River and Stream Ambient Monitoring Report for Water Year 2000

December 2001

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River and Stream Ambient Monitoring Report for Water Year 2000

by
Dave Hallock

Environmental Assessment Program
Olympia, Washington 98504-7710

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Abstract

The Washington State Department of Ecology (Ecology) collected monthly water quality information at 88 river and stream monitoring stations during Water Year (WY) 2000 (October 1, 1999 through September 30, 2000). 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 2000. A description of Ecology's 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 has 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.)

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 River and Stream Ambient Monitoring Program 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) and other management reports, provide water quality information necessary to prioritize grant awards, and conduct miscellaneous site-specific evaluations.

The purpose of this report is to describe the Water Year (WY) 2000 monitoring program, discuss data quality, and present results.

More detailed analyses and interpretations of ambient monitoring data are reported elsewhere. Ecology's Environmental Monitoring and Trends Section (EMTS) analyzes results at specific stations in response to requests by clients (e.g., Hallock, 1996). Other programs conduct some analyses of their own; for example, the Ecology Water Quality Program applies its own data reduction procedures prior to updating Washington's 305(b) report.

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Methods

Sampling Network

The ambient monitoring network in WY 2000 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, allow expanded coverage over a long-term network, and support the "basin approach" to water quality management. This approach consists of a five-year cycle of scoping, data collection, data analysis, planning, and implementation of plans in 22 hydrologic Water Quality Management Areas (WQMA) or "basins" statewide (Wrye, 1993). Sampling was focused in the following basins during WY 2000: Upper Columbia/Pend Oreille, Horseheaven/Klickitat, Skagit/Stillaguamish, and Columbia Gorge. Some basin stations are selected to target known problems and may not necessarily reflect ambient conditions.

The locations of ambient stations monitored during WY 2000 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 Ecology EMTS on request. Also, a description of our long-term monitoring program and access to some historical data 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 2000 (Table 2). Except for two special projects (which are not reported here), metals monitoring was discontinued last year because funding was discontinued. Sample collection and analytical methods are described in earlier annual reports (e.g., Hallock, et al., 1998), our field monitoring protocols (Ward, 2000), the EMTS quality assurance documents (i.e., 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 2000. However, MEL changed several methods citations to better reflect current methods (see Appendix B). All earlier known and suspected changes to methods and procedures during the history of the River and Stream Ambient 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 2000. Stations in WQMAs scheduled for data collection are shown in bold type (Status: C=Core; B=Basin).

Station		Status	Station		Status
01A050	Nooksack R @ Brennan	C	32A070	Walla Walla R nr Touchet	C
01A120	Nooksack R @ No Cedarville	C	32A100	Walla Walla at east Detour Road Br	C
03A060	**Skagit R nr Mount Vernon**	**C**	32B080	Touchet at Sims Road	B
03A080	**Skagit abv Sedro Woolley**	**B**	32B100	Touchet R @ Bolles	B
03B045	**Samish R. nr Mouth**	**B**	33A050	Snake R nr Pasco	C
03B050	**Samish R nr Burlington**	**C**	34A070	Palouse R @ Hooper	C
03D050	**Nookachamp Ck nr Mouth**	**B**	34A170	Palouse R @ Palouse	C
03E050	**Joe Leary Slough nr Mouth**	**C**	34B110	SF Palouse R @ Pullman	C
03F070	**Hill Ditch @ Cedardale Rd**	**B**	35A150	Snake R @ Interstate Br	C
04A100	**Skagit R @ Marblemount**	**B**	35B060	Tucannon R @ Powers	C
05A070	**Stillaguamish R nr Silvana**	**C**	36A070	Columbia R nr Vernita	C
05A090	**SF Stillaguamish @ Arlington**	**C**	37A090	Yakima R @ Kiona	C
05A110	**SF Stilly nr Granite Falls**	**C**	37A205	Yakima R @ Nob Hill	C
05B070	**NF Stillaguamish @ Cicero**	**C**	38A050	Naches R @ Yakima on US HWY 97	B
05B110	**NF Stillaguamish nr Darringtn**	**C**	39A050	Yakima R @ Harrison Bridge	C
07A090	Snohomish R @ Snohomish	C	39A060	Yakima R @ Ellensburg	C
07C070	Skykomish R @ Monroe	C	39A090	Yakima R nr Cle Elum	C
07D050	Snoqualmie R nr Monroe	C	41A070	Crab Cr nr Beverly	C
07D130	Snoqualmie R @ Snoqualmie	C	45A070	Wenatchee R @ Wenatchee	C
08C070	Cedar R @ Logan St/Renton	C	45A110	Wenatchee R nr Leavenworth	C
08C110	Cedar R nr Landsburg	C	45C070	Chumstick Cr nr Leavenworth	B
09A080	Green R @ Tukwila	C	45D070	Brender Cr nr Cashmere	B
09A190	Green R @ Kanaskat	C	45E070	Mission Cr nr Cashmere	B
10A070	Puyallup R @ Meridian St	C	46A070	Entiat R nr Entiat	C
10C095	White River @ R Street	B	48A070	Methow R nr Pateros	C
11A070	Nisqually R @ Nisqually	C	48A140	Methow R @ Twisp	C
13A060	Deschutes R @ E St Bridge	C	49A070	Okanogan R @ Malott	C
16A070	Skokomish R nr Potlatch	C	49A190	Okanogan R @ Oroville	C
16C090	Duckabush R nr Brinnon	C	49B070	Similkameen R @ Oroville	C
17A060	Big Quilcene R nr mouth	B	49B110	Similkameen R. @ Chopaka br B. C.	B
17C070	Jimmycomelately Cr nr Mouth	B	53A070	Columbia R @ Grand Coulee	C
18A070	Dungeness R nr Sequim	B	54A090	Spokane R @ Ninemile Br	B
18B070	Elwha R nr Port Angeles	C	54A120	Spokane R @ Riverside State Pk	C
20B070	Hoh R @ DNR Campground	C	55B070	Little Spokane R nr Mouth	C
22A070	Humptulips R nr Humptulips	C	56A070	Hangman Cr @ Mouth	C
23A070	Chehalis R @ Porter	C	57A150	Spokane R @ Stateline Br	C
23A160	Chehalis R @ Dryad	B	**59A080**	**Colville R abv Kettle Falls**	**B**
24B090	Willapa R nr Willapa	C	**59A110**	**Colville R @ Blue Creek**	**B**
24F070	Naselle R nr Naselle	C	**59B070**	**Little Pend Oreille @ Hwy 395**	**B**
26B070	Cowlitz R @ Kelso	C	**60A070**	**Kettle R nr Barstow**	**C**
27B070	**Kalama R nr Kalama**	**C**	**61A070**	**Columbia R @ Northport**	**C**
27D090	**EF Lewis R nr Dollar Corner**	**C**	**61B070**	**Deep Ck nr Mouth**	**B**
28B110	**Washougal R blw Canyon Ck**	**B**	**62A090**	**Pend Oreille @ Metaline Falls**	**B**
31A070	**Columbia R @ Umatilla**	**C**	**62A150**	**Pend Oreille R @ Newport**	**C**

Table 2. Water quality constituents monitored monthly in Water Year 2000 as part of Ecology's river and stream ambient monitoring program.

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

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 quality control (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).

Eighty-seven field QC samples were processed: 5 field blanks and 82 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.

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Results and Discussion

The primary purpose of this report is to present the results of Ecology's stream monitoring in WY 2000. Appendix C contains results for each station monitored in WY 2000. 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). Water quality criteria 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.

				Fecal Coliform	
Class	Temperature	Oxygen	pH	10 Percent	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

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 4). 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 concentration data are truncated at the reporting limit, 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 that experienced in previous years.

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 total phosphorus, soluble reactive phosphorus, nitrate+nitrite, turbidity, and suspended solids results were reported as 'less than the reporting limits' (Table 5). Total persulfate nitrogen was detected in one sample of the five blanks submitted for analysis. Mean conductivity of blank samples was 2.2 µS (standard error=0.8 µS) with only one measurement above three µS.

The remaining elements of the laboratory QA program were assessed by laboratory staff through a manual review of laboratory quality control charts, check standards, in-house matrix spikes, and laboratory blanks. The results were within acceptable ranges as defined by MEL's Quality Assurance Manual (Ecology, 1988b).

