.63	7.54	4	0.708	0.023	0.608	0.04	0.017	3.4	10
2/28/2001 12:35	5.7	495	126	12.75	7.24	9	0.587	0.01 U	0.508	0.044	0.008	3.7	5
3/21/2001 11:45	7.3	1340	73	11.71	7.84	18	0.503	0.01 U	0.406	0.047	0.015	5.5	23
4/18/2001 12:00	9.6	1550	73	11.01	7.53	13	0.368	0.01 U	0.275	0.036	0.01	4.2	34
5/23/2001 13:20	13.7	1370	77	10.25	7.36	11	0.307	0.025	0.229	0.033	0.011	3.4	28
6/20/2001 12:20	15.3	924	94	9.9	7.34	8	0.294	0.016	0.256	0.039	0.015	3.5	74
7/18/2001 11:40	14.5	474	145	9.38	7.29	6	0.449	0.051	0.306	0.04	0.012	2.7	57
8/22/2001 14:40	15.9	301	135	8.87	7.46	16	0.47	0.032	0.31	0.059	0.014	6.3	610 J
9/19/2001 13:00	15.1	340	126	12.1	7.44	13	0.443	0.036	0.297	0.061	0.015	4.8	63

Conventional Data Report

Green R @ Kanaskat
09A190

Class: AA
Rivermile: 57.6
Latitude: 47 19 10.0
Longitude: 121 53 32.3
Waterbody: WA-09-1030

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/16/2000 8:35	10.5	508	48	10.8	7.6	2	0.102	0.01 U	0.076	0.016	0.005 U	1.1	6
pH was 7.68 prior to recalibration													
11/13/2000 8:30	3.4	383	46	12.77	7.26	1 U	0.1	0.01 U	0.116	0.016	0.005 U	0.5 U	2 J
12/4/2000 7:40	3.6	351	44	12.58	7.97	1	0.189	0.01 U	0.173	0.025	0.005	0.7	5 J
1/22/2001 9:50	3.3	475	45	13.87	7.21	1 U	0.192	0.01 U	0.191	0.017	0.008	0.8	2 J
pH was 7.52 prior to recalibration													
2/26/2001 8:25	3.9	259	46	13.26	7.3	1 U	0.189	0.01 U	0.162	0.019	0.006	0.8	17 J
3/19/2001 8:35	5.1	918	40	12.62	7.34 J	10	0.319	0.01 U	0.273	0.028	0.008	6.8	7 J
4/16/2001 8:30	6.4	1050	39	12.82	7.51	4	0.099	0.01 U	0.063	0.015	0.005 U	1.3	1 UJ
5/21/2001 8:00	8.3	1230	35	12.28	7.51	2	0.069	0.01 U	0.046	0.015	0.006	1.4	1 J
6/18/2001 8:50	10.3	756	42	11.4	7.68	1	0.107	0.01 U	0.075	0.015	0.005 U	0.9	7 J
7/16/2001 8:25	12.4	277	51	10.71	7.64	2	0.121	0.011	0.072	0.011	0.006	0.7	51 J
8/20/2001 9:15	13.6	115	65	10.61	7.43	1	0.118	0.01 U	0.058	0.013	0.005 U	0.7	11 J
9/17/2001 8:03	15.1	386	55	10.2	7.46	3	0.166	0.015	0.079	0.021	0.0036	1.4	35 J

Conventional Data Report

Puyallup R @ Puyallup

10A050

Class: A
Rivermile: 5.7
Latitude: 47 12 49.4
Longitude: 122 20 24.8
Waterbody: WA-10-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/18/2000 13:15	11	3190	65	10.6	7.52	221 J	0.107	0.019	0.114	0.073	0.013	45	160 J
11/15/2000 13:10	4.5	2080	77	12.57	7.51	7	0.213	0.01 U	0.191	0.061	0.015	12	63
12/6/2000 14:40	4.1	977	93	13.36	7.27	2	0.492	0.027	0.388	0.069	0.021	2.2	150 J
1/24/2001 15:25	5.1	1110	94 J	12.85	7.7	4	0.449	0.024	0.408	0.034	0.016	2.9	88
2/28/2001 14:15	4.5	1050	98	13.77	7.42	9	0.524	0.028	0.425	0.062	0.019	4.5	9
3/21/2001 13:15	7	3670	72	12.62	7.8	20	0.364	0.01 U	0.291	0.037	0.012	4.2	4
4/18/2001 13:35	9.8	2260	82	12.32	7.61	14	0.463	0.013	0.37	0.041	0.014	3.3	52
5/23/2001 15:00	14.4	4290	56	11.57	7.68	50	0.152	0.026	0.093	0.051	0.008	18	37
6/20/2001 13:40	14.5	3990	61	11	7.5	21	0.195	0.012	0.093	0.04	0.008	9.9	17
7/18/2001 14:35	12.7	2540	83	10.51	7.51	105	0.236	0.066	0.169	0.11	0.023	57	180
8/22/2001 17:00	12.5	2060	70	10.61	7.45	423 J	0.209	0.021	0.149	0.462	0.024	220	310
9/19/2001 16:00	12.3	1050	89	11.3	7.54	133	0.274	0.097	0.19	0.18	0.0372	115	71

Conventional Data Report

Puyallup R @ Meridian St

10A070

Class: A
Rivermile: 8.3
Latitude: 47 12 10.0
Longitude: 122 17 33.0
Waterbody: WA-10-1020

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/18/2000 12:40	10.9	3190	65	10.5	7.6	59	0.148	0.032	0.105	0.068	0.013	45	63
11/15/2000 12:50	4.5	2080	76	12.47	7.56	6	0.205	0.01 U	0.178	0.057	0.014	12	120
12/6/2000 14:00	4.1	977	91	13.56	7.57	3	0.391	0.01 U	0.357	0.061	0.017	2	41 J
1/24/2001 15:00	5.1	1110	95 J	12.65	7.7	3	0.453	0.021	0.412	0.034	0.018	2.9	45
2/28/2001 13:45	4.3	1050	97	14.28	7.43	11	0.504	0.023	0.408	0.068	0.021	7.3	28
3/21/2001 12:45	7.4	3670	72	12.42	7.83	25	0.347	0.01 U	0.284	0.033	0.011	4	6
4/18/2001 13:05	9.5	2260	80	12.02	7.63	9	0.456	0.01 U	0.367	0.039	0.015	3.4	62
5/23/2001 14:15	14.3	4290	56	11.37	7.7	127 J	0.148	0.026	0.091	0.061	0.008	18	40
6/20/2001 13:10	14.3	3990	61	10.7	7.55	16	0.154	0.011	0.091	0.039	0.008	9.7	10
7/18/2001 13:10	14	2540	65	10.1	7.57	69	0.132	0.043	0.085	0.069	0.014	45	39
8/22/2001 16:20	12.4	2060	69	10.61	7.52	446	0.188	0.018	0.146	0.276	0.021	240	340
9/19/2001 15:26	12.2	1050	85	11.1	7.57	146	0.247	0.085	0.174	0.183	0.027	110	31

Conventional Data Report

White River @ R Street

10C095

Class: A
Rivermile: 8
Latitude: 47 16 31.0
Longitude: 122 12 22.0
Waterbody: WA-10-1030

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000	15:40 9.1	154	87	11.59	8.9	3	0.242	0.01 U	0.202	0.047	0.029	7	3
11/28/2000	16:30 3.8	219	98	12.96	7.89	3	0.648	0.01 U	0.605	0.081	0.041	2.7	230 J
12/12/2000	15:40 0.3	176	96	14.72	8.22	2	0.309	0.01 U	0.287	0.056	0.028	1.9	3
1/30/2001	15:20 5.2	175	107	13.09	7.75	7	0.67	0.01 U	0.61	0.043	0.032	2.8	90
2/20/2001	15:53 6.4	426	77	12.32	7.79	11	0.361	0.01 U	0.333	0.043	0.019	2.3	2
3/27/2001	13:45 6.2	455	84	12.65	7.92	17	0.613	0.019	0.537	0.065	0.032	4.1	44
4/24/2001	16:08 15	400	76	10.2	8.39	15	0.263	0.012	0.197	0.043	0.017	2.9	1
5/29/2001	16:05 14.9	380	65	10.7	8.04	27	0.174	0.023	0.102	0.06	0.018	12	2
6/26/2001	14:55 17	385	67	10.4	8.29	25 J	0.131	0.02	0.079	0.059	0.019	21	6
7/24/2001	16:00 19.2	257	73	9.3	7.94	162	0.179	0.01 U	0.134	0.21	0.03	180	67
8/28/2001	15:07 18.5	405	68	9.69	7.85	145	0.099	0.01 U	0.077	0.315	0.024	200	29
9/25/2001	16:03 13.9	308	87	10.2	7.64	146	0.148	0.057	0.11	0.161	0.028	95	39

Conventional Data Report

Boise Cr @ Buckley

10D070

Class: A
Rivermile: 0.1
Latitude: 47 10 34.0
Longitude: 122 01 02.0
Waterbody:

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000 16:35	8.7		62	10.68	7.34	2	0.292	0.01 U	0.282	0.029	0.012	2.5	88
11/28/2000 17:15	4.1		78	12.16	7.55	3	1.29	0.01 U	1.16	0.05	0.015	3.6	53
I did not take a stage reading, because it was dusk with heavy traffic- there is no shoulder.													
12/12/2000 16:20	1		75	14.12	7.4	4	0.508	0.01 U	0.473	0.035	0.011	1.7	68
1/30/2001 16:40	5.2		78	12.4	7.66	2	0.708	0.01 U	0.659	0.024	0.012	1.6	15
2/20/2001 14:38	6.5		74	11.91	7.81	3	0.909	0.01 U	0.818	0.034	0.012	2	33
3/27/2001 14:40	6.2		76	12.04	7.65	5	1.15	0.01 U	1.01	0.05	0.015	4.5	56
4/24/2001 17:05	13.1		60	10.3	7.64	5	0.35	0.01 U	0.292	0.033	0.011	2.8	18
5/29/2001 16:59	12.3		63	10.5	7.58	5	0.365	0.011	0.217	0.037	0.013	3.7	210 J
6/26/2001 15:46	13.3		64	10.2	7.75	4 J	0.302	0.01	0.228	0.028	0.019	1.9	69
7/24/2001 16:43	15		76	9.8	8.02	3	0.25	0.01 U	0.178	0.03	0.012	2.8	660 J
8/28/2001 16:16	16.6		79	9.49	7.91	5	0.272	0.01 U	0.187	0.031	0.017	2.5	340
9/25/2001 17:07	13.1		90	9.84	7.77	4	0.382	0.025	0.239	0.048	0.023	2.6	1200

Conventional Data Report

Nisqually R @ Nisqually

11A070

Class: A
Rivermile: 3.4
Latitude: 47 03 43.0
Longitude: 122 41 42.0
Waterbody: WA-11-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/25/2000 8:00	10.3		63	10.24	7.45	58	1.37	1.1	0.155	0.107	0.008	80	9
11/29/2000 8:00	5		68	11.55	7.24	18	0.424	0.03	0.345	0.08	0.009	25	12
12/13/2000 8:10	3.6		58	11.93	7.51	10	0.233	0.01 U	0.233	0.056	0.009	19	1 J
1/31/2001 8:30	5.4		74	12.2	7.62	8	0.304	0.01 U	0.258	0.033	0.012	12	4 J
2/21/2001 8:31	5.5		71	12.02	7.48	7	0.371	0.01 U	0.294	0.042	0.009	9.6	3 J
3/28/2001 7:15	6.6		73	11.73	7.62	9	0.326	0.012	0.264	0.044	0.008	8	13 J
4/25/2001 8:05	10.9		74	10.6	7.55	11	0.267	0.012	0.192	0.037	0.009	6.5	4 J
5/30/2001 9:07	11		73	10.7	7.27	8	0.212	0.01 U	0.134	0.031	0.006	3.9	13 J
6/27/2001 7:54	12.6		71	9.69	7.44	9 J	0.184	0.01 U	0.118	0.023	0.008	4.5	18 J
7/25/2001 7:54	12.8		69	9.9	7.66	13	0.142	0.01 U	0.089	0.036	0.01	10	29 J
8/29/2001 8:43	14.4		72	10.3	7.35	8	0.115	0.01 U	0.079	0.023	0.008	6.5	17 J
9/26/2001 9:23	14.1		70	9.64	7.53	19	0.19	0.03	0.126	0.068	0.012	37	27 J

Conventional Data Report

Deschutes R @ E St Bridge

13A060

Class: A
Rivermile: 0.6
Latitude: 47 00 43.0
Longitude: 122 54 07.0
Waterbody: WA-13-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/23/2000 8:25	7.8	152	102	10.08	7.06	7	0.603	0.01 U	0.599	0.041	0.016	3	51
11/27/2000 8:30	5.7	190	115	10.65	7.19	5	0.69	0.01 U	0.586	0.055	0.018	3.3	120 J
12/11/2000 8:24	3.5	135	114	11.71	7.29	2	0.671	0.01 U	0.627	0.046	0.015	1.4	5 J
1/29/2001 9:00	5.1	170	110	11.46	7.29	2	0.674	0.01 U	0.633	0.03	0.013	1.8	10 J
2/19/2001 8:50	5.6	279	93	11.51	7.2	4	0.75	0.01 U	0.661	0.041	0.012	4.6	3
3/26/2001 7:30	9.1	252	93	10.71	7.47	6	0.514	0.01 U	0.466	0.038	0.013	2.4	17 J
4/23/2001 9:50	9.7	245	97	10.6	7.22	5	0.548	0.017	0.497	0.041	0.016	2.5	11 J
5/28/2001 9:50	13.8	161	108	9.29	7.28	4	0.565	0.024	0.455	0.047	0.017	2.5	290 J
6/25/2001 8:47	12.4	121	120	9.69	7.31	3	0.53	0.012	0.451	0.04	0.017	2	46 J
7/23/2001 9:35	14.8	90	138	9.1	7.47	4	0.567	0.013	0.468	0.041	0.016	2.3	65 J
8/27/2001 9:21	14.5	100	133	9.09	7.28	3	0.551	0.024	0.467	0.04	0.02	2.5	55 J
9/24/2001 9:20	13.8	68	149	9.44	7.43	3 J	0.694 J	0.017 J	0.584 J	0.042 J	0.019 J	1.8 J	40 J

Conventional Data Report

Skokomish R nr Potlatch

16A070

Class: AA
Rivermile: 5.3
Latitude: 47 18 36.0
Longitude: 123 10 33.0
Waterbody: WA-16-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000 13:10	8.8	470	66	10.14	7.57	1	0.08	0.01 U	0.074	0.017	0.008	1.3	4
11/28/2000 14:20	6	1030	61	11.45	7.33	3	0.122	0.01 U	0.103	0.027	0.009	3.6	5
12/12/2000 14:00	5.1	562	67	11.51	7.38	2	0.059 J	0.01 U	0.084	0.021	0.008	0.8	4
1/30/2001 13:35	6.7	890	62	11.98	7.53	2	0.076	0.01 U	0.075	0.013	0.008	1.9	4
2/20/2001 13:51	6.8	694	57	12.02	7.54	2	0.084	0.01 U	0.059	0.018	0.008	1	1 U
3/27/2001 11:40	6.7	762	60	11.73	7.53	2	0.071	0.01 U	0.057	0.021	0.005 U	1.5	1
4/24/2001 14:17	10.9	867	58	11.41	7.56	3	0.05	0.01 U	0.031	0.02	0.006	1.5	1 U
5/29/2001 13:55	11.3	515	63	11.01	7.47	1	0.052	0.01 U	0.03	0.02	0.006	0.6	1 U
6/26/2001 12:47	12.3	323	69	10.61	7.37	2	0.042	0.01 U	0.028	0.013	0.008	0.6	10
7/24/2001 13:20	12.1	223	80	10.5	7.58	1 U	0.033	0.01 U	0.023	0.016	0.008	0.6	12
8/28/2001 13:35	13.2	474	74	10	7.52	1	0.067	0.01 U	0.061	0.013	0.009	0.9	10
9/25/2001 14:18	10.9	219	79	10.25	7.37	2	0.064	0.01 U	0.034	0.019	0.0095	0.6	9

Conventional Data Report

Duckabush R nr Brinnon

16C090

Class: AA
Rivermile: 4.5
Latitude: 47 41 03.0
Longitude: 123 00 37.0
Waterbody: WA-16-3010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000	12:05 6.7	176	68	12	7.77	2	0.074	0.01 U	0.068	0.01 U	0.005 U	1	3
11/28/2000	13:00 3.8	176	73	12.66	7.68	1 U	0.068	0.01 U	0.061	0.011	0.005 U	0.7	1
12/12/2000	12:30 1.9	149	77	13.45	7.63	1 U	0.022 J	0.01 U	0.055	0.01 U	0.005 U	0.5 U	1 U
1/30/2001	12:20 4.4	187	77	12.94	7.75	1 U	0.044	0.01 U	0.049	0.01 U	0.005 U	0.5 U	1 U
2/20/2001	12:32 4	137	71	12.82	7.62	2	0.059	0.01 U	0.041	0.01 U	0.005 U	0.7	1 U
3/27/2001	10:30 4.4	267	71	12.85	7.83	1	0.092	0.01 U	0.083	0.013	0.005 U	0.7	1
4/24/2001	13:00 7.7	201	75	12.22	7.67	1 U	0.054	0.01 U	0.043	0.01 U	0.005 U	0.6	1
5/29/2001	12:31 6.5	372	66	12.32	7.57	2	0.061	0.01 U	0.039	0.011	0.005 U	1.5	1 U
6/26/2001	11:26 8.5	231	71	11.73	7.67	2	0.032	0.01 U	0.016	0.01 U	0.005 U	0.6	5
7/24/2001	11:57 11.3	136	87	10.8	7.84	1 U	0.013	0.01 U	0.012	0.01 U	0.005 U	0.5 U	6
8/28/2001	12:16 11.4	155	83	11.01	7.66	1 U	0.052	0.01 U	0.043	0.01 U	0.005 U	0.5 U	6
9/25/2001	12:58 10.2	66	91	11.15	7.81	1 U	0.064	0.01 U	0.034	0.01 U	0.0032	0.5 U	47

Conventional Data Report

Big Quilcene R nr mouth

17A060

Class: AA
Rivermile:
Latitude: 47 49 06.2
Longitude: 122 52 26.5
Waterbody: WA-17-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000 11:15	6.7	95	124	11.6	8.06	2	0.091	0.01 U	0.081	0.012	0.006	0.6	2
11/28/2000 11:20	3.1	75	135	13.26	7.68	1 U	0.127	0.01 U	0.097	0.02	0.006	0.5 U	2
12/12/2000 11:30	0.9	70	139	14.12	7.57	1	0.085	0.01 U	0.102	0.011	0.005 U	0.5 U	1
1/30/2001 11:10	4.5	132	114	12.84	7.6	1	0.168	0.01 U	0.153	0.011	0.005	0.5 U	1
2/20/2001 11:32	3.6	99	115	13.13	7.66	1	0.156	0.01 U	0.135	0.016	0.006	0.6	1 U
3/27/2001 9:40	5.4	110	119	12.75	7.54	1	0.104	0.01 U	0.086	0.017	0.005 U	0.6	2
4/24/2001 12:07	9.4	140	110	11.91	7.95	1 U	0.085	0.01 U	0.061	0.015	0.005 U	0.5	1
5/29/2001 11:27	9.3	120	100	11.71	7.71	1	0.068	0.01 U	0.047	0.015	0.005 U	1	17
6/26/2001 9:56	9.7	81	118	11.42	7.76	1	0.059	0.01 U	0.034	0.01 U	0.005 U	0.5	8
7/24/2001 10:46	12.6	57	143	10.7	7.95	1	0.04	0.01 U	0.024	0.011	0.005 U	0.5 U	10
8/28/2001 11:17	12.8	51	140	11.41	8.22	3	0.078	0.01 U	0.036	0.01 U	0.005 U	1.3	9
9/25/2001 12:02	11.5	44	167	10.45	7.71	3	0.264	0.082	0.101	0.029	0.019	0.7	11

live salmon and salmon carcasses present

Conventional Data Report

Jimmycomelately Cr near Mouth

17C070

Class: A
Rivermile:
Latitude: 48 01 13.8
Longitude: 123 00 14.2
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000	10:00	6.8	7	232	10.78	8.14	1 U	0.045	0.01 U	0.013	0.032	0.021	0.5 U	4
11/28/2000	10:15	12.1	8.8	214	12.96	7.69	1 U	0.116	0.01 U	0.079	0.046	0.022	0.5	4
12/12/2000	10:30	0	5.2	228	13.88	7.8	1 U	0.089	0.01 U	0.082	0.04	0.019	0.5	1 U
1/30/2001	10:07	3.2	10.3	185	12.95	7.72	1 U	0.308	0.01 U	0.225	0.029	0.019	1	32
2/20/2001	10:38	2.3	13.8	153	13.33	7.85	3	0.394	0.01 U	0.285	0.038	0.018	3	3
3/27/2001	8:50	5.2	11.2	171	12.44	7.83	1 U	0.266	0.01 U	0.189	0.039	0.014	0.8	2 J
4/24/2001	11:05	8.2	11.2	163	11.81	7.98	1 U	0.225	0.01 U	0.138	0.034	0.015	1.2	5
5/29/2001	10:34	9.5	2.8	235	10.9	8.18	1	0.214	0.01 U	0.137	0.043	0.026	0.7	37
6/26/2001	9:02	10.5	5.4	191	10.61	8.07	2	0.183	0.01 U	0.103	0.035	0.024	1.2	92 J
7/24/2001	9:56	13	2.6	261	10	8.12	1 U	0.138	0.01 U	0.067	0.04	0.025	2.6	84
8/28/2001	10:26	13.3	1.8	284	10.1	8	1 U	0.139	0.01 U	0.078	0.038	0.029	0.6	24
9/25/2001	11:05	11.8	2	288	10.05	8.04	1 U	0.213	0.014	0.109	0.048	0.0345	0.8	50

live salmon and salmon carcasses present

Conventional Data Report

Dungeness R nr Mouth

18A050

Class: A
Rivermile: 1
Latitude: 48 08 37.7
Longitude: 123 07 39.7
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000	9:20	6.4	190	120	11.26	8.02	4	0.072	0.01 U	0.066	0.011	0.005 U	2.2	9
11/28/2000	9:15	2.1	124	146	12.86	7.64	2	0.086	0.01 U	0.072	0.018	0.005	1.2	12 J
12/12/2000	9:06	-0.1	98	147	13.73	7.79	2	0.09	0.01 U	0.103	0.01 U	0.005 U	1.3	8 J
1/30/2001	9:18	3.4	120	151	12.92	7.77	2	0.144	0.01 U	0.128	0.011	0.006	1	12 J
2/20/2001	9:37	2.5	106	145	13.23	7.86	2	0.194	0.01 U	0.143	0.016	0.007	1.4	12 J
3/27/2001	8:05	4.6	200	138	12.75	7.98	4	0.116	0.01 U	0.097	0.016	0.005 U	1.3	5 J
4/24/2001	9:35	7.2	145	145	12.02	8	3	0.086	0.01 U	0.048	0.015	0.005	0.9	41
5/29/2001	9:46	6.9	410	99	12.12	7.87	7	0.06	0.01 U	0.035	0.015	0.005 U	4.6	31 J
6/26/2001	8:20	9	260	115	11.42	7.97	2	0.043	0.01 U	0.025	0.01 U	0.005 U	1.6	35 J
7/24/2001	9:10	12.8	150	136	10.5	8.02	2	0.049	0.01 U	0.026	0.01 U	0.005 U	0.9	94 J
8/28/2001	9:30	12.7	140	139	10.3	7.88	2	0.087	0.01 U	0.058	0.01 U	0.005 U	1.4	37 J
9/25/2001	10:22	11.5	85	155	10.55	7.95	3	0.182	0.014	0.119	0.016	0.009	1.1	29

live salmon and salmon carcasses present

Conventional Data Report

Dungeness R nr Sequim

18A070

Class: A
Rivermile: 6.9
Latitude: 48 04 34.0
Longitude: 123 08 58.0
Waterbody: WA-18-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/24/2000 8:20	5.7		113	11.21	7.8	3	0.033	0.01 U	0.031	0.01 U	0.005 U	2.2	1
11/28/2000 8:20	1.3		142	13.16	7.77	1	0.045	0.01 U	0.04	0.014	0.006	1.1	1 J
12/12/2000 8:20	-0.9		141	14.75	7.84	1	0.035 J	0.01 U	0.057	0.01 U	0.005 U	0.7	5 J
Temperature reading was actually -1.0. The temperature thermistor appears to be reading low													
1/30/2001 8:37	2.6		145	13.3	7.7	1	0.073	0.01 U	0.069	0.01 U	0.005	0.8	1 J
2/20/2001 8:36	1.4		138	13.73	7.7	1 U	0.087	0.01 U	0.059	0.011	0.006	1	1 J
3/27/2001 7:30	3.9		131	13.06	7.93	2	0.086	0.01 U	0.074	0.015	0.005 U	1.2	1 UJ
4/24/2001 9:00	6.5		140	12.22	7.78	2	0.045	0.01 U	0.017	0.013	0.005 U	1	1
5/29/2001 8:52	6.1		95	12.22	7.78	8	0.04	0.01 U	0.025	0.017	0.005 U	4.2	5 J
6/26/2001 7:24	8.4		112	11.53	7.96	2	0.013	0.01 U	0.01 U	0.01 U	0.005 U	1.6	8 J
7/24/2001 8:30	12.5		129	10.3	7.98	7	0.018	0.01 U	0.01 U	0.01 U	0.005 U	2	20 J
8/28/2001 8:40	11.9		131	10.7	7.84	2	0.072	0.013	0.044	0.01 U	0.005	1.8	5 J
9/25/2001 9:18	10.7		150	10.95	7.96	1 U	0.132	0.01 U	0.09	0.014	0.0092	0.5	6 J

Conventional Data Report

Elwha R nr Port Angeles

18B070

Class: AA
Rivermile: 8.1
Latitude: 48 03 56.0
Longitude: 123 34 35.0
Waterbody: WA-18-2010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/23/2000	15:25 8.7	794	76	11.12	7.45	6	0.045 J	0.01 U	0.028	0.014	0.005 U	9.5	3
11/27/2000	15:57 4.7	905	89	12.66	7.61	2	0.037	0.01 U	0.018	0.013	0.005 U	0.9	1 U
12/11/2000	15:30 3.2	623	93	13.22	7.72	2	0.01 UJ	0.01 U	0.027	0.01 U	0.005 U	0.9	1 U
1/29/2001	15:20 4.5	883	91	13.03	7.78	2	0.036	0.01 U	0.037	0.01 U	0.005 U	2.1	1
2/19/2001	15:42 4.4	511	102	11.51	7.76	1	0.074	0.01 U	0.024	0.01 U	0.005 U	1	1 U
3/26/2001	14:15 6.6	1230	96	12.44	7.68	3	0.029	0.01 U	0.01 U	0.015	0.005 U	1.4	1 U
4/23/2001	16:24 8.9	724	99	11.81	7.8	3	0.03	0.01 U	0.01 U	0.012	0.005 U	1.1	1 U
5/28/2001	17:00 9.9	1910	70	11.31	7.29	2	0.047	0.01 U	0.021	0.013	0.005 U	2.9	1
6/25/2001	16:44 11.8	1090	77	11.12	7.69	2	0.026	0.01 U	0.01 U	0.01 U	0.005 U	0.9	1
7/23/2001	16:48 15.5	703	85	9.9	7.94	2	0.022	0.01 U	0.01 U	0.01 U	0.005 U	0.7	2
8/27/2001	16:12 14.8	643	86	10.4	7.92	2	0.021	0.01 U	0.01 U	0.01 U	0.005 U	2.6	2
9/24/2001	15:51 14.4	313	98	10.35	7.97	2 J	0.052 J	0.01 UJ	0.01 J	0.01 UJ	0.003 UJ	0.7 J	2

Conventional Data Report

Hoh R @ DNR Campground

20B070

Class: AA
Rivermile: 16.5
Latitude: 47 48 36.0
Longitude: 124 14 47.0
Waterbody: WA-20-2010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/23/2000	13:55	7.6	2310	69	11.2	7.29	9	0.144 J	0.01 U	0.133	0.027	0.005 U	11	17
11/27/2000	14:17	5.8	2515	65	12.06	7.39	7	0.162	0.01 U	0.12	0.029	0.005 U	8.9	15
12/11/2000	13:30	3.7	1230	81	12.72	7.42	3	0.103 J	0.01 U	0.128	0.011	0.005 U	2.6	4
1/29/2001	13:40	5.6	1940	68	12.42	7.37	8	0.125	0.01 U	0.113	0.02	0.005 U	6.8	15
2/19/2001	14:04	5.8	1240	76	12.52	7.46	5	0.103	0.01 U	0.083	0.012	0.005 U	2.5	1 U
3/26/2001	12:35	7	2500	67	12.04	7.4	5	0.112	0.01 U	0.096	0.02	0.005 U	4.7	6
4/23/2001	14:37	9	2140	65	11.81	7.43	4	0.089	0.01 U	0.062	0.015	0.005 U	3.1	5
5/28/2001	15:07	10.3	2190	72	11.41	7.53	4	0.051	0.01 U	0.035	0.016	0.005 U	4.8	13
6/25/2001	14:30	12.6	1510	76	11.53	7.73	4	0.026	0.01 U	0.011	0.01 U	0.005 U	3.4	1 U
7/23/2001	14:50	14.3	1230	77	10.6	7.84	6	0.015	0.01 U	0.013	0.011	0.005 U	6.6	2
8/27/2001	14:21	12.4	1770	77	10.8	7.52	6	0.08	0.01 U	0.075	0.018	0.005 U	8.8	9
9/24/2001	14:10	11.9	1025	79	11.25	7.66	4 J	0.02 J	0.01 UJ	0.01 UJ	0.011 J	0.003 UJ	7.4 J	11

Conventional Data Report

Humptulips R nr Humptulips

22A070

Class: A
Rivermile: 23.6
Latitude: 47 13 48.0
Longitude: 123 57 38.0
Waterbody: WA-22-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/23/2000	11:00	7.4	1170	52	11.14	7.27	3	0.228 J	0.01 U	0.202	0.014	0.005 U	4.3	9
11/27/2000	12:30	5.6	2200	44	11.95	7.19	25	0.288	0.013	0.249	0.06	0.006	24	24
12/11/2000	11:00	3.1	790	58	12.8	7.17	1	0.204	0.01 U	0.203	0.015	0.005 U	1.2	2
1/29/2001	11:55	5.4	1235	53	12.29	7.49	3	0.188	0.01 U	0.179	0.016	0.006	2.9	12
2/19/2001	12:06	5.5	970	52	12.62	7.21	2	0.173	0.01 U	0.146	0.018	0.006	2.4	2
3/26/2001	10:10	7.2	1245	49	12.04	7.34	5	0.145	0.01 U	0.129	0.024	0.005	4.8	3 J
4/23/2001	12:20	7.9	2520	43	11.71	7.32	77	0.19	0.022	0.124	0.048	0.005	33	52
5/28/2001	12:50	12	690	54	11.01	7.37	1	0.124	0.01 U	0.093	0.018	0.005 U	0.9	13
6/25/2001	12:11	12.9	475	56	11.12	7.54	1	0.073	0.01 U	0.042	0.01 U	0.005	0.8	33
7/23/2001	11:26	14.9	350	66	10	7.58	1	0.059	0.01 U	0.029	0.013	0.005 U	0.6	13
8/27/2001	12:41	13	880	60	10.6	7.31	1	0.191	0.01 U	0.178	0.012	0.006	3	15
9/24/2001	12:02	14	370	68	10.65	7.57	1 J	0.07 J	0.01 UJ	0.017 J	0.011 J	0.0037 J	0.6 J	16