Table 4. 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	0.24	*39*	NA	-	NA	-
PH	all	0.16	*39*	NA	-	NA	-
Dissolved oxygen	all	0.14	*43*	0.14	*41*	NA	-
Specific conductivity (mS)	all	4.80	*39*	NA	-	NA	-
Turbidity (NTU)	≤10 >10	0.37 5.78	*35* *8*	0.32 2.74	*31* *6*	0.21 0.78	*87* *41*
Suspended solids (mg L^{-1})	≤10 >10	1.20 8.43	*23* *11*	0.93 6.39	*18* *6*	0.59 5.83	*44* *46*
Total phosphorus (µg L^{-1})	≤50 >50	2.61 7.79	*29* *14*	1.63 6.19	*28* *10*	1.53 3.73	*66* *30*
Soluble reactive P (µg L^{-1})	≤50 >50	0.44 34.0	*41* *2*	0.58 13.0	*36* *2*	0.46 25.7	*133* *11*
Total Nitrogen (µg L^{-1})	≤500 >500	20.2 111	*31* *12*	10.0 42.1	*27* *11*	9.77 40.0	*65* *23*
NO_3/NO_2-N (µg L^{-1})	≤500 >500	14.8 9.22	*33* *10*	1.07 7.45	*29* *9*	1.26 5.68	*77* *22*
NH_3-N (µg L^{-1})	≤20 >20	0.81 13.4	*42* *1*	0.27 2.89	*35* *3*	0.32 5.32	*85* *9*
Fecal coliform (# 100 mL^{-1})	≤50 >50	3.06 11.9	*27* *5*	NA	-	2.00 7.83	*137* *2*

Table 5. 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 (2.2, 1.1)	*5*
Turbidity (NTU)	0.5	0	*5*
Suspended solids (mg L^{-1})	1.0	0	*5*
Total phosphorus (µg L^{-1})	10	0	*5*
Soluble reactive P (µg L^{-1})	5	0	*5*
Total Nitrogen (µg L^{-1})	10	1 (12, 4.9)	*5*
NO_3/NO_2-N (µg L^{-1})	10	0	*5*
NH_3-N (µg L^{-1})	10	0	*5*

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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 XXXXXXXXX	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	XXXXXXXXX	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 (USGS)	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 XXXXXXX	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 (USGS)	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 (USGS)	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 <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
27C080	Lewis R @ Co Rd 16	R					X	
27C110	Lewis R @ Ariel (USGS)	R	X	X	XXX	X		
27D090	EF Lewis R nr Dollar Corner	L			XXX	XXXXXXXXXX	XXX XXXXX	XX
27D100	EF Lewis R @ Heisson	R						
27D110	EF Lewis nr Heisson	R						
27E070	Cedar Cr nr Etna	R					X	
27F070	Gee Cr @ Ridgefield	R					X	
28A090	Columbia blw Vancouver WA	R		XX	X			
28A091	Columbia blw Vancouver OR	R		XX	X			
28A165	Columbia R @ Warrendale	R			XXXXXXX			
28A170	Columbia R blw Bonneville	R		XX	X			
28A175	Columbia R @ Bonneville Dam	R		XX	X X			
28B070	Washougal R @ Washougal	R		X	X XX XX		X	
28B090	Washougal R nr Washougal	R		XXXXXXXX	X			
28B110	Washougal R blw Canyon Ck	R					X X	X
28C070	Burnt Br Cr @ Mouth	R			X			
28C110	Burnt Br Cr @ Vancouver	R			X			
28D070	Salmon Cr @ Salmon Creek	R			X			
28D110	Salmon Cr nr Battle Ground	R			X			
28E070	Weaver Cr nr Battle Ground	R			X			
28F070	Lake R nr Ridgefield	R					X	
28G070	Gibbons Ck nr Washougal	R					X	
28H070	Campen Cr. nr Washougal	R						
29B070	White Salmon R nr Underwood	R		XXXXXXXXXX	X XX XXXX	XXXX	X	
29C070	Wind R nr Carson	R			X XXXX	XXXX	X	
29D070	Rattlesnake Cr nr Mouth	R					XXX	
29E070	Gilmer Cr nr Mouth	R					XXX	
30A070	Columbia R @ The Dalles	R		XX	XXXXXXXX		X	
30A090	Columbia R @ The Dalles Dam	R		X				

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 (USGS)	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	
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		
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				
34A110	Palouse R abv Buck Canyon	R		X XX				
34A120	Palouse R at Colfax	R						

Station Number	Name	Long-term or Rotating	Water Year Sampled <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
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	
35D070	Asotin Cr @ Asotin	R		X		X X	
35E070	Clearwater R @ US12/95	R				X	

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
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			
37E120	Wide Hollow Creek @ Randall Park	R					X
37F070	Sulfur Ck Wasteway @ McGee Rd	R				X	

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
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				
41A090	Crab Cr nr Othello	R		X			
41A101	Crab Creek @ McMannon Road	R					

Station Number	Name	Long-term or Rotating		Water Year Sampled <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
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						
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		
48A140	Methow R @ Twisp	L				X	XX X XXXXX	XX
48A170	Methow R @ Weeman Br	R			X			

Station Number	Name	Long-term or Rotating	Water Year Sampled				
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
48A190	Methow R blw Gate Cr	R		X XX	X		
48B070	Chewack R @ Winthrop	R		X			
48C070	Andrews Cr nr Mazama (USGS)	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			
55B070	Little Spokane R nr Mouth	L		X X XXX	XXXXXXXXXX	XX XXXXXX	XX
55B075	Little Spokane @ Painted Rocks	R				X	

Station Number	Name	Long-term or Rotating	Water Year Sampled <---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->
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 XXXXXXXXX	XXXXXXXXXX	XX	XXXXXXXXX	XX
61B070	Deep Ck nr Mouth	R				X	X
61C070	Onion Cr nr Northport	R				X	
61D070	Sheep Cr nr Northport	R				X	
62A070	Pend Oreille R @ Waneta BC (USGS)	R	XXX				

Station Number	Name	Long-term or Rotating	Water Year Sampled					
			<---1960s--->	<---1970s--->	<---1980s--->	<---1990s--->	<---2000s--->	
62A080	Pend Oreille R @ Border (USGS)	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 to collect and analyze river and 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.

TOTAL 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)

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.

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Appendix C

Water Year 2000 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

Central Region:	Dale Clark (360 407-6022; dcla461@ecy.wa.gov)
Eastern Region:	Dave Hallock (360 407-6681; daha461@ecy.wa.gov)
Northwest Region:	Bill Ward (360 407-6621; bwar461@ecy.wa.gov)
Southwest Region:	Rob Plotnikoff (360 407-6687; rplo461@ecy.wa.gov)

Ambient monitoring data from the most recent complete Water Year is 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 are interpreted as follows:

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

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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 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
10/19/1999 12:40	8.2	1520	141	10.9	7.5	11	0.348	0.01 UJ	0.289	0.035		6	9
11/2/1999 13:00	3.8	5010	83	11.4	7.8	67	0.659	0.01 U	0.5	0.095		60	290 J
12/7/1999 12:30	3.9	5480	88	11.5	7.5	45	0.658	0.021	0.541	0.052		26	23
1/18/2000 13:35	2.3	3190	112	12.7	7.5	16	0.879	0.016	0.762	0.031		9.3	15
2/15/2000 12:50	2.5	2480	110	12.4	7.6	10	0.739	0.012	0.637	0.022		4.5	11
3/21/2000 13:05	5.2	2980	109	11.7	7.8	16	0.686	0.021	0.613	0.041		8.9	4
4/18/2000 12:45	6.5	5460	81	11.1	7.6	96	0.411	0.014	0.32	0.043		25	19
5/16/2000 12:50	9.1	5560	71	10.9	7.8	92	0.303	0.01 U	0.215	0.038		24	70
6/20/2000 13:20	8.1	6060	73	11.1	7.4	78	0.259	0.01 U	0.237	0.044		30	13
7/18/2000 13:50	12	3300	71	10.4	7.6	21	0.139	0.01 U	0.126	0.017		16	28
8/22/2000 12:50	15.1	1960	89	10	7.63		0.23	0.01 U	0.201	0.019		7.2	110
9/19/2000 12:50	12.3	2100	80	11.01	7.56	50	0.237	0.01 U	0.176	0.082		45	100

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	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
10/19/1999	11:50	5.5	1160	116	11.8	7.6	16	0.175	0.01 UJ	0.136	0.037		11	5
11/2/1999	12:10	3.6	5920	71	12	7.8	29	0.392	0.01 U	0.324	0.068		33	9
12/7/1999	11:40	3.2	4180	72	12.1	7.7	26	0.337	0.01 U	0.286	0.031		13	5
1/18/2000	12:40	2.8	2460	87	13.2	7.7	11	0.388	0.01 U	0.338	0.023		9.5	7
		pH was 8.28 prior to recalibration												
2/15/2000	12:00	1.8	1880	85	12.9	7.6	4	0.292	0.01 U	0.26	0.01 U		3.3	4
3/21/2000	12:20	4.3	2280	84	12.3	7.9	4	0.276	0.01 U	0.263	0.023		5.3	11
4/18/2000	11:50	5.4	4970	68	11.7	7.6	44	0.25	0.01 U	0.19	0.033		17	6
5/16/2000	12:00	7.1	4830	58	11.6	7.7	43	0.167	0.01 U	0.108	0.023		20	7
6/20/2000	12:30	8	4730	59	11.5	6.9	33	0.105	0.01 U	0.104	0.033		22	5
7/18/2000	12:55	9.4	2870	59	11	7.6	18	0.051	0.01 U	0.043	0.018		12	3
8/22/2000	12:00	12.3	1650	76	11.7	7.92		0.083	0.01 U	0.062	0.017		7.9	18
9/19/2000	12:10	10.7	1930	68	11.81	7.58	43	0.095	0.021	0.063	0.084		50	19

Conventional Data Report

Skagit R nr Mount Vernon

03A060

Class: A
Rivermile: 15.9
Latitude: 48 26 42.0
Longitude: 122 20 03.0
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
10/20/1999	8:00	8.2	11000	131	10.6	6.8	5	0.102	0.01 UJ	0.059	0.016		2.4	10
11/2/1999	16:25	5.8	16300	46	11.6	7	11 J	0.185	0.01 U	0.132	0.022		5.3	39
12/7/1999	15:15	4.4	20400	54	11.7	7.3	21	0.229	0.01 U	0.18	0.029		14	15
1/19/2000	8:10	3.4		61	12.7	7.5	12	0.189	0.01 U	0.155	0.015		3.6	3
2/15/2000	15:30	3	16400	62	12.5	7.4	8	0.155	0.01 U	0.117	0.01		2	4
3/21/2000	16:10	5	12700	64	12.4	7.4	7	0.149	0.01 U	0.124	0.015		3	1 U
4/18/2000	15:25	7.4	18200	52	11.4	7.5	13	0.173	0.01 U	0.113	0.01 U		4.4	4
5/16/2000	15:30	9.4	17000	47	11.1	7.6	13	0.154	0.01 U	0.077	0.012		4.1	12
6/20/2000	15:45	8.3	24400	38	11.7	7.5	22	0.103	0.01 U	0.077	0.016		8	1
7/19/2000	7:20	10.5	18300	39	10.9	7.5	11	0.059	0.01 U	0.046	0.01 U		5.7	1
8/22/2000	15:30	14.8	8990	49	10.3	7.44		0.077	0.01 U	0.051	0.01		3.5	2
9/19/2000	15:40	13.3	12500	46	11.31	7.53	22	0.058	0.01 U	0.046	0.022		11	28

Conventional Data Report

Skagit abv Sedro Woolley

03A080

Class: A
Rivermile: 24.4
Latitude: 48 29 23.3
Longitude: 122 12 15.9
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
10/20/1999	10:30	8.2		52	10.7	7.4	3	0.098	0.01 UJ	0.054	0.016		1.9	1
11/3/1999	9:30	5.7		49	11.3	7.3	10 J	0.159	0.01 U	0.11	0.016		3.2	9
12/8/1999	8:30	4		54	11.7	7.3	10	0.222	0.01 U	0.173	0.02		6.5	4
1/19/2000	9:10	2.5		61	12.8	7.4	5	0.183	0.01 U	0.146	0.014		3.6	1 U
2/16/2000	8:35	2.8		59	12.5	7.4	3	0.144	0.01 U	0.109	0.01 U		2.5	2
3/22/2000	8:45	4.3		64	12	7.5	5	0.135	0.01 U	0.11	0.036		2.6	1
4/19/2000	8:45	6.1		52	11.4	7.4	8	0.173	0.01 U	0.104	0.01 U		5.3	1 U
5/17/2000	7:55	7.6		43	11.1	7.4	14	0.147	0.01 U	0.088	0.01		5.3	19
6/21/2000	7:55	8.3		38	11	7.5	17	0.109	0.01 U	0.071	0.014		7.4	7
7/19/2000	8:30	9.8		39	10.8	7.1	9	0.058	0.01 U	0.043	0.01 U		4.4	7
8/23/2000	7:50	13.2		47	10.3	7.26		0.069	0.01 U	0.045	0.01 U		3.1	1 U
9/20/2000	7:45	13		45	10.4	7.46	113	0.104	0.01 U	0.025	0.112		70	10

Conventional Data Report

Samish R. nr Mouth

03B045

Class: A
Rivermile: 4.7
Latitude: 48 31 15.9
Longitude: 122 24 35.9
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
10/19/1999 14:35	7.4		155	11	6.9	5	0.779	0.036 J	0.54	0.051		2.3	97
11/2/1999 15:00	7.4		82	11.1	6.6	6	0.837	0.01 U	0.573	0.042		6.3	63
pH meter was w/i .07 of standard													
12/7/1999 14:20	4.9		71	11.5	7.3	13	1.21	0.016	1.04	0.034		9	29
1/18/2000 15:45	2.6		76	12.4	7.2	13	1.29	0.162	1.13	0.032		7.9	25
Too windy for tapedown													
2/15/2000 14:50	3.5		79	11.8	7.2	8	1.08	0.01	0.898	0.033		6.4	170
3/21/2000 15:10	6		74	11.5	6.9	12	0.946	0.01 U	0.867	0.041		8.9	13
4/18/2000 14:30	8.6		69	10.4	7.2	30	1.06	0.022	0.829	0.054		21	48
5/16/2000 14:45	11		72	10.1	7.4	17	0.808	0.014	0.643	0.034		11	23
6/20/2000 15:00	12.3		83	10.2	7.4	13	0.735	0.01 U	0.571	0.033		5.3	41
7/18/2000 15:40	13.8		117	12.4	8	13	0.644	0.01 U	0.54	0.017		4.7	66
8/22/2000 14:40	15.9		121	10.9	7.66		0.753	0.02	0.691	0.029		3.5	92
Too windy for tapedown													
9/19/2000 15:00	14.7		123	10.7	7.59	4	0.685	0.01 U	0.589	0.034		2.7	140
Too windy for stage height													

Conventional Data Report

Samish R nr Burlington

03B050

Class: A
Rivermile: 10.4
Latitude: 48 32 46.0
Longitude: 122 20 13.0
Waterbody: WA-03-2010

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
10/19/1999	13:35	6.6	39	128	11	7.8	3	0.684	0.01 UJ	0.538	0.034		2	43
11/2/1999	13:55	5.4	152	76	11.4	7	5	0.795	0.01 U	0.549	0.034		5.1	92
12/7/1999	13:30	4.9	470	65	11.9	7.5	12	1.14	0.013	0.987	0.025		6.2	27
1/18/2000	14:25	2.6	482	65	12.8	7.3	9	1.2	0.01 U	1.08	0.02		5.9	30
2/15/2000	13:40	3.3	279	68	12.5	7.7	8	0.817	0.01 U	0.879	0.019		5.8	38
3/21/2000	13:55	6.3	434	64	11.8	7.2	22	0.902	0.01 U	0.836	0.025		6.4	4
		pH was 7.7 before recalibration												
4/18/2000	13:35	8.3	499	60	10.8	7.5	35	0.969	0.01 U	0.817	0.028		12	13
5/16/2000	13:45	10.9	345	64	10.4	7.6	15	0.804	0.011	0.628	0.019		7.9	36
7/18/2000	14:35	12.2	195	97	11.5	8	4	0.688	0.01 U	0.611	0.01		2.4	93
8/22/2000	13:35	13.7	57	105	10.1	7.66		0.761	0.014	0.74	0.027		2.9	88
9/19/2000	13:40	13.3	46	107	10.4	7.65	3	0.663	0.01 U	0.618	0.025		2.4	160

Conventional Data Report

Nookachamp Ck nr Mouth

03D050

Class: A
Rivermile: 1.9
Latitude: 48 27 13.9
Longitude: 122 16 13.3
Waterbody: WA-03-1017