Conventional Data Report

Chehalis R @ Porter

23A070

Class: A
Rivermile: 33.3
Latitude: 46 56 17.0
Longitude: 123 18 45.0
Waterbody: WA-23-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/23/2000	9:25	9.3	1135	88	9.93	7.43	7	0.489	0.017	0.446	0.046	0.02	4.1	110
11/27/2000	10:00	4.4	1900	83	11.55	7.24	26	0.985	0.037	0.878	0.07	0.016	11	69 J
12/11/2000	9:26	2.9	905	91	12.3	7.32	2	0.677	0.01 U	0.607	0.046	0.013	2.4	5 J
1/29/2001	10:10	4.6	1830	90	11.59	7.26	4	0.728	0.01 U	0.63	0.031	0.011	3.7	28 J
2/19/2001	10:00	5.1	3330	83	11.81	7.18	10	0.895	0.01 U	0.759	0.043	0.011	7.5	20
3/26/2001	8:30	9.3	2165	82	11.02	7.15	8	0.702	0.022	0.587	0.051	0.01	3.9	7 J
4/23/2001	10:55	10.6	2240	88	10.78	7.31	8	0.606	0.02	0.505	0.041	0.013	3.7	17
5/28/2001	11:00	16.2	1260	81	9.39	7.3	5	0.546	0.016	0.411	0.041	0.012	2.5	17
6/25/2001	10:17	15.5	840	87	9.79	7.51	2	0.517	0.011	0.392	0.032	0.011	1.5	28
7/23/2001	10:34	17.7	512	106	8.5	7.58	2	0.636	0.017	0.475	0.031	0.016	1.3	23
8/27/2001	11:00	17.7	737	96	8.58	7.4	3	0.748	0.019	0.605	0.041	0.019	2.2	26 J
9/24/2001	10:28	17.3	428	111	8.94	7.44	3 J	0.711 J	0.016 J	0.562 J	0.04 J	0.017 J	1.6 J	56 J

Conventional Data Report

Chehalis R @ Dryad

23A160

Class: A
Rivermile: 101.7
Latitude: 46 37 52.0
Longitude: 123 14 56.0
Waterbody: WA-23-1100

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/25/2000 10:04	7.5	130	68	10.75	7.73	1	0.29	0.01 U	0.294	0.02	0.006	1.3	430 J
11/29/2000 9:45	4	660	63	12.06	7.27	2	0.673	0.01 U	0.621	0.032	0.006	1.5	11
12/13/2000 10:05	1.2	1920	49	13.09	7.35	2	0.308	0.01 U	0.267	0.017	0.005 U	1	61
1/31/2001 10:04	5.2	910	61	12.74	7.35	9	0.949	0.01 U	0.84	0.025	0.008	6	40
2/21/2001 10:08	5.5	450	62	12.52	7.56	2	0.594	0.01 U	0.556	0.024	0.007	1.3	9 J
3/28/2001 8:40	6.5	900	60	12.24	7.43	13	0.759	0.01 U	0.708	0.036	0.008	4.8	43 J
4/25/2001 10:00	11.3	290	66	10.8	7.69	4	0.491	0.01	0.43	0.027	0.008	1.8	52
5/30/2001 10:47	11.2	505	67	11.31	7.6	2	0.383	0.012	0.281	0.028	0.007	1.5	23
6/27/2001 9:45	14.2	325	74	9.69	7.48	3	0.276	0.013	0.166	0.024	0.01	1.9	150
7/25/2001 9:33	16.3	89	81	8.8	7.71	2	0.201	0.014	0.066	0.028	0.011	1.9	20 J
8/29/2001 10:20	17	105	79	9.39	7.63	2	0.557	0.012	0.458	0.022	0.009	1.2	93
9/26/2001 10:52	15.3	86	88	9.34	7.55	2	0.224	0.01 U	0.09	0.033	0.0092	1.8	110

Conventional Data Report

Willapa R nr Willapa

24B090

Class: A
Rivermile: 17.7
Latitude: 46 39 01.0
Longitude: 123 39 08.0
Waterbody: WA-24-2020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/25/2000	11:08	8.5	137	64	10.59	7.48	2	0.538	0.01 U	0.54	0.02	0.007	1.5	90
11/29/2000	11:00	4.8	366	63	11.75	7.02	4	0.962	0.01 U	0.92	0.035	0.006	2.2	75
12/13/2000	11:06	2.1	173	48	13.13	7.23	2	0.554	0.01 U	0.531	0.017	0.005 U	1.2	10
1/31/2001	11:02	6.1	862	58	12.24	7.14	9	0.914	0.01 U	0.85	0.023	0.008	5.6	28
2/21/2001	11:10	6.5	560	59	12.22	7.29	3	0.827	0.01 U	0.812	0.022	0.005	1.9	7
3/28/2001	10:00	7.5	809	55	11.73	7.23	15	0.671	0.01 U	0.597	0.035	0.006	6	140 J
4/25/2001	11:25	12.2	424	60	10.9	7.48	6	0.592	0.01 U	0.54	0.028	0.006	2.5	21
5/30/2001	12:00	12.3	208	60	11.51	7.48	3	0.459	0.01 U	0.359	0.023	0.005 U	1.8	54
6/27/2001	10:46	15.2	135	68	9.28	7.29	4	0.35	0.016	0.22	0.021	0.006	2.1	350
7/25/2001	10:43	17.6	60	73	8.8	7.26	2	0.316	0.013	0.17	0.025	0.008	2	130
8/29/2001	11:17	16.6	169	66	9.49	7.37	5	0.492	0.015	0.43	0.024	0.008	2.8	250
9/26/2001	12:07	15.6	64	75	9.34	7.33	4	0.354	0.023	0.219	0.032	0.0079	2.1	400
		salmon present												

Conventional Data Report

Naselle R nr Naselle

24F070

Class: A
Rivermile: 17.4
Latitude: 46 22 23.0
Longitude: 123 44 44.0
Waterbody: WA-24-3010

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/25/2000 13:02	8.8	143	54	10.11	7.34	1	0.397	0.01 U	0.422	0.018	0.008	1.1	64
11/29/2000 13:00	6	320	53	11.75	7.02	3	0.589	0.01 U	0.548	0.028	0.007	1.5	56
	raining hard												
12/13/2000 13:15	3.1	148	41	13.15	7.26	2	0.413	0.01 U	0.425	0.014	0.006	0.5 U	11
1/31/2001 13:20	7	530	52	12.6	7.4	3	0.549	0.01 U	0.526	0.016	0.009	1.8	14
2/21/2001 13:50	7	370	52	12.52	7.36	1	0.527	0.01 U	0.511	0.021	0.008	0.9	24
3/28/2001 11:15	7.8	591	49	12.24	7.33	7	0.496	0.01 U	0.468	0.027	0.007	3.5	27
4/25/2001 14:30	12	377	52	11.31	7.54	2	0.422	0.01 U	0.406	0.021	0.007	1.3	3
5/30/2001 14:41	12.2	177	52	11.51	7.43	1	0.364	0.011	0.297	0.021	0.007	0.9	10
6/27/2001 12:01	13.6	148	56	10.71	7.58	3	0.263	0.01 U	0.193	0.014	0.008	1.1	260 J
7/25/2001 13:21	16	52	59	10.5	7.71	2	0.222	0.012	0.144	0.016	0.008	0.5	14
8/29/2001 12:50	13.7	210	58	10.7	7.32	1	0.488	0.01 U	0.462	0.017	0.01	1.3	73
9/26/2001 15:06	14	112	61	10.55	7.45	2	0.282	0.01 U	0.209	0.019	0.0064	1.2	440
	salmon present												

Conventional Data Report

Cowlitz R @ Kelso

26B070

Class: A
Rivermile: 4.9
Latitude: 46 08 44.0
Longitude: 122 54 47.0
Waterbody: WA-26-1040

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/25/2000 14:40	10.3		73	10.48	7.48	11	0.067	0.01 U	0.051	0.021	0.005 U	3.9	16
11/29/2000 14:48	7.6	8985 J	69	11.25	7.46	48	0.192	0.033	0.146	0.045	0.006	5.2	7
12/13/2000 14:50	6.3	10000 J	53	11.51	7.41	31	0.077 J	0.01 U	0.096	0.026	0.005 U	5.1	1 U
1/31/2001 15:47	6.3	5810	86	12.44	7.52	8	0.26	0.01 U	0.219	0.027	0.009	7.8	4
2/21/2001 15:30	6.5	5715	78	12.12	7.43	9	0.341	0.01 U	0.287	0.033	0.007	7.3	1
3/28/2001 13:00	7.5	6130	83	11.83	7.48	86	0.418	0.019	0.362	0.049	0.008	10	38 J
4/25/2001 16:04	15.2	4700	90	9.49	7.5	12	0.249	0.016	0.179	0.027	0.005	3.5	4
5/30/2001 16:19	15.7	3920	88	10.2	7.43	7	0.185	0.011	0.114	0.027	0.005 U	3	81
6/27/2001 14:20	15.6	3800	101	10	7.53	10	0.175	0.016	0.1	0.026	0.007	5.9	1500 J
7/25/2001 15:22	17.3	3180	104	9.8	7.6	7	0.163	0.01 U	0.097	0.015	0.008	2.7	1500
8/29/2001 14:34	17.1	3065	104	9.89	7.66	16	0.136	0.011	0.09	0.034	0.007	8.6	790
9/26/2001 16:42	14.3	3135	110	10.45	7.52	7	0.17	0.01 U	0.102	0.025	0.0052	3	110

Conventional Data Report

Kalama R nr Kalama

27B070

Class: A
Rivermile: 2.8
Latitude: 46 02 51.0
Longitude: 122 50 10.0
Waterbody: WA-27-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/25/2000	15:20	7.7	380	50	12.08	7.39	2	0.163	0.01 U	0.143	0.023	0.012	0.8	12
11/29/2000	15:26	5	760	42	12.56	7.47	5	0.306	0.01 U	0.269	0.033	0.009	1.8	7
12/13/2000	15:45	2.6	425	37	13.86	7.8	5	0.168	0.01 U	0.184	0.019	0.008	0.6	5
1/31/2001	16:25	5	580	52	13.73	7.71	4	0.362	0.01 U	0.342	0.023	0.015	1.5	2
2/21/2001	16:15	7.1	585	46	12.52	7.78	2	0.303	0.01 U	0.266	0.027	0.011	1.3	1
3/28/2001	14:05	6.9	1600	42	12.44	7.55	16	0.616	0.01 U	0.587	0.037	0.01	6.6	22
4/25/2001	16:55	12.7	680	43	11.61	7.75	9	0.234	0.011	0.197	0.027	0.011	2.1	1
5/30/2001	17:01	14.1	370	47	12.02	8.36	2	0.166	0.01 U	0.098	0.026	0.008	1.2	4
6/27/2001	15:00	14.2	400	57	11.53	8.15	7	0.135	0.01 U	0.063	0.02	0.009	3	110
7/25/2001	16:20	18.7	180	60	10.19	8.11	4	0.143	0.014	0.064	0.019	0.016	1.1	3
8/29/2001	15:39	18.1	190	61	10.4	7.91	2	0.125	0.012	0.074	0.023	0.015	1.6	18
9/26/2001	17:22	13.9	245	71	10.55	7.52	6	0.251	0.017	0.146	0.04	0.018	2.8	320 J

Conventional Data Report

EF Lewis R nr Dollar Corner

27D090

Class: A
Rivermile: 10.2
Latitude: 45 48 53.0
Longitude: 122 35 26.0
Waterbody: WA-27-2020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/25/2000 16:19	9.2		40	11.48	7.4	2	0.209	0.01 U	0.211	0.011	0.005 U	0.8	13
11/29/2000 16:40	4.8		35	12.36	7.22	2	0.45	0.01 U	0.41	0.021	0.005 U	1.7	22
	Steelhead in pool below bridge												
12/13/2000 16:40	2		30	13.19	7.22	2	0.27	0.01 U	0.28	0.01 U	0.005 U	0.8	3
1/31/2001 17:18	5.4		40	12.75	7.25	2	0.621	0.01 U	0.588	0.014	0.006	2.9	1
2/21/2001 17:15	6.9		39	12.12	7.4	6	0.389	0.01 U	0.349	0.017	0.005 U	1.4	2
3/28/2001 15:00	7.8		32	12.04	7.32	8	0.532	0.01 U	0.496	0.024	0.005 U	4.7	28 J
4/25/2001 17:55	13.4		34	9.69	7.63	4	0.258	0.01 U	0.225	0.016	0.005 U	1.7	7
5/30/2001 17:51	16.3		37	10.3	7.66	2	0.224	0.011	0.153	0.018	0.005 U	1.2	75
6/27/2001 16:13	16.4		41	10.2	7.66	4	0.204	0.012	0.125	0.121	0.005 U	2.5	180
7/25/2001 17:18	21.8		51	9.3	7.9	2	0.161	0.01 U	0.089	0.01 U	0.006	1.3	3
8/29/2001 16:32	21.5		54	9.59	8.04	2	0.208	0.01 U	0.138	0.01	0.005 U	1.1	14
9/26/2001 18:42	15.1		65	10.15	7.47	3	0.285	0.01 U	0.191	0.021	0.0045	2.4	350 J

Conventional Data Report

Columbia R @ Umatilla

31A070

Class: A
Rivermile: 290.5
Latitude: 45 56 02.0
Longitude: 119 19 31.0
Waterbody: WA-CR-1020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/11/2000	13:00	13.9	97100	172	9.84	8.23	28	0.207	0.01 U	0.153	0.023	0.009	2.7	6
11/15/2000	12:50	8	142400	146		8.05	2	0.24	0.01 U	0.241	0.021	0.013	1.4	8
		Accidentally dumped DO sample in lab												
12/13/2000	13:15		151300											
		Site was inaccessible due to heavy snow on rocks.												
1/10/2001	13:00	4	109500	154	12.4	8.24	3	0.219	0.01 U	0.224	0.011	0.008	1.4	2
2/14/2001	12:15		142500											
		Access road closed--could not sample.												
3/14/2001	12:55	5.6	129000	191	13.69	8.36	4	0.389	0.01 U	0.338	0.024	0.005 U	1.5	1 U
		Interstate underpass was closed last month to restrict access. Ancient skeleton found in cove near site.												
4/11/2001	13:35	7.9	116600	200	12.32	8.21 J	6	0.618	0.01 U	0.522	0.029	0.005 U	3.2	1
5/16/2001	12:55	13.7	157700	156	11.17	8.54	6	0.295	0.01 U	0.192	0.03	0.005 U	3.6	2
6/13/2001	13:20	16.7	125000	126	11.25	8.65	4	0.16	0.01 U	0.07	0.017	0.005 U	2.1	1
		pH meter calibration = 6.99												
7/11/2001	14:45	20.1	101500	137	9.3	8.33	4	0.175	0.022	0.072	0.013	0.005 U	1.9	1 U
8/8/2001	12:45	21.4	117000	150	8.98	8.21	3	0.162	0.01 U	0.056	0.016	0.006	2.1	2
		Collected samples by hand directly into containers rather than bucket due to long walk. COE worker reports strong ammonia smell in the area yesterday.												
9/12/2001	13:00	19.4	114600	151 J	9.69	8.42	4	0.134	0.01 U	0.038	0.012	0.003 U	2.1	5

Conventional Data Report

Walla Walla R nr Touchet

32A070

Class: B
Rivermile: 15.3
Latitude: 46 02 16.0
Longitude: 118 45 55.0
Waterbody: WA-32-1010

Date/Time		Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
		deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/11/2000	10:35	9.5	128	211	9.94	7.84	65	0.978	0.071	0.822	0.247	0.106	50	370
		rained previous night												
11/15/2000	10:30	2.2	282	154	12.7	7.85	11	0.754	0.01 U	0.71	0.137	0.084	8.2	37
12/13/2000	11:15	0.6	355	106	14.04	8.07	9	0.845	0.01 U	0.831	0.113	0.075	6.3	12
1/10/2001	10:40	2.4	493	155	12.7	7.88	28	0.897	0.025	0.833	0.157	0.092	16	42
2/14/2001	10:10	3.5	550	157	12.68	7.89	49	1.09	0.048	0.961	0.169	0.079	20	39
3/14/2001	10:45	8.4	605	139	11.37	8	55	0.665	0.01 U	0.555	0.16	0.063	24	20 J
		New road construction underway												
4/11/2001	11:05	8.3	1210	109	11.01	7.74 J	140	0.712	0.01 U	0.553	0.207	0.074	32	53 J
5/16/2001	10:40	13.7	950	105	9.6	7.75	115	0.653	0.019	0.478	0.213	0.061	35	1000 J
		Windy, tape down +/-0.5. Big construction project ongoing over the hill (private road).												
6/13/2001	10:45	15.7	150	262	11.55	8.58	19	0.41	0.01 U	0.253	0.098	0.038	7.3	200
		pH meter Calibration = 6.98												
7/11/2001	12:25	23.9	40	363	7.2	8.22	82	1.05	0.109	0.761	0.23	0.114	52	290
8/8/2001	10:30	24.1	33	367	7.57	8.26	47	0.782	0.051	0.522	0.199	0.107	25	160
9/12/2001	10:50	19.3	22	366 J	9.09	8.35	21	0.713	0.019	0.531	0.129	0.0802	14	51

Conventional Data Report

Snake R nr Pasco

33A050

Class: A
Rivermile: 2.2
Latitude: 46 13 00.0
Longitude: 119 01 20.0
Waterbody: WA-33-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/11/2000	11:35	14.4	12500	293	8.84	8.16	4	0.474	0.01 U	0.37	0.059	0.039	2.5	7
11/15/2000	11:35	8.3	13000	300		8.09	4	0.758	0.01 U	0.711	0.087	0.062	2.1	8
		Accidentally dumped DO sample in lab												
12/13/2000	12:15	4.6	23000	192	11.31	7.97	7	0.627	0.01 U	0.595	0.06	0.044	2	1
1/10/2001	11:40	2.9	14000	319	12.2	7.99	2	0.856	0.01 U	0.821	0.075	0.056	1.6	1
2/14/2001	11:15	2.8	25500	343	13.19	8.15	2	1.03	0.01 U	0.986	0.069	0.036	1.3	2
3/14/2001	11:45	5.5	42000	307	13.18	8.3	7	1.04	0.01 U	0.971	0.062	0.022	2.7	1 U
4/11/2001	12:10	8.2	36000	276	11.21	8.08 J	8	1.42	0.034	1.28	0.064	0.035	6.8	3
5/16/2001	11:45		91600	119	10.19	7.91	6	0.405	0.012	0.285	0.056	0.024	5.8	3
		Too windy to get temp.												
6/13/2001	11:50	16.6	52000	104	9.74	8.03	7	0.356	0.017	0.246	0.039	0.011	3.2	5
7/11/2001	13:30	19.8	33450	142	8.19	8.1	4	0.247	0.047	0.105	0.025	0.014	2.5	5
8/8/2001	11:30	21	30000	173	7.77	8.1	3	0.312	0.02	0.162	0.038	0.027	2.1	2
9/12/2001	11:40	19.6	19000	206 J	7.57	8	3	0.366	0.033	0.191	0.046	0.0341	2.1	6

Conventional Data Report

Palouse R @ Hooper

34A070

Class: B
Rivermile: 19.5
Latitude: 46 45 31.0
Longitude: 118 08 48.0
Waterbody: WA-34-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000 14:20	9.5	90	347	11.55	8.83	8	0.989	0.01 U	0.83	0.054	0.027	6.7	120
11/14/2000 14:35	0.1	106	280	15.5	8.75	3	2.21	0.01 U	1.97	0.114	0.081	2.1	6
12/12/2000 14:25	0	103	245	15.05	8.23	3	2.96	0.01 U	2.65	0.211	0.161	2	11
Ice sheet on surface.													
1/9/2001 14:15	1.3	247	328	13.3 J	8.13	29	3.17 J	0.081	2.88	0.273	0.163	55	18
River was very turbid--difficult to see D.O. endpoint due to turbidity.													
2/13/2001 13:55	2.2	336	330	13.6	8.11	20	7	0.055	6.15	0.243	0.139	23	4
3/13/2001 13:40		683											
3/13/2001 13:45	8.5	683	254	11.07	8	63	7.61	0.037	5.09	0.263	0.123	55	27
4/10/2001 14:00	9.2	633	206	11.11	8.17 J	27	2.49	0.026	2.05	0.144	0.084	18	1
5/15/2001 14:25	15.8	381	238	9.8	8.7	27	1.49	0.037	1.24	0.148	0.091	14	66
6/12/2001 14:00	15.6	176	266	12.06	9.66	46	0.393	0.022	0.066	0.119	0.008	18	16
pH meter calibration = 7.01													
7/10/2001 16:05	27.8	67	314	11.8	9.4	42 J	0.32 J	0.033 J	0.025 J	0.116 J	0.039 J	23 J	25 J
pH=9.63 (34A170 pH checked and within limits)													
8/7/2001 14:10	25.9	28	358	10.2	8.88	16 J	0.607 J	0.025 J	0.178 J	0.104 J	0.04 J	13 J	39
Mostly stagnant.													
9/11/2001 14:00	18.6	31	352 J	10.8	8.71	39	0.732	0.027	0.412	0.103	0.0084	23	

Conventional Data Report

Palouse R @ Palouse

34A170

Class: A
Rivermile: 121.2
Latitude: 46 54 33.0
Longitude: 117 04 33.0
Waterbody: WA-34-1030

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000	11:50	6.9	14	77	10.05	7.66	1	0.075	0.01 U	0.01 U	0.032	0.009	3.7	8
11/14/2000	12:00	-0.99 J	14	96	13.4	7.85	2	0.063	0.01 U	0.01 U	0.062	0.018	7.2	6
		River had ice sheet on surface. Actual temperature value is -1.6, but -.99 was the lowest value the database would allow me to enter.												
12/12/2000	12:00		13											
		Could not sample--river was frozen												
1/9/2001	11:40		31											
		River was frozen												
2/13/2001	11:30		37											
		River was frozen--could not sample.												
3/13/2001	11:15	4	381	8.8	11.67	7.2	39	3.17	0.038	2.76	0.179	0.058	55	110
4/10/2001	11:35	4.7	268	62	11.81	7.35 J	6	0.605	0.01 U	0.419	0.083	0.028	16	27
5/15/2001	11:55	12.6	264	66	9.21	7.65	20	0.312	0.035	0.138	0.084	0.028	12	920 J
6/12/2001	11:40	14.3	43	66	9.84	8.07	2	0.124	0.01 U	0.01 U	0.058	0.015	2.7	49
7/10/2001	13:00	25.8	13	78	10.19	9	1 UJ	0.148 J	0.01 J	0.01 UJ	0.027 J	0.012 J	1 J	31
8/7/2001	11:50	23.7	7.2	86	8.68	8.57	4 J	0.284 J	0.01 UJ	0.01 UJ	0.022 J	0.008 J	3.3 J	92
		Very low flow												
9/11/2001	12:00	15	3.3	110 J	9.69	8.35	1 U	0.334	0.01 U	0.011	0.014	0.0037	1.9	
		Very Stagnant.												

Conventional Data Report

SF Palouse R @ Pullman

34B110

Class: A
Rivermile: 22.2
Latitude: 46 43 58.0
Longitude: 117 10 48.0
Waterbody: WA-34-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000 12:45	7.9	6.7	560	9.24	7.93	9	6.11	0.01 U	6.06	2.04	1.62	10	83
11/14/2000 13:00	-0.3	9.4	411	13.1	7.87	2	6.95	0.725	7.15	1.69	1.48	4.9	15
12/12/2000 12:50	0	8.9	464	13.23	8.12	5	7.81	1.32	5.78	1.75	1.55	5.1	4
1/9/2001 12:45	1.7	18	404	12.5	8	4	7.19	0.01 U	6.73	0.649	0.565	11	24
WWG wire has gotten tangled.													
2/13/2001 12:30	1.6	23	473	13.5	8.05	3	8.58	0.254	7.58	0.846	0.605	6.1	13
3/13/2001 11:50	6.7	49	251	11.17	7.6	13	6.45	0.055	6.12	0.448	0.306	35	61
4/10/2001 12:30	7.2	35	277	12.52	8.01 J	7	5.06	0.017	3.76	0.493	0.388	19	28
5/15/2001 12:35	12.5	45	268	8.62	7.61	29	3.23	0.291	2.21	0.577	0.37	29	2700 J
6/12/2001 12:35	13.4	6	455	9.54	8.2	7	5.08	0.027	4.48	1	0.93	5.5	200
7/10/2001 13:55	23.6	4.5	520	10.6	8.57	6 J	2.58 J	0.021 J	2.15 J	1.55 J	1.58 J	3.2 J	390
8/7/2001 12:40	20.6	4.4	586	8.88	8.18	6 J	4.39 J	0.021 J	3.91 J	1.69 J	1.75 J	3.6 J	260
9/11/2001 12:35	13.4		591 J	10.3	8.09	2	5.92	0.01 U	5.55	2.44	2.14	1.6	
Wasps in gage. No reading. Water very low.													

Conventional Data Report

Snake R @ Interstate Br

35A150

Class: A
Rivermile: 139.6
Latitude: 46 25 15.0
Longitude: 117 02 05.0
Waterbody: WA-35-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/11/2000 7:00	12.7		354	9.54	8.31	4	0.785	0.01 U	0.691	0.082	0.07	2.6	7
11/15/2000 6:45	5.4		315	11.8	8.37	2	0.787	0.01 U	0.735	0.084	0.057	1.4	1 J
12/13/2000 7:00	2.3		317	12.42	8.04	4	1.17	0.078	0.963	0.11	0.095	1.5	3 J
1/10/2001 7:15	2.1		396	13.2	8.8	3	1.13	0.01 U	1.08	0.059	0.043	0.8	1 UJ
2/14/2001 6:45	1.5		417	14.22	8.02	2	1.33	0.01 U	1.28	0.068	0.032	1	1
3/14/2001 7:10	5.8		343	12.58	8.5	6	1.14	0.01 U	1.05	0.067	0.027	3.7	3 J
4/11/2001 7:15	8.4		290	11.31	8.58 J	6	0.823	0.02	0.66	0.062	0.035	5.1	3 J
5/16/2001 7:05	11.7		122	10.09	8.31	37	0.348	0.02	0.209	0.072	0.02	15	79 J
6/13/2001 6:40	15.3		184	9.64	8.43	7	0.356	0.012	0.234	0.044	0.02	1.6	6 J
7/11/2001 7:30	23		261	9.6	8.81	9	0.332	0.014	0.206	0.031	0.022	3	1 J
8/8/2001 7:00	22.8		360	8.68	8.38	8	0.589	0.012	0.373	0.065	0.047	3.3	7 J
9/12/2001 6:55	20.9		385 J	9.59	8.55	5	0.551	0.01 U	0.324	0.081	0.0562	2.3	12 J

Conventional Data Report

Tucannon R @ Powers

35B060

Class: A
Rivermile: 2.3
Latitude: 46 32 16.0
Longitude: 118 09 16.0
Waterbody: WA-35-2010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/11/2000	8:40	10.5	87	153	10.25	7.86	5	0.224	0.01 U	0.185	0.074	0.043	2.4	53
		cattle upstream												
11/15/2000	8:35	1.6	96	116	12.9	7.65	2	0.191	0.01 U	0.19	0.08	0.038	1	23 J
12/13/2000	9:00	2.1	89	98	13.23	8.06	20	0.316	0.01 U	0.339	0.076	0.045	2	31 J
		Cattle grazing on riverbank.												
1/10/2001	8:50	4.1	98	146	12.5	7.67	10	0.438	0.01 U	0.424	0.095	0.057	4.8	78 J
2/14/2001	8:25	2.9	122	143	14.02	7.78	15	0.449	0.01	0.4	0.108	0.048	5.3	23
3/14/2001	8:45	7.3	115	137	12.08	8.2	7	0.247	0.01 U	0.189	0.085	0.036	3.7	45 J
4/11/2001	9:20	8.6	169	125	11.71	8.17 J	27	0.187	0.01 U	0.114	0.072	0.039	4.2	33
5/16/2001	8:40	11.7	292	97	10.39	8.25	29	0.189	0.01 U	0.098	0.094	0.043	7.9	100 J
6/13/2001	8:30	13.3	98	133	10.35	8.18	7	0.19	0.01 U	0.106	0.087	0.037	2.2	71 J
7/11/2001	9:20	20.5	53	177	8.69	8.24	8	0.268	0.012	0.2	0.07	0.05	2.4	200 J
8/8/2001	8:35	18.5	48	185	9.29	8.14	4	0.382	0.01 U	0.273	0.077	0.056	2	120 J
9/12/2001	8:45	15.6	53	175 J	9.69	8.09	7	0.315	0.01 U	0.243	0.079	0.0472	2.9	76 J

Conventional Data Report

Columbia R nr Vernita

36A070

Class: A
Rivermile: 388.1
Latitude: 46 38 30.0
Longitude: 119 43 50.0
Waterbody: WA-CR-1030

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/3/2000 8:45	14.5	55000	123	9.39	7.94	1	0.154 J	0.01 U	0.125	0.01 UJ	0.005 U	0.7	1 U
11/7/2000 8:30	10.4	62800	124	10.1	7.84	1	0.116	0.01 U	0.123	0.01 U	0.005	0.5	1 J
Grant County PUD has a hydrolab deployed from this bridge.													
12/5/2000 8:45	6.6	101000	114	10.25	7.6	1	0.202	0.01 U	0.157	0.013	0.005	0.7	1 J
1/16/2001 8:50	3.2	138000	140	11.96	7.68	1	0.14	0.01 U	0.143	0.01 U	0.005 U	0.8	1 UJ
2/6/2001 8:20	2.5	71400	138	13.57	7.77	1	0.177	0.01 U	0.15	0.01	0.005 U	0.8	1 UJ
3/6/2001 8:35	3.4	32700	158	13.53	8.47	2	0.178	0.01 U	0.145	0.01 U	0.005 U	0.9	1 UJ
4/3/2001 8:45	5.9	19200	146	12.92	7.96 J	2	0.191	0.01 U	0.159	0.01 U	0.005 U	1.1	1 J
5/8/2001 8:50	10.8	59500	146	11.9	8.42	4 J	0.213 J	0.01 UJ	0.152 J	0.01 UJ	0.005 UJ	1.7 J	1 UJ
6/5/2001 8:25	13.6	63300	131	11.61	8.28	2	0.178	0.01 U	0.106	0.013	0.005 U	1	1 UJ
7/10/2001 8:35	17.8	29900	131	10.17	8.23	2	0.129	0.01 U	0.07	0.01 U	0.005 U	0.7	1 UJ
8/14/2001 9:05	20.8	40900	137	10.2	8.1	2 J	0.112 J	0.01 UJ	0.041 J	0.01 UJ	0.005 UJ	0.8 J	2 J
9/4/2001 9:05	19.7	26800	138	9.2	8.16	1 J	0.125 J	0.01 UJ	0.055 J	0.01 J	0.005 UJ	0.8 J	1 UJ