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
10/20/1999 9:30	5.7	21	145	9	7.2	4	0.755	0.032 J	0.408	0.058		3.8	40
11/3/1999 8:05	3.9		107	8.8	6.7	6	1.25	0.19	0.492	0.09		6.3	660 J
To windy for tape down													
12/8/1999 7:50	3.5	290	97	10	7.3	5	1.05	0.03	0.725	0.095		4.7	17
pH was 7.2 prior to recalibration													
1/19/2000 8:40	0.8		94	12.1	7.2	7	1.24	0.057	0.997	0.065		7	16
Too windy for tapedown													
2/16/2000 8:00	2.1	136	98	11.4	7.2	7	1.28	0.197	0.774	0.071		8.2	590 J
3/22/2000 8:05	5.7	176	93	10.5	7.2	14	0.819	0.026	0.621	0.057		7	20
pH was 7.3 before recalibration													
4/19/2000 8:10	8.4	289	81	9	7.3	18	0.707	0.021	0.464	0.051		10	53
pH was 7.37 prior to recalibration													
5/17/2000 7:20	10.4	278	80	9	7.3	18	0.583	0.031	0.275	0.07		8.6	40
6/21/2000 7:15	14.2	392	90	7.3	7.2	10	0.519	0.02	0.216	0.066		5.8	230
7/19/2000 7:45	15.2	236	146	8.9	7.1	7	0.742	0.012	0.453	0.068		4.9	370
8/23/2000 7:15	15	4.2	185	4.8	6.92		1.01	0.156	0.724	0.08		6.4	120
9/20/2000 7:10	13.8	85	121	7.77	7.3	7	0.453	0.044	0.322	0.052		4.2	150

Conventional Data Report

Joe Leary Slough nr Mouth

03E050

Class: A
Rivermile:
Latitude: 48 31 7.5
Longitude: 122 26 59.3
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
10/19/1999 14:15	8.3		570	0.3	6.9	57	1.48	0.69 J	0.01 U	0.991		290	8 U
11/2/1999 14:35	6.4		452	0.1	6.8	55	1.78	0.647	0.01 U	1.39		80	16
	Visible oily sheen on water surface												
12/7/1999 14:00	6		339	2.4	6.5	8	3.98	0.923	2.29	0.253		26	3
	pH meter W/I .01 of standard												
1/18/2000 15:00	4.3		300	4.5	6.8	21	3.48	0.981	2.08	0.274		50	84
	pH meter W/I .02 of standard												
2/15/2000 14:30	5.5		296	4	6.8	31	2.19	0.835	0.649	0.36		60	40
3/21/2000 14:45	8.2		317	4.1	6.6	163	2.21	0.94	1.04	1.05		200	130
	pH meter W/I .05 of standard												
4/18/2000 14:15	9.9		274	4.7	6.7	67	2.48	0.626	1.02	0.381		77	200
5/16/2000 14:25	12.5		323	3.8	6.9	71	1.95	0.772	0.354	0.516		100	100
6/20/2000 14:40	13.5		323	4.3	6.9	44	1.81	0.954	0.342	0.403		70	56
7/18/2000 15:15	13.8		345	3.9	6.9	22	1.64	0.982	0.195	0.289		65	74
8/22/2000 14:20	15.7		356	4.9	6.93		1.52	0.967	0.272	0.27		55	71
9/19/2000 14:40	14.8		351	6.26	6.97	6	1.25	0.78	0.108	0.154		29	10

Conventional Data Report

Hill Ditch @ Cedardale Rd

03F070

Class: A
Rivermile:
Latitude: 48 19 25.0
Longitude: 122 19 37.7
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
10/20/1999 11:25	7.1	1.7 J	257	7	7.4	1	0.686	0.01 UJ	0.398	0.072		1.7	18
11/3/1999 10:20	4.6	5.5 J	249	6.6	7.6	2	0.718	0.01 U	0.364	0.058		1.8	38
12/8/1999 9:25	3.8	70.3 J	149	8.6	7.4	1	1.26	0.011	0.948	0.049		3.2	11
1/19/2000 10:05	1.7	51.5 J	131	11.4	7.8	2	1.56	0.01 U	1.36	0.041		4.7	28
2/16/2000 9:20	2.3	25.1 J	154	10.9	7.6	3	1.23	0.01 U	0.967	0.053		7.3	40
3/22/2000 9:45	5.9	48.7 J	146	10	7.7	6	1.11	0.01 U	0.904	0.039		5.1	31
4/19/2000 9:35	8.6	50.7 J	141	9.2	7.4	9	1.15	0.013	0.928	0.051		6.9	49
5/17/2000 8:50	10.8	38.5 J	149	8.3	7.4	5	1.11	0.018	0.741	0.063		4.6	69
6/21/2000 8:45	13.3	34.7 J	168	6.5	7.4	4	0.698	0.031	0.368	0.073		3.3	130
7/19/2000 9:15	15.4	4.4 J	223	4.7	7.4	3	0.317	0.028	0.023	0.056		3.3	91
8/23/2000 8:50	17.3	7.3 J	223	5.9	7.45		0.453	0.038	0.183	0.098		2.7	150
9/20/2000 8:30	15.9	6 J	231	3.53	7.33	3	0.466	0.046	0.332	0.094		2.5	100

Conventional Data Report

Skagit R @ Marblemount

04A100

Class: AA
Rivermile: 78.2
Latitude: 48 31 35.0
Longitude: 121 25 40.0
Waterbody: WA-04-1090

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
10/19/1999	9:50 7.1	4270	63	11	7.7	1	0.112	0.01 UJ	0.07	0.011		1.7	2
11/2/1999	10:00 5.5	5350	44	12.3	7.4	1 U	0.112	0.01 U	0.075	0.012		0.6	4
12/7/1999	9:45 4.7	6230	46	11.6	7.5	2	0.103	0.01 U	0.076	0.01 U		2.2	1
1/18/2000	10:20 4.9	7560	60	12.3	7.7	1	0.1	0.01 U	0.07	0.01 U		1.1	1 U
2/15/2000	9:45 2.6	6610	58	12.4	7.9	1 U	0.082	0.01 U	0.066	0.01 U		0.5	1 U
3/21/2000	10:10 2.9	6090	63	12.6	7.9	1 U	0.067	0.01 U	0.06	0.01 U		0.5	1 U
4/18/2000	9:55 4	5780	48	12.2	7.5	1 U	0.104	0.01 U	0.081	0.01 U		0.7	1 U
5/16/2000	10:05 4.9	6370	37	12.3	7.5	5	0.153	0.01 U	0.093	0.01		1.6	3
6/20/2000	10:35 5.9	6180	28	12.2	7.4	3	0.065	0.01 U	0.07	0.01 U		1.8	1 U
7/18/2000	10:45 7.2	7230	37	11.8	7.4	2	0.066	0.01 U	0.054	0.01 U		0.9	2
8/22/2000	10:20 10.4	2620	42	11.4	7.47		0.07	0.01 U	0.06	0.01 U		1.2	1
9/19/2000	10:25 10.2	4080	44	11.91	7.52	1	0.039 J	0.01 U	0.058	0.01 U		0.8	3

Conventional Data Report

Stillaguamish R nr Silvana

05A070

Class: A
Rivermile: 11.1
Latitude: 48 11 50.0
Longitude: 122 12 34.0
Waterbody: WA-05-1010

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
10/20/1999 12:05	6.9	1020	75	11	7.4	3	0.326	0.01 UJ	0.252	0.033		4.1	46
11/3/1999 11:00	4	2780	51	11.7	7.3	13 J	0.375	0.01 U	0.317	0.029		11	11
	pH was 7.8 prior to recal.												
12/8/1999 10:00	3.5	5620	47	12	7.2	26	0.419	0.01 U	0.359	0.044		20	11 J
	pH was 7.41 prior to recalibration												
1/19/2000 10:50	0.8	2760	65	13.2	7.7	13	0.492	0.01 U	0.452	0.031		16	5
2/16/2000 10:10	2	2350	58	12.7	7.5	38	0.4	0.01 U	0.349	0.065		50	7
3/22/2000 10:25	4.3	3320	53	11.9	7.7	16	0.301	0.01 U	0.284	0.026		14	7
4/19/2000 10:10	6.1	5020	40	11.4	7.6	37	0.232	0.01 U	0.166	0.027		13	12
5/17/2000 9:45	7.6	5620	34	11.3	7.8	22	0.211	0.01 U	0.125	0.016		11	20
6/21/2000 9:30	10.3	3380	45	10.6	7.7	12	0.196	0.01 U	0.141	0.019		8.7	17
7/19/2000 10:00	13	1410	54	10.5	7.7	3	0.069	0.01 U	0.033	0.01 U		2	20
8/23/2000 9:30	16.7	678	80	9.1	7.51		0.204	0.015	0.144	0.021		3.9	38
9/20/2000 9:05	14.6	1090	64	9.69	7.52	30	0.192	0.01 U	0.113	0.081		50	100

Conventional Data Report

SF Stillaguamish @ Arlington

05A090

Class: A
Rivermile: 18.2
Latitude: 48 12 03.0
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
10/18/1999 16:25	7.5		68	11.2	7.4	4	0.272	0.01 UJ	0.223	0.025		5.3	9
11/1/1999 16:25	4.8		36	11.9	7.2	24	0.366	0.01 U	0.291	0.038		21	17
12/6/1999 15:35	4.3		33	12.2	7.3	556	0.288 J		0.19	0.437			54
1/17/2000 16:55	3.5		45	13	7.4	118	0.458	0.01 U	0.384	0.182		110	9
2/13/2000 15:10	3		49	12.5	7.5	23	0.388	0.01 U	0.324	0.06		38	4
3/20/2000 15:35	3.4		38	12.9	7.5	34	0.276	0.01 U	0.251	0.027		24	1
4/17/2000 15:00	6.7		35	11.8	7.6	27	0.251	0.01 U	0.191	0.024		18	3
5/15/2000 13:35	8.7		34	11.4	7.5	12	0.218	0.01 U	0.149	0.012		5.7	3
6/19/2000 15:20	8.7		32	11.4	7.5	16	0.132	0.01 U	0.119	0.02		13	7
7/17/2000 16:15	17.2		42	10.5	7.8	3	0.091	0.01 U	0.057	0.01 U		1.6	4
8/21/2000 15:10	17.5		54	10	7.56		0.24	0.032	0.196	0.047		29	64
9/18/2000 15:50	15.3		62	10.6	7.53	7	0.173	0.01 U	0.14	0.023		16	88

Conventional Data Report

SF Stilly nr Granite Falls

05A110

Class: AA
Rivermile: 34.6
Latitude: 48 06 12.0
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
10/18/1999	15:00	5.3		56	11.7	7.3	5	0.159	0.01 UJ	0.12	0.028		7.8	5
11/1/1999	15:00	4.2		31	12.3	7.1	47	0.247	0.01 U	0.191	0.054		33	3
12/6/1999	14:00	3.8		25	12.7	7.4	649	0.177 J		0.088	0.367			38
1/17/2000	15:42	2		37	13.5	7.8	135	0.207	0.011	0.158	0.138		100	2
2/13/2000	13:50	1.3		40	13.2	7.8	46	0.144	0.01 U	0.121	0.064		40	2
3/20/2000	13:55	2.2		32	13.3	7.7	56	0.147	0.01 U	0.125	0.075		28	2
4/17/2000	13:40	4.3		29	12.4	7.3	39	0.132	0.01 U	0.093	0.034		23	5
5/15/2000	12:10	5.5		28	12.3	7.5	25	0.136	0.01 U	0.077	0.012		7.2	6
6/19/2000	14:10	6.2		26	12.2	7.4	12	0.07	0.01 U	0.064	0.034		30	7
7/17/2000	15:00	12.6		36	10.5	7.1	4	0.033	0.01 U	0.019	0.01 U		2.8	3
8/21/2000	13:50	14		42	10.7	7.59		0.121	0.015	0.09	0.037		17	26
9/18/2000	14:25	14.4		50	10.7	7.6	31	0.108	0.019	0.061	0.06		35	110

Conventional Data Report

NF Stillaguamish @ Cicero

05B070

Class: A
Rivermile: 9.5
Latitude: 48 16 05.0
Longitude: 122 00 44.0
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
10/18/1999	16:00	7.3	583	82	11.3	7.5	6	0.256	0.01 UJ	0.197	0.038		9.3	9
11/1/1999	15:50	4.9	2350	41	11.9	7.1	28	0.447	0.01 U	0.366	0.056		23	2
12/6/1999	15:05	4.6	5000	33	12.1	7.2	384	0.281	0.056	0.186	0.205			15
1/17/2000	16:25	4.3	1530	51	12.6	7.5	32	0.377	0.01 U	0.296	0.057		24	7
2/13/2000	14:50	3	1200	56	12.4	7.4	18	0.251	0.01 U	0.204	0.032		17	3
3/20/2000	15:00	3.7	1730	46	12.6	7.8	22	0.217	0.01 U	0.192	0.033		16	1
		Bridge painting project being set up												
5/15/2000	13:00	7.7	2490	38	11.7	7.5	13	0.164	0.01 U	0.099	0.014		7.2	6
6/19/2000	15:00	8.1	1890	40	11.3	7.4	28	0.115	0.01 U	0.109	0.02		9.7	4
7/17/2000	15:45	15.7	670	53	11.2	8	4	0.052	0.01 U	0.015	0.01 U		2.9	2
8/21/2000	14:40	15.8	410	70	11.2	7.92		0.114	0.01 U	0.059	0.018		4	15
9/18/2000	15:25	13.9	378	77	11.01	7.69	5	0.095	0.01 U	0.085	0.021		4	46

Conventional Data Report

NF Stillaguamish nr Darrington

05B110

Class: A
Rivermile: 30
Latitude: 48 16 48.0
Longitude: 121 42 04.0
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
10/19/1999	8:35	4.9	81.8	69	11.1	7.3	1	0.222	0.01 UJ	0.172	0.019		0.5	14
11/2/1999	8:40	3.4	558	36	11.9	7.3	4	0.315	0.01 U	0.275	0.015		2.7	11
12/7/1999	8:20	3.3	1150	34	12.1	7.2	11	0.223	0.01 U	0.184	0.018		7	2
1/18/2000	9:00	3.1	453	45	12.7	8	6	0.256	0.01 U	0.209	0.017		6.5	6
2/15/2000	8:30	1.9	379	43	12.3	7.5	1 U	0.173	0.01 U	0.159	0.01 U		0.8	4
3/21/2000	8:50	2.7	564	40	12.5	7.5	2	0.146	0.01 U	0.138	0.01 U		1.3	3
		pH was 7.56 before recalibration												
4/18/2000	8:40	3.3	800	31	12	7.6	4	0.134	0.01 U	0.112	0.01 U		3.1	5
5/16/2000	9:00	4.5	878	27	12	7.6	6	0.141	0.01 U	0.073	0.01		2.2	6
6/20/2000	9:00	5.7	581	32	11.8	7.4	2	0.075	0.01 U	0.087	0.01 U		0.9	14
7/18/2000	9:10	8.3	225	34	11.4	7.3	5	0.077	0.01 U	0.053	0.01 U		0.8	14
8/22/2000	9:00	10.7	72.1	54	10.8	7.36		0.099	0.01 U	0.083	0.01 U		0.8	12
9/19/2000	9:30	11.6	139	42	11.31	7.44	1 U	0.056	0.01 U	0.059	0.01 U		0.5	31

Conventional Data Report

Snohomish R @ Snohomish

07A090

Class: A
Rivermile: 12.7
Latitude: 47 54 38.0
Longitude: 122 05 52.0
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
10/18/1999	13:50	7.3	3810	53	10.9	7.1	4	0.289	0.01 UJ	0.209	0.021		2.6	22
		Ph was 7.3 before recalibration												
11/1/1999	14:00	5.4	12500	31	11.7	7	18	0.385	0.01 U	0.277	0.031		12	57
12/6/1999	13:00	4.8	15675	41	11.6	6.9	9	0.493	0.018	0.392	0.025		5.5	42
1/17/2000	14:45	4.6	8560	49	12.3	7.2	5	0.636	0.012	0.525	0.018		4.7	13
2/13/2000	12:50	2.8	6910	49	12.2	7.2	1	0.17	0.01 U	0.177	0.01 U		2	1 U
3/20/2000	13:00	3.8	10800	39	12.5	7.1	15	0.384	0.023	0.339	0.022		9	10
4/17/2000	12:35	5.3	17250	32	11.8	7.3	28	0.271	0.01 U	0.212	0.019		9.7	33
5/15/2000	11:05	8.4	13440	34	11.1	7.2	10	0.214	0.01 U	0.148	0.012		2.6	27
6/19/2000	12:55	7.5	17020	25	11.4	7.2	5	0.107	0.01 U	0.098	0.01 U		4.7	17
7/17/2000	13:45	13.6	5875	38	10.5	7.2	7	0.138	0.021	0.082	0.01 U		2.3	4
8/21/2000	12:50	15.9	2570	51	9.69	7.26		0.204	0.011	0.149	0.011		1.5	36
9/18/2000	13:30	15.9	2740	48	9.59	7.17	2	0.163	0.01 U	0.155	0.014		1.7	43