Conventional Data Report

Yakima R @ Kiona

37A090

Class: A
Rivermile: 29.8
Latitude: 46 15 11.0
Longitude: 119 28 27.0
Waterbody: WA-37-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/3/2000 7:30	12.6	2620	241	9.29	7.88	31	1.25 J	0.01 U	1.11	0.137 J	0.095	13	37
11/7/2000 7:20	6.2	2300	262	10.6	8.04	9	1.32	0.01 U	1.14	0.109	0.065	4.9	18 J
12/5/2000 7:15	3.1	1980	213	12.38	7.81	5	1.7	0.029	1.45	0.149	0.088	2.9	20 J
1/16/2001 7:15	3.2	1900	267	11.86	8.01	5	1.49	0.01 U	1.45	0.103	0.103	2.9	11 J
2/6/2001 7:00	4.3	1810	260	11.83	7.91	7	1.47	0.01 U	1.4	0.119	0.097	3.5	2 J
3/6/2001 7:07	5.8	1830	271	11.61	8.15	10	1.28	0.027	1.24	0.127	0.096	3.3	5 J
4/3/2001 7:25	9.3	2150	209	10.4	8.2 J	12	0.823	0.01 U	0.711	0.099	0.065	6.3	7 J
5/8/2001 7:00	16.7	1090	255	7.8	8.33	11 J	0.972 J	0.03 J	0.782 J	0.123 J	0.094 J	5.2 J	22 J
USGS gage house was inaccessible due to a large bull blocking the door.													
6/5/2001 7:15	17.8	1060	256	7.47	8.43	15	0.945	0.03	0.687	0.112	0.075	6.8	19 J
P. crispus fragments in stream													
7/10/2001 7:25	25.3	683	252	5.59	8.02	8	0.798	0.044	0.562	0.207	0.118	4.9	14 J
Collected total As sample. Clumps of net-like algae.													
8/14/2001 7:40	26.2	683	277	6.39	7.94	8 J	1.03 J	0.04 J	0.769 J	0.176 J	0.141 J	3.8 J	4 J
pH within calibration limits													
9/4/2001 7:45	19.4	974	288	7.02	7.95	10 J	1.12 J	0.023 J	0.956 J	0.12 J	0.097 J	4.8 J	6 J

Conventional Data Report

Yakima R @ Nob Hill

37A205

Class: A
Rivermile: 111.3
Latitude: 46 34 54.0
Longitude: 120 27 38.0
Waterbody: WA-37-1040

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000 12:05	11.4	3270	99	10.9	8.39	10	0.186 J	0.01 U	0.129	0.044 J	0.027	5.3	41
11/6/2000 12:20	5.7	1470	130	13.2	8.39	2	0.198	0.01 U	0.195	0.047	0.026	1.5	47
12/4/2000 12:05	1.3	1250	100	15.12	7.79	2	0.29	0.01 U	0.274	0.06	0.027	1.2	14
1/15/2001 11:55	1.9	1110	130	13.72	8.01	5	0.255	0.01 U	0.244	0.035	0.029	2.3	2
2/5/2001 11:55	2.2	1100	128	13.97	7.55	4	0.314	0.012	0.257	0.051	0.036	1.6	5
3/5/2001 12:00	4.5	1100	131	13.73	8.4	4	0.26	0.016	0.207	0.037	0.021	2.2	1
4/2/2001 12:15	6.7	1710	108	12.92	7.98 J	6 J	0.144	0.01 U	0.073	0.029	0.011	3.8	5
5/7/2001 12:55	11.6	2220	98	12.3	8.95	7	0.113	0.01 U	0.041	0.022	0.011	3.5	7
	pH meter calibration was 6.98												
6/4/2001 12:20	13.4	2440	96	10.8	8.41	7	0.269	0.015	0.151	0.057	0.037	3.4	27
7/9/2001 12:20	20.2	2680	88	10.07	8.46	11	0.245	0.017	0.137	0.034	0.024	4.6	86
8/13/2001 13:05	23.4	2750	77	9.89	8.66	8 J	0.154 J	0.01 UJ	0.065 J	0.027 J	0.014 J	2.7 J	18
9/3/2001 12:10	18.3	2540	91	10.39	8.5	6 J	0.132 J	0.01 UJ	0.059 J	0.029 J	0.014 J	2.8 J	28

Conventional Data Report

Wide Hollow Creek @ Randall Park

37E120

Class: A
Rivermile:
Latitude: 46 34 45.0
Longitude: 120 34 16.0
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000	13:30	11.4	28.8	167	10.2	7.98	20	0.51 J	0.01 U	0.431	0.067 J	0.042	5	2300 J
11/6/2000	13:30	8	23.3	576	11.4	7.92	3	2.62	0.01 U	2.35	0.26	0.21	1.5	350
		New RP from last month's. Last month's dry.												
12/4/2000	13:50	5	2.4	470	11.67	7.97	4	2.62	0.01 U	2.4	0.315	0.158	1.6	250
1/15/2001	13:25	6.7	2.6	534	11.66	7.89	8	3.77	0.01 U	2.31	0.218	0.192	9.4	640
		Downed tree upstream of bridge impeding flow.												
2/5/2001	13:20	7.6	2.5	533	14.28	8.09	10	2.46	0.01 U	2.32	0.241	0.197	8.8	330
3/5/2001	13:15	10.6	2.4	499	15.75	8.38	8	2.44	0.01 U	2.2	0.244	0.175	2.9	140
4/2/2001	13:30	7	27.7	148	12.82	7.63 J	9 J	0.341	0.01 U	0.274	0.051	0.026	4.9	1800 J
5/7/2001	14:30	11.9	21.8	144	11.2	8.13	10	0.3	0.01 U	0.25	0.043	0.027	4.5	110
6/4/2001	13:40	14.2	24.6	196	10.1	7.77	8	0.724	0.023	0.55	0.079	0.053	3.2	740 J
		Large willows just below bridge cut down in last two months												
7/9/2001	13:20	21	24.1	219	9.76	8.02	6	0.776	0.01 U	0.633	0.073	0.063	3.6	1400
8/13/2001	14:45	22.4	19.6	245	9.07	8.1	7 J	1.04 J	0.013 J	0.868 J	0.139 J	0.101 J	3.3 J	17000 J
9/3/2001	13:10	16.8	15.2	173	9.6	7.84	8 J	0.567 J	0.01 UJ	0.452 J	0.067 J	0.048 J	3.8 J	1600

Conventional Data Report

Ahtanum Cr. @ 62nd Ave

37G120

Class: A
Rivermile:
Latitude: 46 32 54.0
Longitude: 120 35 29.0
Waterbody:

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/2/2000 12:55	10.6	6.6	216	11.31	8	12	0.331 J	0.01 U	0.159	0.132 J	0.103	6.4	1000 J
	Very strong silage smell												
11/6/2000 13:05	6.6	5.8	229	12.1	7.99	4	0.115	0.01 U	0.086	0.152	0.103	1.6	63
12/4/2000 12:50	3.6	5.3	208	13.09	7.78	6	0.439	0.01 U	0.322	0.184	0.097	2.4	35
1/15/2001 12:55	4.4	5.1	285	12.74	8.02	3	0.486	0.01 U	0.431	0.124	0.113	2.3	6
2/5/2001 12:45	5	6.6	249	13.87	7.96	4	0.427	0.01 U	0.325	0.121	0.095	2.2	22
3/5/2001 12:40	7.3	8.3	208	14.04	8.32	4	0.24	0.01 U	0.169	0.103	0.061	2.4	5
4/2/2001 13:00	7.2	12.4	178	12.22	7.93 J	8 J	0.251	0.01 U	0.138	0.106	0.066	3.9	56
5/7/2001 13:45	13.7	16.3	160	12	8.51	21	0.153	0.01 U	0.04	0.086	0.056	8	110
	pH meter calibration was 7.02												
6/4/2001 13:20	15.7	11.9	137	10.6	8.28	23	0.211	0.014	0.072	0.121	0.062	8.3	380
7/9/2001 12:55	23.8	2.4	277	10.37	8.33	12	0.809	0.023	0.557	0.166	0.104	5	570
8/13/2001 13:45	25.9	1.1	217	9.89	8.29	11 J	0.254 J	0.019 J	0.052 J	0.157 J	0.099 J	5.2 J	1000
9/3/2001 12:50	18.8	2.9	219	10.19	8.16	9 J	0.253 J	0.01 UJ	0.042 J	0.123 J	0.082 J	4.7 J	540

Conventional Data Report

Cowiche Cr. @ Zimmerman rd

38G120

Class: A
Rivermile:
Latitude: 46 38 10.0
Longitude: 120 39 55.0
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000	14:10	12.7	8.5	258	10.3	7.92	6	0.916 J	0.01 U	0.751	0.097 J	0.068	3.2	160
		Mike Lust (sp?), landowner, talked about Tieton canal dumping down Cowiche Creek periodically, delivering lots of sediment.												
11/6/2000	14:05	7	7.2	296	11.5	8.18	4	0.78	0.01 U	0.721	0.124	0.071	2.1	96
12/4/2000	14:40	2.5	7.8	213	12.89	8.04	3	0.85	0.01 U	0.751	0.156	0.073	1.4	34
1/15/2001	14:10	3.8	7.5	274	12.74	8.25	2	0.849	0.01 U	0.799	0.093	0.08	1.5	5
		Hide & organs of a large game animal have been dumped in creek on downstream side of bridge.												
2/5/2001	14:00	4.6	8.5	261	13.87	8.28	4	0.799	0.01 U	0.693	0.105	0.072	2.4	28
		Elk carcass still present in creek.												
3/5/2001	13:41	8.4	8.8	248	13.23	8.72	5	0.701	0.01 U	0.644	0.093	0.052	2.1	4
4/2/2001	14:10	7.2	19	172	12.62	7.99 J	9 J	0.331	0.01 U	0.212	0.092	0.054	4	25
5/7/2001	15:10	14	23.1	139	12.1	9.1	12	0.184	0.01 U	0.07	0.069	0.038	5.9	160
		pH meter calibration was 7.02												
6/4/2001	14:15	15.1	20.1	124	9.69	8.04	21	0.277	0.021	0.138	0.083	0.036	10	280
		Cattle near creek, especially d/s but some u/s. Irrigation just upstream,												
7/9/2001	14:00	23.9	13.8	427	11.19	8.12	3	0.76	0.022	0.492	0.123	0.102	2	890
		Very little flow. (~.5 f/s)												
8/13/2001	15:30	25	41	145	9.17	8.55	9 J	0.323 J	0.016 J	0.175 J	0.09 J	0.058 J	5.4 J	3800
		pH within calibration limits												
9/3/2001	13:45	19	49	114	9.5	8.15	39 J	0.246 J	0.017 J	0.129 J	0.086 J	0.041 J	16 J	2300

Conventional Data Report

Yakima R @ Harrison Bridge

39A050

Class: A
Rivermile: 122
Latitude: 46 40 47.0
Longitude: 120 29 24.0
Waterbody: WA-39-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000	11:40	11.4	554	126	12.32	7.96	5	0.262 J	0.01 U	0.172	0.043 J	0.029	4.5	51
11/6/2000	11:40	5.6	460	139	13.1	8.36	3	0.234	0.01 U	0.214	0.047	0.023	1.6	5
12/4/2000	11:15	1.1	548	103	14.01	7.77 J	3	0.284	0.01 U	0.266	0.049	0.018	1.9	3
1/15/2001	11:15	1.8	756	134	13.33	8.06	5	0.258	0.01 U	0.244	0.031	0.025	2.4	2
2/5/2001	11:15	3	519	135	13.87	7.52	3	0.29	0.011	0.217	0.039	0.023	2	1 U
3/5/2001	11:23	4.6	430	128	13.73	8.22	3	0.268	0.01 U	0.19	0.032	0.017	1.7	1 U
4/2/2001	11:40	7	445	116	12.72	8.06 J	5 J	0.145	0.011	0.081	0.027	0.011	2.6	1
5/7/2001	12:10	14	560	123	15.4	9.48	6	0.136	0.01 U	0.025	0.026	0.015	3.4	1
		pH meter calibration was 7.03												
6/4/2001	11:50	15.1	503	113	12.62	9.1	5	0.292	0.016	0.135	0.047	0.027	2.8	5
7/9/2001	11:40	19.8	1374	81	10.88	8.1	11	0.238	0.015	0.132	0.028	0.018	4.9	27
8/13/2001	12:35	23.3	1392	72	10.3	8.71	8 J	0.157 J	0.012 J	0.073 J	0.026 J	0.014 J	2.9 J	16
		pH within calibration limits												
9/3/2001	11:40	17.6	576	91	10.89	8.74	2 J	0.151 J	0.01 UJ	0.053 J	0.028 J	0.015 J	1.6 J	26

Conventional Data Report

Yakima R @ Ellensburg

39A060

Class: A
Rivermile: 153.1
Latitude: 46 58 40.0
Longitude: 120 33 58.0
Waterbody: WA-39-1030

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000	10:45	10.3	1234	70	10.6	7.63	4	0.114 J	0.01 U	0.056	0.015 J	0.006	1.7	15
11/6/2000	10:50	5.1	575	80	11.7	7.58	2	0.037	0.01 U	0.043	0.019	0.005	1.7	1 J
12/4/2000	10:10	1.1	509	56	12.99	7.3	2	0.04	0.01 U	0.044	0.02	0.005 U	1.3	8 J
1/15/2001	10:05	1.2	491	78	12.74	7.58	2		0.01 U	0.035	0.01 U	0.005 U	1	3 J
2/5/2001	10:15	0.8	627	75	13.77	7.26	2	0.053	0.01 U	0.033	0.013	0.005 U	1	6 J
3/5/2001	10:05	3.1	617	77	12.72	7.46	2	0.065	0.01 U	0.03	0.012	0.005 U	1.2	1 UJ
4/2/2001	10:50	5.5	1371	87	12.22	7.78 J	4 J	0.087	0.01 U	0.042	0.016	0.005	2.5	1
5/7/2001	10:40	9.6	940	85	11.6	8.03	8	0.171	0.01 U	0.128	0.017	0.01	2.6	7
6/4/2001	11:00	12	1173	76	11.31	8.24	6	0.195	0.01 U	0.126	0.023	0.008	2.9	16
7/9/2001	10:50	16.3	2837	60	9.66	7.74	8	0.122	0.01 U	0.067	0.012	0.006	2.8	21
8/13/2001	11:35	21.1		54	10.1	7.84	4 J	0.089 J	0.01 UJ	0.042 J	0.012 J	0.005 J	1.8 J	25
9/3/2001	10:50	16.3		64	9.4	7.71	2 J	0.08 J	0.01 UJ	0.033 J	0.014 J	0.005 UJ	1.4 J	45

Conventional Data Report

Yakima R nr Cle Elum

39A090

Class: AA
Rivermile: 191
Latitude: 47 11 10.0
Longitude: 121 02 30.0
Waterbody: WA-39-1060

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/2/2000	9:40	9.9	590	52	9.69	7.38	4	0.048 J	0.01 U	0.011	0.011 J	0.005 U	1.5	13
11/6/2000	9:50	5.3	410	53	10.9	8.2	1	0.01 U	0.01 U	0.01 U	0.015	0.005 U	1.4	15 J
12/4/2000	9:00	1.1	400	40	12.18	7.92	1	0.027	0.01 U	0.04	0.013	0.005 U	0.7	2 J
		Wind blew foil off fecal bottle.												
1/15/2001	9:05	1.6	300	56	12.54	7.59	1 U		0.01 U	0.062	0.01 U	0.005 U	0.5 U	3 J
2/5/2001	9:00	1.5	330	54	12.85	8.06	4	0.083	0.01 U	0.069	0.013	0.005 U	0.9	1 UJ
3/5/2001	9:00	2.7	310	55	12.32	7.28	1	0.072	0.01 U	0.053	0.01 U	0.005 U	0.8	1 J
4/2/2001	10:00	4	750	63	11.91	7.4 J	1 J	0.066	0.01 U	0.051	0.015	0.005 U	1.8	1 J
5/7/2001	9:35	5.7	630	65	11.6	7.71	3	0.046	0.01 U	0.02	0.01 U	0.005 U	1.3	2 J
6/4/2001	9:50	9.5	560	59	10.7	7.8	3	0.043	0.01 U	0.011	0.017	0.005 U	1.6	
		Fecal sample did not get shipped												
7/9/2001	9:50	15.9	680	49	9.25	7.84	5	0.045	0.01 U	0.012	0.01 U		1.9	28 J
		Collected total As sample												
8/13/2001	10:15	21.2	1625	43	8.24	7.35	5 J	0.048 J	0.01 UJ	0.01 UJ	0.01 UJ	0.005 UJ	2.2 J	21 J
9/3/2001	9:45	15.6	535	53	8.01	7.38	2 J	0.039 J	0.01 UJ	0.01 UJ	0.01 J	0.005 UJ	1.1 J	19 J
		pH Recalibrated												