Conventional Data Report

Skykomish R @ Monroe

07C070

Class: A
Rivermile: 25.6
Latitude: 47 51 08.0
Longitude: 121 57 29.0
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
10/18/1999	13:00	7.5	4900	41	11.3	7.4	2	0.189	0.01 UJ	0.128	0.013		2.9	3
11/1/1999	13:10	5.2	8360	28	12	7.2	4	0.29	0.01 U	0.226	0.015		3.2	8
12/6/1999	11:55	4.3	9800	31	12	7.1	10	0.242	0.01 U	0.196	0.017		6.3	5
1/17/2000	13:35	3.7	4990	36	13.1	7.2	3	0.271	0.01 U	0.229	0.012		3.5	1
2/13/2000	11:45	2.2	4150	38	12.8	7.7	4	0.481	0.014	0.387	0.011		3	5
3/20/2000	12:10	3.3	6020	33	13	7.6	3	0.195	0.01 U	0.176	0.01 U		2.4	1
4/17/2000	11:55	4.7	10200	27	12.1	7.3	5	0.141	0.01 U	0.125	0.01 U		3.4	2
5/15/2000	10:40	6.4		28	11.9	7.3	4	0.146	0.01 U	0.084	0.012		3.6	9
		No key to USGS WWG box												
6/19/2000	12:15	6.1	11500	21	12.2	7.2	10	0.061	0.01 U	0.055	0.01 U		2.7	8
7/17/2000	12:00	11.6	4800	27	10.9	7.1	2	0.049	0.01 U	0.032	0.01 U		1.2	7
8/21/2000	12:00	14.6	2220	36	11	7.38		0.082	0.01 U	0.044	0.01 U		1.2	7
9/18/2000	12:15	14.5	2200	37	10.4	7.28	3	0.082	0.01 U	0.063	0.01 U		1.4	14

Conventional Data Report

Snoqualmie R nr Monroe

07D050

Class: A
Rivermile: 2.7
Latitude: 47 48 14.0
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
10/18/1999 12:20	7	542	58	11	7.6	3	0.317	0.01 UJ	0.25	0.022		1.8	15
11/1/1999 12:40	6		28	11.7	7.1	30	0.414	0.01 U	0.288	0.033		18	84
	Too windy for tape down												
12/6/1999 11:20	5.1		44	11.3	7.1	12	0.586	0.023	0.482	0.033		5.5	45
	Too windy for tapedown												
1/17/2000 13:10	5.2	3600	49	12	7	6	0.669	0.01	0.563	0.02		4.1	13
2/13/2000 11:00	2.9		50	12.1	7.1	6	0.519	0.01 U	0.419	0.014		4.1	23
	Too Windy for RP. Observed brown plumes of water in river.												
3/20/2000 11:25	3.7		40	12.2	7.5	16	0.421	0.01 U	0.372	0.031		9.8	31
	Too windy for tapedown												
4/17/2000 11:20	5.2	7800	31	11.7	7.3	24	0.329	0.01 U	0.256	0.024		10	77
5/15/2000 10:05	9.2		35	10.7	7.1	8	0.273	0.01 U	0.195	0.012		2.6	13
	Too windy for RP												
6/19/2000 11:40	8.2	7030	27	11.1	7.1	12 J	0.178	0.01 U	0.151	0.012		5.8	25
7/17/2000 11:20	14.5		46	9.8	7.1	3	0.179	0.01 U	0.132	0.01 U		1.9	10
	Too windy for Tapedown												
8/21/2000 11:25	16.3		64	9.5	7.26		0.294	0.013	0.259	0.015		1.9	51
	Too windy for Tapedown												
9/18/2000 11:40	16.5	193	53	9.79	7.19	3	0.241	0.01 U	0.214	0.019		2.3	43

Conventional Data Report

Snoqualmie R @ Snoqualmie

07D130

Class: A
Rivermile: 42.3
Latitude: 47 31 40.0
Longitude: 121 48 40.0
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
10/18/1999 10:50	5.7	955	51	11.2	7.1	3	0.253	0.01 UJ	0.207	0.016		1.3	9
11/1/1999 11:40	4.2	3100	26	11.9	7.4	6	0.312	0.01 U	0.252	0.017		4.4	9
12/6/1999 10:15	4.1	3750	31	11.7	7.1	12	0.303	0.01 U	0.266	0.019		7.4	8
1/17/2000 11:10	4.5	1760	41	12.4	7.2	3	0.368	0.01 U	0.332	0.011		3.5	3
2/13/2000 9:40	2	1740	39	12.3	7.6	2	0.301	0.01 U	0.258	0.01 U		2.4	3
3/20/2000 10:25	2.6	2400	34	12.7	7.9	5	0.258	0.014	0.248	0.012		4.8	1 U
4/17/2000 10:05	3.8	4290	24	12.1	7.7	15	0.216	0.01 U	0.178	0.01 U		5.3	2
5/15/2000 9:10	5.8	3790	24	11.7	7.5	9	0.193	0.01 U	0.135	0.01		3.2	22
6/19/2000 10:00	6.3	3790	21	11.6	7.2	6	0.126	0.01 U	0.111	0.01 U		3.5	13
7/17/2000 10:00	11.2	1240	34	10.5	7.1	3	0.153	0.01 U	0.108	0.01 U		1.3	10
8/21/2000 9:45	12.8	437	50	9.69	7.1		0.2	0.01 U	0.18	0.01 U		1.2	27
9/18/2000 10:20	13.5	552	46	9.89	7.11	11	0.18	0.01 U	0.183	0.013		1.3	38

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-08-1140

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
10/20/1999 14:00	8.3	415	63	11.5	7.4	3	0.209	0.01 UJ	0.154	0.028		0.8	20
11/3/1999 13:10	6.6	397	63	11.5	7.4	2	0.218	0.01 U	0.17	0.022		0.6	29
12/8/1999 12:00	5.4	1760	44	11.7	7.6	9	0.305	0.01 U	0.257	0.022		3.9	13
1/19/2000 12:30	3.9	776	60	12.6	7.7	1	0.413	0.01 U	0.377	0.015		0.9	3
2/16/2000 11:40	5.1	520	66	12.7	8.2	2	0.411	0.01 U	0.376	0.012		0.9	10
	pH meter W/I .06 of standard												
3/22/2000 12:00	5.8	692	64	12.1	7.6	7	0.329	0.01 U	0.304	0.02		4.1	140 J
	pH was 7.9 before recalibration												
4/19/2000 12:00	7.5	1190	44	11.7	7.6	15	0.221	0.01 U	0.154	0.015		2.9	25
5/17/2000 12:40	8.6	545	61	12.4	7.7	3	0.244	0.01 U	0.165	0.012		1	33
	pH was 8.03 prior to recalibration												
6/21/2000 10:50	10.1	734	54	11.9	7.9	6	0.15	0.01 U	0.091	0.011		1.3	37
	pH was 8.0 prior to recalibration												
7/19/2000 11:15	11.5		75		8.1	15	0.182	0.01 U	0.144	0.01 U		1.8	57
	No DO sample												
8/23/2000 11:10	14.8		84	12.5	8.33		0.22	0.01 U	0.177	0.019		1.5	51
9/20/2000 10:40	12.6		78	11.91	7.92	6	0.205	0.01 U	0.19	0.029		1.5	200

Conventional Data Report

Cedar R nr Landsburg

08C110

Class: AA
Rivermile: 25.1
Latitude: 47 23 28.0
Longitude: 121 55 08.0
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
10/18/1999 9:45	7.7	509	60	11.1	7.6	7	0.165	0.01 UJ	0.127	0.02		0.5 U	3
11/1/1999 10:25	6.6	479	49	11.3	7.6	1 U	0.176	0.01 U	0.153	0.018		0.5 U	2
12/6/1999 9:25	5.3	1750	35	11.7	7.3	3	0.173	0.01 U	0.138	0.014		2.4	1 U
3/20/2000 9:30	4.3	622	48	12.3	7.8	2	0.198	0.01 U	0.199	0.012		0.5 U	1 U
4/17/2000 9:15	5.6	1050	39	11.6	7.6	2	0.187	0.01 U	0.147	0.01 U		1.1	3
5/17/2000 11:30	7.2	572	48	11.3	7.6	1	0.207	0.01 U	0.149	0.013		0.7	3
6/19/2000 8:55	8.3	1170	38	11.2	7.2	2	0.109	0.01 U	0.1	0.01 U		0.8	3
7/17/2000 9:05	7.8	359	65	10.9	7.3	1 U	0.192	0.01 U	0.176	0.01		0.9	1
8/21/2000 8:40	11	347	60	10.8	7.46		0.176	0.01 U	0.173	0.013		0.6	10
9/18/2000 9:25	10.2	267	65	11.21	7.49	1 U	0.189	0.01 U	0.185	0.016		0.9	1

Conventional Data Report

Green R @ Tukwila

09A080

Class: A
Rivermile: 12.4
Latitude: 47 27 52.0
Longitude: 122 14 49.0
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
10/20/1999 14:30	8.4	345	124	10.3	7.4	2	0.472	0.01 UJ	0.337	0.057		1.8	34
11/3/1999 13:40	5.7	479	101	10.8	7.1	3	0.398	0.01 U	0.267	0.047		2.2	20
12/8/1999 12:35	4.4	2990	62	11.5	7.4	16	0.519	0.01 U	0.433	0.057		8.5	9
1/19/2000 13:10	2.6	1180	100	12	7.4	5	0.772	0.012	0.664	0.042		3	11
2/16/2000 12:20	4.2	1170	97	11.4	7.3	6	0.687	0.01 U	0.56	0.047		3.8	14
3/22/2000 12:40	5.4	1340	88	11	7.4	11	0.473	0.01 U	0.422	0.04		5.3	24
4/19/2000 12:40	7.2	2470	52	11	7.5	22	0.3	0.01 U	0.218	0.032		6.6	24
5/17/2000 13:15	9.2	1690	64	10.5	7.7	12	0.308	0.01 U	0.195	0.026		2.4	45
6/21/2000 11:30	12.3	1030	81	9.5	7.5	9	0.366	0.01 U	0.269	0.044		3.4	22
7/19/2000 12:00	13.7	459	130		7.2	6	0.416	0.018	0.319	0.033		3.1	26
8/23/2000 11:50	17.5	232	16.3	9	7.33		0.456	0.044	0.361	0.049		2.5	29
9/20/2000 11:00	15.7	340	113	8.98	7.34	7	0.349	0.022	0.291	0.055		3.5	72

Conventional Data Report

Green R @ Kanaskat

09A190

Class: AA
Rivermile: 57.6
Latitude: 47 19 10.0
Longitude: 121 53 33.0
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
10/18/1999	8:40	7.9	248	63	10.9	7.1	1	0.175	0.01 UJ	0.098	0.024		0.7	4
11/1/1999	8:50	5.9	271	50	11.9	7.1	2	0.158	0.01 U	0.089	0.022		0.9	7
12/6/1999	8:30	3.9	2100	38	11.9	7.3	6	0.223	0.01 U	0.193	0.03			9
1/17/2000	9:40	4.1	735	47	12.8	7.7	1	0.209	0.01 U	0.192	0.018		0.9	1
2/13/2000	8:25	2.3	878	40	12.4	7.4	1 U	0.165	0.01 U	0.145	0.018		0.8	2
3/20/2000	8:35	2.9	1040	37	12.8	7.8	3	0.136	0.01 U	0.128	0.016		1.4	1 U
4/17/2000	8:35	4.7	1740	32	11.9	7.4	4	0.116	0.01 U	0.07	0.023		5.3	1 U
5/15/2000	8:10	6	1240	38	11.7	6.7	2	0.079	0.01 U	0.028	0.018		1.6	2
6/19/2000	8:10	8	1290	36	11.2	6.8	2	0.068	0.01 U	0.052	0.015		1.4	8
7/17/2000	8:15	10.2	318	48	10.3	7.2	2	0.112	0.01 U	0.064	0.014		1	10
		pH was 7.09 before recalibration												
8/21/2000	8:00	13.5	117	51	10.19	7.4		0.11	0.01 U	0.069	0.015		1.2	27
9/18/2000	8:30	14.5	341	49	10	7.73	3	0.092	0.01 U	0.05	0.019		1.4	10

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 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
10/20/1999 16:15	9.7	2440	68	10.2	7.6	9	0.15	0.01 UJ	0.084	0.057		15	20 J
11/3/1999 15:10	5.4	933	76	11.4	7.3	5	0.277	0.01 U	0.2	0.046		6.4	21
12/8/1999 14:05	4.4	4690	63	11.5	7.4	57	0.41	0.019	0.326	0.057		23	83 J
1/19/2000 14:40	1.9	3060	68	12.9	7.6	8	0.443	0.01 U	0.368	0.036		4.7	77
2/16/2000 14:30	0	3590	64	12.5	7.4	9	0.395	0.01 U	0.311	0.037		4.5	48
3/22/2000 14:20	5.4	3580	72	11.8	7.6	12	0.365	0.023	0.282	0.043		8.7	76
4/19/2000 14:10	8.5	3910	57	11.2	7.8	9	0.229	0.01 U	0.149	0.027		4.3	12
5/17/2000 14:50	9.2	3800	56	11.2	7.8	8	0.186	0.01 U	0.093	0.026		2.6	55
6/21/2000 13:50	10.9	4510	48	10.5	7.6	25	0.137	0.011	0.084	0.058		23	20
7/19/2000 13:35	12.5	3270	50	10.1	7.7	54	0.091	0.03	0.066	0.065		50	19
8/23/2000 13:25	15.2	1460	74	10.4	7.53		0.184	0.012	0.138	0.183		90	68
9/20/2000 13:10	12.4	3110	57	10.1	7.3	447	0.138	0.01 U	0.063	0.37		240	150

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
10/20/1999 15:30	9.1		97	11.3	8.1	6	0.294	0.01 UJ	0.221	0.077		8.5	1
11/3/1999 14:40	4.8		94	11.9	7.5	3	0.289	0.01 U	0.224	0.056		3.4	2
12/8/1999 13:20	3.7		65	12.2	7.5	112	0.431	0.01 U	0.355	0.048		7.8 J	28 J
1/19/2000 14:00	1.5		96	13.4	7.9	1	1.02	0.034	0.912	0.055		1.6	6
	pH meter W/I .00 of standard												
2/16/2000 13:50	4.6		75	12.9	8.2	4	0.532	0.01 U	0.445	0.041		1.8	3
	Too windy for RP. Ph meter W/I .02 of standard.												
3/22/2000 13:30	5.6		78	12.3	7.9	10	0.489	0.01 U	0.412	0.041		2.3	13
4/19/2000 13:35	10.2		67	11.4	8	10	0.216	0.01 U	0.142	0.03		2	3
5/17/2000 14:20	8.9		65	11.7	7.8	10	0.219	0.01 U	0.11	0.032		2.3	3
6/21/2000 13:00	12.7		55	10.5	7.8	45	0.146	0.01 U	0.089	0.049		15	3
7/19/2000 12:55	15		65	10.7	8.8	15	0.11	0.012	0.066	0.046		27	5
	pH meter W/I .02 of standard												
8/23/2000 12:45	17.3		73	10.4	8.25		0.076	0.016	0.045	0.066		33	4
	Too windy for Tapedown												
9/20/2000 12:30	14.2		65	10.5	7.64	718	0.219	0.01 U	0.119	1.21		950	20

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	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
10/27/1999 17:00	7.8	1430	63	10.7	7.8	17	0.179	0.01 U	0.103	0.075		45	5800 J
11/17/1999 16:30	7.7	3050	48	10.7	7.5	178	1.74	0.051	0.269	0.25		200	100
12/15/1999 15:55	6.1	6860	45	11.9	7.3	66	0.264	0.024	0.191	0.077		37	39
1/26/2000 16:20	3.5	2640	53	12.6	7.5	5	0.353	0.01 U	0.279	0.039		7.3	5
2/23/2000 15:00	4.2	2090	57	12.3	7.6	7	0.459	0.01 U	0.324	0.038		6	7
3/29/2000 17:05	6.2	1610	66	11.9	7.8	13	0.361	0.01 U	0.278	0.025		3.3	1 U
4/26/2000 18:30	10.5	1490	63	11.4	7	4	0.305	0.01 U	0.219	0.027		2.7	1
5/24/2000 15:35	9.1	2590	55	11.3	7.8	10	0.142	0.01 U	0.087	0.016		2.9	6
	pH Recalibrated												
6/28/2000 17:15	13.7	1410	61	10.7	8	9	0.155	0.01 U	0.087	0.015		3.4	13
7/26/2000 16:20	12.1		57	11.2	7.3	5	0.148	0.01 U	0.093	0.026		3.5	7
8/30/2000 16:25	14.6		59	10.34	7.8	7	0.149	0.011	0.089	0.042		15	10
9/27/2000 16:25	14.1		60	10.4	7.66	18	0.114	0.01 U	0.084	0.072		50	11