Conventional Data Report

Crab Cr nr Beverly

41A070

Class: B
Rivermile: 6
Latitude: 46 49 53.0
Longitude: 119 48 54.0
Waterbody: WA-41-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/3/2000 9:40	10.4	354	560	8.78	8.1	20	1.7 J	0.01 U	1.44	0.064 J	0.029	4.4	84
11/7/2000 9:25	5.3	209	683	11.3	8.21	7	2.35	0.01 U	1.84	0.073	0.03	3.8	23 J
12/5/2000 10:00	4 J	179	620	12.38	7.91	12	3.25	0.021	2.98	0.123	0.052	5.1	18 J
Tele-thermometer unit fell in the creek and shorted out.													
1/16/2001 9:50	1.5	168	813	12.35	8.45	24	3.95	0.029	2.78	0.09	0.074	7.3	29 J
2/6/2001 9:15	3.8	180	781	11.83	8.13	21	3.78	0.034	2.63	0.108	0.066	11	19 J
3/6/2001 9:51	6.5	153	804	11.91	8.72	15	2.78	0.014	2.76	0.097	0.032	9.5	6 J
4/3/2001 9:35	7.4	287	581	10.9	8.15 J	58	2.79	0.011	2.03	0.115	0.025	18	680 J
5/8/2001 10:05	15.2	190	546	9	8.45	68 J	1.41 J	0.025 J	1.25 J	0.104 J	0.04 J	25 J	92
6/5/2001 9:10	16.2	172	513	8.28	8.51	97	1.55	0.023	1.19	0.141	0.022	34	200 J
7/10/2001 9:20	23.1	171	550	7.73	8.54	116	1.53	0.01 U	1.18	0.15	0.016	31	120 J
8/14/2001 9:55	24.7	133	608	8.24	8.39	63 J	1.26 J	0.012 J	0.947 J	0.074 J	0.014 J	19 J	140 J
pH within calibration limits													
9/4/2001 10:05	19.2	243	535	8.61	8.51	71 J	1.45 J	0.01 UJ	1.22 J	0.066 J	0.015 J	19 J	160 J

Conventional Data Report

Crab Cr nr Moses Lake

41A110

Class: B
Rivermile: 63
Latitude: 47 11 23.0
Longitude: 119 15 54.0
Waterbody: WA-41-1030

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/8/2000 12:15	8.8	49	479	15.47	8.44	6	1.08	0.01 U	0.99	0.058	0.016	3.1	27
11/12/2000 12:30	3.1	24	445 J	15	8.19	1	1.69	0.01 U	1.41	0.081	0.034	0.9	7
Could not measure stage--USGS staff gage was above water surface. Conductivity meter was not holding calibration.													
12/10/2000 12:00	2.8	17 J	363	13.43	8.04	2	1.61	0.01 U	1.45	0.107	0.049	1.4	9
1/7/2001 11:50	0.2	13	622	13.4	7.99	2	1.62	0.024	1.46	0.09	0.051	1.2	4
Dead horse in creek at sampling site.													
2/11/2001 11:30	2.4	9.9	621	14.32	7.97	45	1.85	0.179	1.45	0.159	0.061	22	230
3/11/2001 12:10	7	9.1	576 J	14.09	8.2	6	0.869	0.017	0.628	0.074	0.019	3.5	9
Dead horse still in stream. Stage is from gage house. Tape down was 11.08													
4/8/2001 12:10	9.1	6.4	559	13.23	8.51 J	8 J	0.489	0.01 U	0.253	0.053	0.012	3.2	27
Dead horse still in creek.													
5/13/2001 12:10	19	47	411	10.98	8.48	20	0.749	0.022	0.498	0.06	0.012	11	180 J
Murky. Carp thrashing along bank.													
6/10/2001 11:30	17.3	27	390	12.46	8.68	45	0.819	0.017	0.568	0.067	0.011	12	200
pH meter calibration = 7.02													
7/8/2001 12:25	23.5	34	390	12.3	8.62	21	0.78	0.021	0.58	0.038	0.016	8.5	43
8/5/2001 12:40	21.1	37	408	11.71	8.41	12	0.716	0.013	0.471	0.038	0.014	4.8	56
9/9/2001 12:15	15.5	38	461	13.33	8.35	7	0.898	0.01 U	0.692	0.042	0.013	4.4	53 J

Conventional Data Report

Rocky Ford Creek @ Hwy 17

41D070

Class: AA
Rivermile: 2
Latitude: 47 15 41.0
Longitude: 119 27 15.0
Waterbody:

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/8/2000	11:20	10	88	413	9.64	8.01	8	1.91	0.064	1.87	0.158	0.136	4.2	12
11/12/2000	11:30	6.7	82	350 J	8.8	7.88	15	2.48	0.192	1.91	0.201	0.156	5.7	7
		Conductivity meter was not holding calibration.												
12/10/2000	11:10	7.3	68	283	9.19	7.56	12	1.98	0.223	1.84	0.247	0.175	5.4	14
1/7/2001	11:00	5.1	55	404	10.4	7.99	7	1.9	0.196	1.82	0.198	0.163	2.8	5
2/11/2001	12:55	7.3	47	406	12.47	8.08	9	2.15	0.214	1.81	0.224	0.167	3.9	1
3/11/2001	12:55	11.4	41	356 J	11.27	8.1	7	1.91	0.132	1.6	0.183	0.131	3.7	1 U
4/8/2001	13:00	13.3	37	391	11.71	8.29 J	16 J	1.8	0.141	1.46	0.161	0.123	4.4	1
5/13/2001	12:55	18.9	43 J	391	11.66	8.38	17	1.71	0.194	1.34	0.15	0.105	5.8	33 J
		Somewhat murky. Aquatic plant fragments in stream.												
6/10/2001	12:20	17.7	56	397	11.65	8.57	25	1.79	0.167	1.39	0.169	0.117	7.5	31 J
		pH meter calibration = 7.02												
7/8/2001	13:05	23.4	64	400	13.1	8.64	19	1.56	0.053	1.34	0.132	0.102	5.5	28
8/5/2001	13:20	20.8	74 J	423	10.2	8.34	24	1.95	0.116	1.62	0.165	0.125	7.1	10
9/9/2001	12:50	16.2	79	423	11.11	8.14	17	2.04	0.074	1.83	0.164	0.125	5.9	8 J

Conventional Data Report

Rocky Coulee Wasteway @ K NE Roa

41G070

Class: A
Rivermile: 0.3
Latitude: 47 09 46.0
Longitude: 119 15 21.0
Waterbody:

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/8/2000 12:35	11.1	49	441	15.97	8.56	1 U	1.91	0.01 U	1.92	0.073	0.054	0.9	11
11/12/2000 13:00	8.5	25	429 J	16.2	8.46	1 U	2.57	0.01 U	2.16	0.097	0.065	0.7	5
Conductivity probe was not holding calibration													
12/10/2000 12:30	8.3	17.9	368	12.62	7.9	3	2.83	0.014	2.4	0.145	0.086	1.4	8
1/7/2001 12:25	6.5	15 J	537	12.6	8.13	5	3.44	0.016	2.4	0.13	0.089	3.3	19
2/11/2001 11:55	8.2	1.6	541	10.61	8.29	22	2.66	0.048	2.41	0.153	0.096	8	15
3/11/2001 11:45	10.6		525 J	16.3	8.38	4	2.35	0.012	2.25	0.1	0.046	1.5	2
4/8/2001 11:45	5.8	1180	135	13.13	7.9 J	2 J	0.097	0.01 U	0.048	0.011	0.005 U	1	1
5/13/2001 11:50	12	450	149	11.66	8.53	3	0.165	0.01 U	0.111	0.014	0.005 U	1.3	4 J
Lots of carp moving upstream													
6/10/2001 11:00	15.6	23 J	414	12.86	8.54	2	1.76	0.01 U	1.59	0.067	0.026	0.9	29
pH meter calibration = 6.99													
7/8/2001 12:10	21	99 J	231	11.8	8.89	3	0.549	0.01 U	0.45	0.018	0.012	0.9	24
8/5/2001 12:00	19.4	71	269	12.52	8.75	2	0.78	0.01 U	0.648	0.034	0.017	1.1	25
Net-like algae in samples													
9/9/2001 11:50	17.7	1100 J	158	10.2	8.37	1	0.155	0.01 U	0.08	0.01 U	0.0039	1	3 J

Conventional Data Report

Moses Lake S. Outlet

41H050

Class: AA
Rivermile:
Latitude: 47 04 50.0
Longitude: 119 19 58.0
Waterbody:

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
2/11/2001 10:40	2.8		387	12.26	8.36	2	0.622	0.075	0.402	0.034	0.005	2.1	1 U
3/11/2001 11:10	5.1		386	14.19	8.7	4	0.701	0.06	0.481	0.033	0.005 U	2.8	1 U
low but obvious flow INTO Moses Lake													
4/8/2001 10:45	8.4		260	13.43	8.83 J	10 J	0.274	0.01 U	0.086	0.022	0.005 U	4.5	1
5/13/2001 11:00	15.5		244	9.21	8.85	5	0.149	0.015	0.01 U	0.018	0.005 U	4.7	1 UJ
6/10/2001 10:15	18.1		240	9.24	8.77	3	0.175	0.021	0.01 U	0.025	0.006	2.5	1
pH meter calibration = 7.04													
7/8/2001 11:15	24		247	8.9	9.14	4	0.16	0.01 U	0.01 U	0.013	0.005 U	2.1	1 U
8/5/2001 11:10	21.9		277 J	7.87 J	8.59 J	5	0.361	0.022	0.01 U	0.035	0.006	5.4	3
Very little flow. Sample (except temp) from Moses Lake side, surface (discharge is ~2 m down) and therefore coded "J".													
9/9/2001 11:15	20.1		247	9.09	8.67	8	0.311	0.028	0.015	0.018	0.003 U	4.7	1 U
All gates open ~ 1/2 way. Flow too great for d/s sample but probably well-mixed upstream.													

Conventional Data Report

Crab Cr below Adrian

42A070

Class: B
Rivermile: 80.3
Latitude: 47 22 59.0
Longitude: 119 23 02.0
Waterbody: WA-42-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/8/2000 13:20	12.6		124	10.25	8.97	8	0.045	0.01 U	0.01 U	0.01 U	0.005 U	1.8	31

Conventional Data Report

Wenatchee R @ Wenatchee

45A070

Class: A
Rivermile: 1.1
Latitude: 47 27 32.0
Longitude: 120 20 07.0
Waterbody: WA-45-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/3/2000 12:55	9.7	1410	50	12.02	8.43	4	0.099 J	0.01 U	0.072	0.013 J	0.005 U	1.1	7
11/7/2000 12:50	5.7	996	64	13.8	8.19	1	0.118	0.01 U	0.121	0.014	0.005 U	0.6	4
12/5/2000 14:00	3.6 J	605	66	15.02	7.97	1	0.309	0.01 U	0.25	0.025	0.005 U	0.6	5
1/16/2001 13:40	0	613	74	14.7	8.02	1	0.229	0.01 U	0.226	0.01 U	0.005	0.6	8
2/6/2001 13:50	2.6	582	87	14.79	8.14	5	0.249	0.01 U	0.205	0.017	0.005 U	1.4	1 U
3/6/2001 14:39	6.5	522	104	13.93	8.69	4	0.256	0.018	0.2	0.015	0.005 U	1.3	1 U
4/3/2001 13:05	6.3	1550	64	13.83	8.12 J	4	0.132	0.01 U	0.073	0.014	0.005 U	1.3	1 U
5/8/2001 14:45	11.9	3410	46	11.7	8.67	5 J	0.096 J	0.01 UJ	0.055 J	0.01 UJ	0.005 UJ	1.2 J	1 U
	pH meter calibration was 7.03												
6/5/2001 13:15	11	4280	36	11.21	7.6	3	0.125	0.01 U	0.069	0.015	0.005 U	1.1	9
7/10/2001 13:00	20.6	2060	43	9.35	7.93	3	0.117	0.01 U	0.068	0.01 U	0.005 U	1.2	9
8/14/2001 14:25	23.8	567	73	10.1	8.89	2 J	0.249 J	0.01 UJ	0.148 J	0.01 UJ	0.005 UJ	0.8 J	28
	pH within calibration limits												
9/4/2001 14:25	20.3	451	82	10.49	8.8	4 J	0.303 J	0.01 UJ	0.209 J	0.015 J	0.005 UJ	0.8 J	11

Conventional Data Report

Wenatchee R nr Leavenworth

45A110

Class: AA
Rivermile: 35.6
Latitude: 47 40 35.0
Longitude: 120 43 58.0
Waterbody: WA-45-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/3/2000 11:50	8.3	921	31	10.7	8.51	2	0.019 J	0.01 U	0.01 U	0.01 UJ	0.005 U	0.7	2
11/7/2000 11:50	4.5	661	35	11.7	8.38	1 U	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	0.6	1 J
12/5/2000 12:50	4 J	377	32	14.21	7.35	1 U	0.053	0.01 U	0.03	0.017	0.005 U	0.5 U	2
1/16/2001 12:25	0.3	377	41	13.23	7.91	2		0.01 U	0.026	0.01 U	0.005 U	0.5 U	1 U
2/6/2001 11:55	2.2	370 J	42	13.36	7.8	1	0.045	0.01 U	0.029	0.013	0.005 U	0.5 U	1 U
3/6/2001 13:21	4.8	311	50	12.62	8.23	1 U	0.052	0.01 U	0.018	0.011	0.005 U	0.7	1 U
4/3/2001 12:00	4.9	1040	37	12.32	7.99 J	2	0.063	0.01 U	0.04	0.011	0.005 U	0.8	1 U
5/8/2001 13:00	9.3	2360	32	11.1	7.7	3 J	0.094 J	0.01 UJ	0.063 J	0.01 UJ	0.005 UJ	0.7 J	1 U
6/5/2001 11:50	8.8	3030	27	10.9	7.84	5	0.1	0.01 U	0.053	0.014	0.005 U	1	1 U
7/10/2001 12:00	17.3	1680	29	9.35	8.18	5	0.051	0.01 U	0.015	0.01 U	0.005 U	0.7	1
	Collected total As sample.												
8/14/2001 13:15	21.7	588	38	9.07	8.02	3 J	0.049 J	0.01 UJ	0.011 J	0.01 UJ	0.005 UJ	0.7 J	6
9/4/2001 13:10	17.4	430	40	9.2	8.17	8 J	0.055 J	0.01 UJ	0.011 J	0.011 J	0.005 UJ	0.8 J	3

Conventional Data Report

Entiat R nr Entiat

46A070

Class: A
Rivermile: 1.5
Latitude: 47 39 48.0
Longitude: 120 14 58.0
Waterbody: WA-46-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/4/2000 14:20	8.1	154	104	11.41	8.18	2	0.133	0.01 U	0.123	0.016	0.005 U	0.7	2
11/8/2000 13:50	3.2	162	109	12.8	8.1	1	0.113	0.01 U	0.121	0.02	0.005 U	0.6	5
12/6/2000 13:10	3.3 J		100	13.8	8.09	2	0.21	0.01 U	0.175	0.031	0.005	0.5	1 U
1/17/2001 15:00	0.9		142	14.11	8.49	1 U	0.235	0.01 U	0.24	0.014	0.01	0.5 U	
	Datalogger in gage house not functioning properly--gave stage value of 4700 ft. Staff gage was dry.												
2/7/2001 15:20	0.3		136	14.48	8.09	1	0.261	0.01 U	0.222	0.026	0.007	0.5 U	1
	Datalogger in gage house not functioning properly.												
3/7/2001 15:30	8.3	104	134	12.22	8.9 J	4	0.186	0.01	0.133	0.02	0.006	0.9	1 U
4/4/2001 14:00	9.5	136	115	12.32	8.57 J	2	0.101	0.01 U	0.046	0.019	0.006	1.4	1 U
5/9/2001 14:50	12.4	360	64	10.7 J	8.26	8	0.067	0.01 U	0.016	0.01 U	0.005 U	1.8	4
	D.O. is estimate because an unknown quantity (1-2 ml) of Sodium thiosulfate leaked into the sample through a leaky fitting on the buret in the HQ wet lab.												
6/6/2001 14:45	10.4	617	44	11.61	7.96	4	0.059	0.01 U	0.02	0.017	0.005 U	1	4
7/11/2001 12:30	19.8	240	62	9.35	8.48	4	0.061	0.01 U	0.028	0.01	0.005 U	1.5	7
8/15/2001 11:55	21.1	117	90	10.2	8.49	2	0.136	0.01 U	0.064	0.014	0.005 U	0.7	9
	Gage Height an estimate; pH within calibration limits												
9/5/2001 12:05	17.1	92	108	10.09	8.48	1 U	0.195	0.01 U	0.115	0.016	0.005 U	0.7	4
	USGS gage station refitted to reflect lower water levels.												

Conventional Data Report

Methow R nr Pateros

48A070

Class: A
Rivermile: 5
Latitude: 48 04 29.0
Longitude: 119 57 20.0
Waterbody: WA-48-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/4/2000 13:10	6.3	347	190	11.51	8.42	2	0.248	0.01 U	0.226	0.01	0.005 U	0.5	3
11/8/2000 12:40	3.3	372	180	12.6	8.42	1	0.196	0.01 U	0.21	0.011	0.005 U	0.5 U	1
About 15 large salmonids hanging out under bridge.													
12/6/2000 13:45	3 J	323	154	14.01	8.04	1 U	0.259	0.01 U	0.263	0.018	0.005 U	0.5 U	1 U
1/17/2001 13:35	0	270	199	14.11	8.27	1	0.281	0.01 U	0.289	0.01 U	0.005 U	0.7	
2/7/2001 13:55	0	242	194	14.48	8.1	1 U	0.28	0.01 U	0.265	0.013	0.005 U	0.6	1 U
3/7/2001 13:00	7	263	196	12.52	8.65 J	3	0.252	0.01 U	0.209	0.01	0.005 U	1.1	1 U
4/4/2001 12:35	7.7	288	191	12.62	8.33 J	3	0.26	0.01 U	0.206	0.013	0.005 U	1.4	1 U
5/9/2001 13:20	14.6	644	138	10.4	8.65	11	0.104	0.01 U	0.048	0.01 U	0.005 U	2.9	30
pH meter calibration was 6.97													
6/6/2001 13:05	11.9	2020	89	11.01	8.58	3	0.086	0.01 U	0.038	0.016	0.005 U	1	1 U
7/11/2001 11:05	19.8	680	140	9.56	8.74	1	0.108	0.01 U	0.062	0.01 U	0.005 U	0.5 U	8
Smoky due to forest fires. Concrete bridge rail crumbly; debris may fall into samples.													
8/15/2001 10:45	20.4	281	195	10.51	8.51	1	0.257	0.01 U	0.163	0.01 U	0.005 U	0.5	7
9/5/2001 10:35	16.2	239	206	10	8.45	2	0.308	0.01 U	0.212	0.014	0.005 U	0.9	1

Conventional Data Report

Methow R @ Twisp
48A140

Class: A
Rivermile: 39.4
Latitude: 48 21 34.0
Longitude: 120 06 47.0
Waterbody: WA-48-1020

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/4/2000	11:35	6.5	290	155	11.41	8.14	1 U	0.215	0.01 U	0.194	0.011	0.005 U	0.4	3
11/8/2000	11:35	2.7	311	147	12.5	8.15	1	0.139	0.01 U	0.159	0.012	0.005 U	0.5 U	2
12/6/2000	12:30	2.8 J	245	125	13.09	7.87	1 U	0.186	0.01 U	0.192	0.015	0.005 U	0.5 U	1
		Could not find gauge house												
1/17/2001	11:50	0.7	220	163	13.13	7.86	1 U	0.197	0.01 U	0.21	0.01 U	0.005 U	0.5 U	
		Access road to gage house impassable												
2/7/2001	12:35	0	188	157	13.87	7.54	2	0.219	0.01 U	0.213	0.012	0.005 U	0.5 U	1 U
		Door on gage house was stuck												
3/7/2001	11:52	6	202	158	12.12	8.29	2	0.202	0.01 U	0.171	0.011	0.005 U	0.5	1 U
4/4/2001	11:30	6.4	215	158	12.32	8.06 J	3	0.199	0.01 U	0.169	0.012	0.005 U	0.6	1 U
5/9/2001	11:55	10.3	820	108	11	8.22	7	0.119	0.01 U	0.075	0.01 U	0.005 U	2.4	6
6/6/2001	11:45	9.6	1900	76	11.21	7.92	2	0.081	0.01 U	0.047	0.015	0.005 U	0.8	1
7/11/2001	10:00	15.7	599	118	9.66	8.31	2	0.123	0.01 U	0.085	0.01 U	0.005 U	0.5	190 J
8/15/2001	9:20	16.5	228	170	9.79	8.09	1 U	0.254	0.01 U	0.187	0.01 U	0.005 U	0.5 U	29
		Gage height an estimate												
9/5/2001	9:35	12.3	184	182	10	8.24	1 U	0.294	0.01 U	0.241	0.013	0.005 U	0.5 U	12
		Gage Height Estimated from USGS Station												

Conventional Data Report

Okanogan R @ Malott

49A070

Class: A
Rivermile: 17
Latitude: 48 16 50.0
Longitude: 119 42 12.0
Waterbody: WA-49-1010

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/4/2000 10:30	10.8	1540	280	9.69	8.36	7	0.091	0.01 U	0.022	0.02	0.005 U	2.6	18
11/8/2000 10:30	4.4	1320	263	11.3	8.17	3	0.062	0.01 U	0.042	0.018	0.005 U	1.4	7
12/6/2000 11:20	2.7 J	983	238	13.09	7.87	2	0.18	0.01 U	0.076	0.022	0.005 U	1.1	2
1/17/2001 10:50	0	760	306	13.62	8.11	1	0.127	0.01 U	0.088	0.011	0.006	0.8	
2/7/2001 11:35	0	593	313	13.87	8.4	2	0.117	0.01 U	0.05	0.017	0.005	0.8	1 U
3/7/2001 10:40	6.3	547	323	11.91	8.36	3	0.102	0.01 U	0.021	0.017	0.005 U	1.4	1 U
4/4/2001 10:30	7.8	758	303	11.31	8.25 J	6	0.142	0.01 U	0.031	0.019	0.005 U	2	2
5/9/2001 10:50	13.8	2110	157	9.5	8.04	15	0.09	0.01 U	0.01 U	0.02	0.005 U	5.1	13
6/6/2001 10:30	13	4060	114	10.1	8	18	0.1	0.01 U	0.013	0.031	0.005 U	5.5	34
7/11/2001 9:00	24.7	1180	218	7.32	8.35	3	0.089	0.01 U	0.011	0.014	0.005 U	1.5	34
8/15/2001 8:30	24.2	562	314	7.93	8.29	3	0.155	0.01 U	0.017	0.019	0.008	1.7	97 J
	pH within calibration limits												
9/5/2001 8:35	18.2	448	348	8.11	8.45	3	0.16	0.01 U	0.016	0.021	0.005 U	1.5	80 J

Conventional Data Report

Okanogan R @ Oroville

49A190

Class: A
Rivermile: 78
Latitude: 48 56 21.0
Longitude: 119 25 32.0
Waterbody: WA-49-1040

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/4/2000 9:15	13.5	521	276	8.38	8.3	3	0.107	0.01 U	0.01 U	0.016	0.005 U	1.6	9
11/8/2000 9:15	7.9	475	288 J	9.19	8.18	2	0.226	0.022	0.034	0.019	0.005 U	1.2	19 J
12/6/2000 10:00	3.7 J	369	246	11.16	7.98	2	0.135	0.01 U	0.062	0.022	0.005 U	1.2	3
1/17/2001 9:30	0.8	244	307	12.45	7.66	1	0.113	0.01 U	0.046	0.01 U	0.005 U	0.7	
2/7/2001 9:55	0.4	163	301	13.06	7.87	2	0.203	0.011	0.048	0.016	0.005 U	1.4	4
3/7/2001 9:25	4.8	140	294	14.34	8.45	5	0.122	0.01 U	0.01 U	0.011	0.005 U	1.4	1 UJ
4/4/2001 9:05	6.5	239	303	11.81	8.31 J	4	0.181	0.01 U	0.037	0.014	0.005 U	1.6	1 UJ
5/9/2001 8:50	13.2	108	303	9.8	8.35	4	0.133	0.01 U	0.01 U	0.01 U	0.005 U	1.7	4 J
6/6/2001 9:00	16.9	195	302	9.09	8.64	4	0.155	0.01 U	0.012	0.016	0.005 U	1.9	4 J
7/11/2001 7:30	24.6	163	308	8.44	8.65	3	0.142	0.01 U	0.01 U	0.029	0.005 U	2.1	12
8/15/2001 6:45	26.4	305	301	8.65	8.58	14	0.228	0.011	0.01 U	0.021	0.005 U	9.1	37 J
9/5/2001 6:50	18.6	259	314	7.92	8.53	7	0.223	0.01 U	0.01 U	0.021	0.005 U	4.4	23 J

Conventional Data Report

Similkameen R @ Oroville

49B070

Class: A
Rivermile: 5
Latitude: 48 56 05.0
Longitude: 119 26 27.0
Waterbody: WA-49-1030

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/4/2000 8:50	9	550	194	10.9	8.27	2	0.037	0.01 U	0.01 U	0.011	0.005 U	1.1	2
11/8/2000 8:50	3.2	740	177	12.4	8.05	1	0.043	0.01 U	0.01 U	0.011	0.005 U	0.7	1 J
12/6/2000 9:30	1.9 J	375	160	14.01	7.79	1 U	0.058	0.01 U	0.016	0.017	0.005 U	0.5	1 U
1/17/2001 9:05	0	900	213	13.92	7.86	2		0.01 U	0.037	0.01 U	0.005 UJ	0.9	
2/7/2001 9:15	0	340	217	14.48	7.79	1	0.045	0.01 U	0.019	0.013	0.005 U	0.9	1 J
3/7/2001 8:30	4.7	325	224	12.52	8.1	4	0.058	0.01 U	0.013	0.012	0.005 U	1.1	1 UJ
4/4/2001 8:40	7.5	500	216	12.02	8.07 J	2	0.053	0.01 U	0.01 U	0.012	0.005 U	2.1	1 J
5/9/2001 8:20	13	2780	126	10.6	8.06	13	0.079	0.01 U	0.01 U	0.018	0.005 U	5.5	38 J
6/6/2001 8:15	11.7	4580	94	11.31	7.97	9	0.081	0.01 U	0.01 U	0.023	0.005 U	3	6 J
7/11/2001 6:50	22.1	1040	157	8.54	8.11	3	0.057	0.01 U	0.01 U	0.01	0.005 U	1.6	18
	~1.5 hrs earlier than previously because no longer sampling at Chopaka Br. And no more metals samples. Thermister was dry (returned to water ~0720).												
8/15/2001 6:25	22.3	330	207	8.45	8.18	2	0.073	0.01 U	0.01 U	0.01 U	0.005 U	1.1	1 J
	pH within calibration limits												
9/5/2001 6:25	16.4	270	233	8.71	8.34	3	0.066	0.01 U	0.01 U	0.015	0.005 U	0.9	2 J
	One dead whitefish (Prosopium williamsoni) floating downstream.												

Conventional Data Report

Similkameen R. @ Chopaka Br. B. C.

49B110

Class: A
Rivermile:
Latitude: 49 04 43.2
Longitude: 119 42 30.0
Waterbody:

Date/Time	Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
	deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/4/2000 7:35	6.4		172	10.4	7.73	2	0.058	0.01 U	0.013	0.01 U	0.005 U	0.8	10
11/8/2000 7:30	2.5		165	11.5	8.15 J	1	0.016	0.01 U	0.02	0.011	0.005 U	0.6	1 UJ
12/6/2000 8:00	1.4 J		155	13.9	7.61	1 U	0.062	0.01 U	0.071	0.02	0.005 U	0.5 U	1 J
1/17/2001 7:40	0		210	12.74	7.63	1 U		0.01 U	0.084	0.01 U	0.005 UJ	0.5 U	
2/7/2001 7:35	-0.5		220	13.46	7.51	2	0.078	0.01 U	0.063	0.015	0.005 U	0.6	1 J
	Ice sheet on surface												
3/7/2001 7:20	4.6		214	11.11	8.08	3	0.077	0.01 U	0.03	0.011	0.005 U	0.6	9 J
4/4/2001 7:20	4.7		203	11.61	8.11 J	2	0.047	0.01 U	0.025	0.013	0.005 U	1	6 J
5/9/2001 7:00	9		108	10.19	7.83	16	0.091	0.01 U	0.01 U	0.013	0.005 U	4.5	30 J
6/6/2001 7:05	10.1		78	10.3	7.77	8	0.073	0.01 U	0.01 U	0.019	0.005 U	2.4	6 J

Conventional Data Report

Columbia R @ Grand Coulee

53A070

Class: A
Rivermile: 596
Latitude: 47 57 56.0
Longitude: 118 58 51.0
Waterbody: WA-CR-1050

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/8/2000 15:00	14.4	37500	120	9.64	7.98	1 U	0.123	0.01 U	0.1	0.01 U	0.005 U	0.6	1 U
11/12/2000 15:30	11.1	35000	112 J	10	8.09	1 U	0.098	0.01 U	0.106	0.01 U	0.005 U	0.5	2
Conductivity probe was not holding calibration													
12/10/2000 14:50	7.1	76700	92	10.9	8.05	1 U	0.119	0.01 U	0.124	0.01 U	0.005 U	0.7	1 U
VERY windy--Foil blew off fecal sample.													
1/7/2001 14:40	3.4	120000	135	12.2	8.18	1 U	0.171	0.025	0.134	0.01 U	0.005 U	0.6	1 U
2/11/2001 14:40	2.6	27000	147	13.19	8.14	1	0.194	0.01 U	0.169	0.013	0.005 U	0.8	1
3/11/2001 14:30	3.5	45000	144	13.18	8	1 U	0.198	0.01 U	0.158	0.011	0.005 U	0.8	1 U
4/8/2001 15:05	5.3	27000	146	13.33	8.1 J	2 J	0.207	0.01 U	0.168	0.01 U	0.005 U	0.8	1 U
5/13/2001 14:45	8.5	20000	151	12.05	8.13	2	0.219	0.014	0.158	0.011	0.005 U	1.2	1 UJ
6/10/2001 14:40	11.7	75000	133	10.35	8.12	1 U	0.173	0.021	0.101	0.011	0.005 U	0.6	1 U
7/8/2001 14:35	13.7	90000	136	9.6	7.8	1 U	0.139	0.016	0.07	0.01 U	0.005 U	0.5 U	1 U
8/5/2001 15:00	15.9	61000	133	8.98	8.21	1 U	0.137	0.01 U	0.072	0.01 U	0.005 U	0.5 U	1 U
9/9/2001 14:35	16.5	40000	135	7.57	7.99	1 U	0.169	0.01 U	0.124	0.01 U	0.0057	0.5 U	1 J

Conventional Data Report

Spokane R @ Riverside State Pk

54A120

Class: A
Rivermile: 66
Latitude: 47 41 48.0
Longitude: 117 29 48.0
Waterbody: WA-54-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000 8:00	7.3	2700	280	9.04	7.99 J	3	0.761	0.01 U	0.727	0.018	0.009	1	20
pH meter experiencing slow upward drift													
11/14/2000 8:30	4.6	2950	152	11.3	7.73	1 U	0.658	0.01 U	0.658	0.055	0.043	0.6	10 J
12/12/2000 8:15	3.4	2230	134	11.81	7.42	1	0.915	0.01 U	0.873	0.078	0.057	0.7	19 J
1/9/2001 8:25	4.5	1940	173	11	7.88	2	1.02	0.01 U	1.01	0.071	0.061	0.7	11 J
2/13/2001 8:15	2.8	1710	181	11.85	7.93	2	1.22	0.01 U	1.18	0.089	0.066	1.7	15 J
3/13/2001 8:05	6.5	1940	172	11.07	7.7	7	3.31	0.032	3.29	0.104	0.067	9.5	7 J
4/10/2001 8:15	5.7	4510	95	11.91	7.44 J	3	0.654	0.01 U	0.55	0.024	0.01	2	8 J
5/15/2001 8:20	10.7	14600	64	11.76	7.73	6	0.198	0.01 U	0.12	0.021	0.005 U	2.8	13 J
6/12/2001 8:05	14.1	4350	112	9.54	8.08	4	0.557	0.01 U	0.47	0.021	0.006	1.1	4 J
7/10/2001 9:00	17.5	1480	210	8.9	8.24	1 J	1.09 J	0.01 UJ	1.02 J	0.018 J	0.006 J	0.7 J	14 J
8/7/2001 7:50	15.6	752	252	8.88	8.12	1 J	1.47 J	0.01 UJ	1.39 J	0.029 J	0.012 J	0.9 J	19 J
River is as low as I can remember													
9/11/2001 8:25	11.9	985	280 J	9.79	8.06	3	1.63	0.01 U	1.58	0.03	0.011	1.2	

Conventional Data Report

Little Spokane R nr Mouth

55B070

Class: A
Rivermile: 1.1
Latitude: 47 46 59.0
Longitude: 117 31 46.0
Waterbody: WA-55-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000 7:30	9.5	454	140	9.84	8.02	5	1.38	0.01 U	1.33	0.023	0.012	2.1	32
11/14/2000 7:50	3.6	481	300	10.19	8.37	6	1.34	0.01 U	1.31	0.027	0.012	2.3	38 J
12/12/2000 7:40	3.2	444	218	10.9	8.3	8	1.42	0.01 U	1.36	0.034	0.012	2.6	30 J
1/9/2001 7:35	5.1	481	268	10.3	8.19	11	1.41	0.01 U	1.39	0.028	0.013	3.3	38 J
2/13/2001 7:15	5	468	276	10.72	8.19	14	1.44	0.012	1.41	0.035	0.014	4.1	55 J
3/13/2001 7:25	7.5	577	262	9.76	8.2	16	1.49	0.073	1.35	0.05	0.018	7.2	20 J
4/10/2001 7:35	7.7	618	239	9.79	8.21 J	15	1.25	0.063	1.11	0.039	0.017	5.1	32 J
5/15/2001 7:35	11.7	599	245 J	8.43	8.32	19	1.16	0.015	1.07	0.036	0.015	5.6	180
6/12/2001 7:15	11.7	457	261	8.64	8.3	10	1.19	0.01 U	1.1	0.028	0.008	2.8	110 J
7/10/2001 7:50	14.6	384	307	8.19	8.11	6 J	1.27 J	0.01 UJ	1.19 J	0.019 J	0.01 J	2 J	88 J
8/7/2001 7:05	14	371	291	8.18	8.16	7 J	1.34 J	0.01 UJ	1.28 J	0.018 J	0.011 J	1.7 J	92 J
9/11/2001 7:43	11	363	285 J	8.78	8.48	3	1.35	0.01 U	1.31	0.016	0.0078	1.3	

Conventional Data Report

Hangman Cr @ Mouth

56A070

Class: A
Rivermile: 0.6
Latitude: 47 39 17.0
Longitude: 117 27 12.0
Waterbody: WA-56-1010

Date/Time		Temp	Flow	Conduc-tivity	Oxygen	ph	Suspend. Solids	Total Pers. N.	Ammonia Nitrogen	Nitrate+ Nitrite	Total Phosp.	Soluble Reactive P	Turbid-ity	Fecal Coliforms
		deg. C	CFS	umhos/cm	mg/L	std units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	NTU	#/100/mL
10/9/2000	16:30	8.8	22	369	13.06	8.66	2	0.919	0.01 U	0.825	0.038	0.019	1.1	3
11/13/2000	16:30	0.6	34	360 J	14.1	8.52	1	1.55	0.01 U	1.18	0.048	0.02	1.2	8
		Conductivity probe was not holding calibration												
12/11/2000	17:25		38											
		Could not sample--creek was frozen												
1/8/2001	14:25	1.2	58	326	14	8.69	4	1.92	0.01 U	1.78	0.044	0.026	1.8	2
2/12/2001	16:00	1.5	104	271	13.29	8.12	5	6.54	0.052	6.67	0.158	0.066	28	5
3/12/2001	15:10	5.5	476	214	11.87	7.8	19	11.5	0.08	11	0.195	0.09	40	4
4/9/2001	15:55	9.6	263	180	11.71	8.16 J	6	4.34	0.011	3.11	0.085	0.033	17	8
5/14/2001	15:10	15.1	85	229	9.41	8.5	8	0.945	0.03	0.638	0.1	0.055	7.4	220 J
6/11/2001	16:05	16.1	38	292	11.05	8.93	3	0.563	0.012	0.361	0.056	0.023	1.8	14
		pH meter calibration = 6.99												
7/9/2001	17:10	26.8	15	337	11.5	8.95	16 J	0.826 J	0.026 J	0.601 J	0.052 J	0.026 J	4.6 J	70
8/6/2001	15:00	22.4	6.8	404	12.52	8.57	3	1.15	0.01 U	0.931	0.031	0.014	1.7	6
		Nearly stagnant.												
9/10/2001	15:05	16.3	4.5	433	13.63	8.53	2 J	1.31 J	0.01 UJ	1.17 J	0.03 J	0.012 J	1 J	

Conventional Data Report

Spokane R @ Stateline Br

57A150

Class: A
Rivermile: 96
Latitude: 47 41 55.0
Longitude: 117 02 37.0
Waterbody: WA-57-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/10/2000 9:45	11.2	2210	50	9.44	7.6	1	0.064	0.01 U	0.039	0.01	0.005 U	1	7
11/14/2000 9:50	4.6	2330	57	10.9	7.59	1 U	0.044	0.01 U	0.044	0.022	0.011	0.6	3
12/12/2000 10:00	2.4	1700	47	11.71	7.55	2	0.114	0.01 U	0.115	0.029	0.016	1	3 J
1/9/2001 9:45	2.2	1320	52	12.1	7.48	1	0.124 J	0.01	0.117	0.023	0.015	0.6	4 J
2/13/2001 9:30	1.4	1230	55	12.68	7.42	1 U	0.183	0.018	0.116	0.036	0.017	0.6	8
3/13/2001 9:20	4.6	1450	52	12.38	7.5	2	0.153	0.011	0.086	0.028	0.01	1.1	2 J
4/10/2001 9:35	4.7	4270	51	12.32	7.44 J	2	0.106	0.01 U	0.054	0.014	0.005 U	0.7	1 UJ
5/15/2001 9:30	10	14900	54	11.37	7.64	4	0.097	0.01 U	0.031	0.013	0.005 U	1.8	3
6/12/2001 9:30	15	3530	51	9.24	7.82	2	0.105	0.01 U	0.031	0.017	0.005 U	1.3	3
7/10/2001 10:35	23	802	55	8.4	7.92	2 J	0.116 J	0.013 J	0.055 J	0.01 UJ	0.005 UJ	1.1 J	17
8/7/2001 9:05	22	264	62	7.87	8.2	10 J	0.236 J	0.01 J	0.133 J	0.018 J	0.008 J	1.3 J	220 J
9/11/2001 9:50	19	636	65 J	8.48	8.11	3	0.213	0.01 U	0.115	0.01 U	0.003 U	1.2	

Conventional Data Report

Kettle R nr Barstow

60A070

Class: AA
Rivermile: 10.9
Latitude: 48 47 05.0
Longitude: 118 07 27.0
Waterbody: WA-60-1010

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/9/2000	13:40	6.3	395 J	196	11.65	8.28	1	0.126	0.01 U	0.093	0.01 U	0.005 U	0.6	1 U
11/13/2000	13:15	0	382 J	194	13.6	8.09	1 U	0.115	0.01 U	0.114	0.012	0.005 U	0.5 U	1
12/11/2000	14:00	0	334 J	146	14.64	7.83	3	0.247	0.017	0.213	0.015	0.005 U	0.9	1 U
1/8/2001	13:40	0	350 J	222	14	8.16	1 U	0.295	0.01 U	0.298	0.01 U	0.005 U	0.5 U	1 U
2/12/2001	13:30		312 J											
		River was frozen--could not sample.												
3/12/2001	12:30	5.9	338 J	209	13.59	8.6	2	0.191	0.01 U	0.091	0.015	0.005 U	0.8	1 U
4/9/2001	13:15	8.6	700 J	169	12.22	8.72 J	4	0.097	0.01 U	0.014	0.011	0.005 U	1.2	1 U
5/14/2001	12:25	10.1	10000 J	51 J	10.98	7.76	50	0.105	0.01 U	0.014	0.064	0.005 U	13	71
		Turbid. Lots of debris, large and small.												
6/11/2001	13:15	11.8	6410 J	49	10.85	7.74	8	0.076	0.01 U	0.01 U	0.019	0.005 U	1.9	28
7/9/2001	14:05	22.7	1680 J	97	9.4	8.61	3 J	0.069 J	0.01 UJ	0.01 UJ	0.01 UJ	0.005 UJ	0.8 J	1
8/6/2001	12:15	20.6	782 J	130	9.09	8.25	1	0.094	0.01 U	0.01 U	0.01 U	0.005 U	0.6	9
9/10/2001	12:20	16	210 J	212	10	8.39	1 UJ	0.102 J	0.01 UJ	0.014 J	0.01 UJ	0.003 UJ	0.5 UJ	

Conventional Data Report

Columbia R @ Northport

61A070

Class: AA
Rivermile: 735.1
Latitude: 48 55 21.0
Longitude: 117 46 32.0
Waterbody: WA-CR-1060

Date/Time		Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/9/2000	12:15	10.4	70500	130	10.05	8.07	3	0.082	0.01 U	0.065	0.01 U	0.005 U	1.1	27
11/13/2000	11:25	6.2	71600	154 J	11 J	8.03	1 U	0.062	0.01 U	0.07	0.01 U	0.005 U	0.8	1 J
		Original DO bottle broke during sampling. Conductivity probe was not holding calibration												
12/11/2000	12:10	4.2	106000	85	11.91	7.84	1	0.081 J	0.02	0.101	0.01 U	0.005 U	0.8	1 U
1/8/2001	12:00	3.2	48100	132	12.2	8.03	1 U		0.01 U	0.137	0.01 U	0.005 U	0.7	1 U
2/12/2001	11:50	2.6	83900	136	12.88	8.11	2	0.153	0.01 U	0.132	0.01 U	0.005 U	0.6	3
3/12/2001	11:10	3.8	74400	135	12.78	8	1	0.159	0.01 U	0.125	0.01	0.005 U	0.6	20
4/9/2001	11:30	5.5	53400	143	12.12	8.12 J	2	0.158	0.01 U	0.1	0.01 U	0.005 U	1.1	1 U
5/14/2001	11:00	9.8	96700	144 J	11.37	8.17	3	0.119	0.01	0.074	0.01	0.005 U	1.5	3
6/11/2001	11:35	15	83900	131	10.75	8.21	2	0.14	0.011	0.07	0.012	0.005 U	1	32
7/9/2001	12:25	17.5	75700	136	9.9	8.4	2 J	0.1 J	0.01 UJ	0.043 J	0.01 UJ	0.005 UJ	1.1 J	9
8/6/2001	10:55	18.5	57100	129	9.29	8.46	2	0.1	0.01 U	0.034	0.01 U	0.005 U	1.2	46
9/10/2001	11:00	17.2	83700	130	9.29	8.41	1 J	0.083 J	0.01 UJ	0.017 J	0.01 UJ	0.003 UJ	1.1 J	

Conventional Data Report

Pend Oreille @ Metaline Falls

62A090

Class: A
Rivermile: 27
Latitude: 48 51 54.0
Longitude: 117 22 20.0
Waterbody: WA-62-1010

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/9/2000 9:25	10.3	17300	160	10.05	8.32	4	0.035	0.01 U	0.01 U	0.01 U	0.005 U	1.3	2
11/13/2000 8:50	3.9	16800	172	11	8.19	2	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	1	6 J
12/11/2000 9:10	1.3	17000	100	12.42	8	2	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	1.1	1 UJ
1/8/2001 8:55	1	12800	173	12.7	8.23	1 U		0.01 U	0.016	0.01 U	0.005 U	0.9	1 UJ
2/12/2001 9:20	0	11000	171	13.81	8.29	2	0.041	0.01 U	0.01 U	0.013	0.005 U	0.9	1 UJ
3/12/2001 8:45	3.6	1050	162	12.98	7.8	5	0.071	0.01 U	0.01 U	0.014	0.005 U	1.5	1 UJ
4/9/2001 8:30	6.4	5310	162	11.61 J	7.96 J	3	0.07	0.01 U	0.01 U	0.012	0.005 U	1.6	1 UJ
5/14/2001 8:45	12.4	20300	163 J	10.09	8.37	4	0.062	0.01 U	0.01 U	0.013	0.005 U	2.5	5 J
6/11/2001 9:05	14.4	20200	142	9.64	8.43	2	0.068	0.01 U	0.01 U	0.014	0.005 U	1.5	8 J
7/9/2001 9:40	21	16400	146	8.9	8.62	3 J	0.071 J	0.01 UJ	0.01 UJ	0.01 UJ	0.005 UJ	1.6 J	1 J
8/6/2001 8:40	21.2	8390	156	8.48	8.71	1 U	0.096	0.01 U	0.01 U	0.01 U	0.005 U	1.3	12 J
9/10/2001 8:30	18.8	6920	163	8.78	8.55	1 UJ	0.101 J	0.01 UJ	0.01 UJ	0.01 UJ	0.003 UJ	0.9 J	

Conventional Data Report

Pend Oreille R @ Newport

62A150

Class: A
Rivermile: 88.2
Latitude: 48 11 07.0
Longitude: 117 02 02.0
Waterbody: WA-62-1020

Date/Time	Temp deg. C	Flow CFS	Conduc-tivity umhos/cm	Oxygen mg/L	ph std units	Suspend. Solids mg/L	Total Pers. N. mg/L	Ammonia Nitrogen mg/L	Nitrate+ Nitrite mg/L	Total Phosp. mg/L	Soluble Reactive P mg/L	Turbid-ity NTU	Fecal Coliforms #/100/mL
10/9/2000 7:30	10.8	17500	160	9.64	8.34	3	0.037	0.01 U	0.01 U	0.01 U	0.005 U	1.5	1 U
11/13/2000 6:50	2.9	14100	114	11.2	7.9	2	0.01 U	0.01 U	0.01 U	0.01 U	0.005 U	1.6	1 UJ
12/11/2000 7:00	2.3	24400	100	11.81	7.79	6	0.01 UJ	0.01 U	0.017	0.01 U	0.005 U	6.4	1 J
1/8/2001 7:05	1	13100	173	11.8	7.71	1	0.042 J	0.01 U	0.05	0.01 U	0.005 U	0.9	1 J
2/12/2001 7:15	0.4	7610	178	12.68	7.62	2	0.081	0.01 U	0.037	0.013	0.005 U	1	1 UJ
3/12/2001 7:10	3.6	6710	163	12.68	8.2	3	0.078	0.01 U	0.015	0.014	0.005 U	1.5	1 UJ
4/9/2001 6:45	5.6	10300	161	11.91	7.97 J	3	0.064	0.01 U	0.01 U	0.012	0.005 U	2.1	1 UJ
5/14/2001 7:00	11.3	24400	149	10.58	8.41	5	0.057	0.01 U	0.01 U	0.015	0.005 U	2.8	7 J
6/11/2001 7:00	13.9	20900	145	9.64	8.41	3	0.062	0.01 U	0.01 U	0.013	0.005 U	1.8	1 J
7/9/2001 8:10	20.6	17400	148	9	8.58	2 J	0.063 J	0.01 UJ	0.01 UJ	0.01 UJ	0.005 UJ	1.5 J	1 UJ
8/6/2001 6:55	21.1	8410	158	8.48	8.39	2	0.083	0.01 U	0.01 U	0.01 U	0.005 U	1.3	1 UJ
9/10/2001 6:50	19	6060	166	8.48	8.18	1 J	0.089 J	0.01 UJ	0.01 UJ	0.01 UJ	0.003 UJ	1.2 J	