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
10/25/1999	8:10	7.6	102	137	10.1	7.2	3	0.966	0.01 U	0.811	0.059		1.6	44
11/15/1999	8:10	8.4	877	65	10.1	6.9	30	0.541	0.01 U	0.433	0.062		21	64 J
12/13/1999	8:10	4.8	1780	49	11.8	7.4	73	0.41	0.011	0.275	0.085		34	49
		pH Recalibrated												
1/24/2000	7:40	4.5	595	76	11.6	7.2	2	0.64	0.014	0.563	0.043		3.7	10
2/21/2000	7:45	5.1	404	89	10.8	7.4	4	0.77	0.01 U	0.705	0.041		4.4	3
		pH Recalibrated												
3/27/2000	7:15	6.8	508	91	10.8	7	6	0.594	0.01 U	0.525	0.03		3.8	6
4/24/2000	17:45		368	95	11.8	7.7	3	0.594	0.01 U	0.493	0.033		2.4	4
		Thermometer broke at this station.												
5/22/2000	7:50	10.7	263	106	9.4	6.9	6	0.624	0.01 U	0.486	0.035		2	23
6/26/2000	7:45	12	183	104	9.1	7.1	5	0.622	0.01 U	0.528	0.023		2.7	29
7/24/2000	8:25	11.6	126	122	9.2	7.3	7	0.798	0.01 U	0.692	0.052		3.3	29
8/28/2000	8:15	12.6	102	130	8.96	6.91	5	0.848	0.013	0.734	0.047 J		2.6	28
9/25/2000	8:00	9.3	90	130		7.34 J	4	0.817	0.01 U	0.756	0.056		2.9	15
		pH Recalibrated; pH=7.35 following recalibration												

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
10/26/1999	11:45	7	298	70	10.5	7.5	1	0.059	0.01 U	0.035	0.025		1	14
11/16/1999	11:45		1930											
11/16/1999	12:00	7		54	10.7	7.3	11	0.082	0.01 U	0.073	0.027		11	6
12/14/1999	11:30	5	3160	46	11.7	7.4	28	0.086	0.015	0.056	0.037		20	8
1/25/2000	11:10	5	1430	50	11.8	7.8	3	0.074	0.01 U	0.057	0.021		3.3	10
2/22/2000	10:40	5.1	888	55	11.2	7.4	4	0.064	0.01 U	0.039	0.013		2.2	4
		pH Recalibrated												
3/28/2000	11:05	5.7	840	58	11.6	7.8	3	0.033	0.01 U	0.03	0.012		1.5	1
4/25/2000	13:50	9.3	700	58	11.4	7.8	3	0.046	0.01 U	0.024	0.012		1.5	11
5/23/2000	11:15	7.6	592	61	11.2	7.8	39	0.051	0.01 U	0.017	0.01 U		0.9	5
6/27/2000	12:10	10.3	568	66	10.2	7.6	1	0.039	0.01 U	0.023	0.01 U		1	4
7/25/2000	11:20	9.3	318	67	10.6	7.3	3	0.04	0.01 U	0.021	0.022		0.6	2
8/29/2000	11:40	10.2	219	71	10.14	7.66	2	0.051	0.01 U	0.026	0.02		0.5 U	12
9/26/2000	12:05	9.2	181	72	10.1	7.38	2	0.037	0.01 U	0.039	0.022		0.8	8

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	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
10/26/1999 10:25	5	121	78	12.2	7.8	1 U	0.014	0.01 U	0.01 U	0.012		0.7	1
11/16/1999 10:25	5.4	978	52	12	6.9	7	0.033	0.01 U	0.025	0.014		6.1	3
12/14/1999 10:20	3.2	568	61	12.9	7.6	2	0.051	0.01 U	0.023	0.01 U		1.3	1 U
1/25/2000 10:00	3.2	335	58	12.8	7.7	1 U	0.039	0.01 U	0.022	0.01 U		0.6	1 U
2/22/2000 9:35	2.4	1210	36	12.4	7.8	30	0.08	0.01 U	0.028	0.015		11	5
3/28/2000 9:50	3.1	211	73	12.6	8	1 U	0.029	0.01 U	0.02	0.01 U		0.5 U	1
4/25/2000 12:20	7	340	67	12.5	7.9	2	0.059	0.01 U	0.037	0.01 U		1.7	1
5/23/2000 10:00	3.7	586	53	12.5	7.8	4	0.069	0.01 U	0.051	0.01 U		2.4	1 U
6/27/2000 10:50	5.8	568	54	11.7	8	2	0.027	0.01 U	0.02	0.01 U		1.9	1
7/25/2000 10:00	7.7	297	58	11.6	7.6	3	0.025	0.01 U	0.01 U	0.01 U		0.7	3
	pH was 7.68 prior to recalibration												
8/29/2000 10:10	9.1	109	73	11.23	7.78	3	0.048	0.01 U	0.021	0.01 U		0.5	1 U
9/26/2000 10:10	7.4	65	78	11.7	7.62	1	0.025	0.01 U	0.027	0.01 U		0.5	1

Conventional Data Report

Big Quilcene R nr mouth

17A060

Class: AA
Rivermile:
Latitude: 47 49 06.2
Longitude: 122 52 26.5
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
10/26/1999 9:40	5.9	41.3	151	11.6	7.4	2	0.078	0.01 U	0.039	0.019		0.6	1
11/16/1999 9:35	6.4	445	79	11.4	7.1	7	0.126	0.01 U	0.104	0.018		5.4	3
12/14/1999 9:35	3.6	379	82	12.5	7.8	2	0.13	0.014	0.092	0.017		1.2	1
1/25/2000 9:10	4.2	290	83	12.6	7.2	1	0.146	0.01 U	0.121	0.015		1.2	700 J
2/22/2000 8:50	4.2	305	85	12	7.6	14	0.125	0.01 U	0.083	0.012		4.5	9
3/28/2000 9:05	4.3	164	109	12.2	7.9	1	0.055	0.01 U	0.047	0.01 U		0.6	1 U
4/25/2000 11:15	8.3	201	93	12	8	1	0.06	0.01 U	0.035	0.01 U		0.8	3 U
5/23/2000 9:15	5.5	224	89	11.8	7.7	2	0.071	0.01 U	0.036	0.01 U		1.1	2
6/27/2000 9:40	8.2	174	96	11.1	8.1	2	0.054	0.01 U	0.024	0.01 U		0.9	1 U
7/25/2000 9:15	8.6	123	104	11.3	7.6	3	0.044	0.01 U	0.02	0.013		0.6	19
8/29/2000 9:25	10.4	67.6	136	11.23	7.66	1	0.051	0.01 U	0.022	0.01 U		0.5 U	2
9/26/2000 9:20	7.8	67.6	154	10.7	7.46	2	0.1	0.01 U	0.084	0.022		0.6	10

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
10/26/1999 8:45	5.6	2.5	249	11.2	7.9	1 U	0.11	0.01 U	0.04	0.044		0.5 U	3
11/16/1999 8:50	6.7	10.9	148	10.5	7.5	2	0.452	0.01 U	0.31	0.042		1.9	6
12/14/1999 8:50	2.6	26.6	119	12.3	7.7	2	0.432	0.01 U	0.257	0.038		3	25
1/25/2000 8:10	2.5	32.2	115	12.7	7.8	2	0.507	0.01 U	0.373	0.038		4.1	1
	pH Calibration Check												
2/22/2000 7:55	3.5	18.3	132	11.6	7.9	4	0.335	0.01 U	0.19	0.035		2.5	2
3/28/2000 8:20	4	14.5	149	12.1	8	2	0.152	0.01 U	0.091	0.026		1.4	3
4/25/2000 10:25	8	11.2	160	11.8	8	1	0.191	0.01 U	0.09	0.031		1.2	2
5/23/2000 8:25	7	14.5	158	11	7.8	2	0.268	0.01 U	0.13	0.036		1.9	25
6/27/2000 8:50	10.2	7.8	198	9.9	7.7	2	0.197	0.01 U	0.106	0.029		1.5	56
7/25/2000 8:25	10.8	5.4	221	10.5	7.9	4	0.167	0.01 U	0.093	0.05		0.6	35
8/29/2000 8:40	11.2	4.3	241	10.24	7.59	2	0.153	0.01 U	0.086	0.042		0.5 U	44
9/26/2000 8:30	8.1	4.2	249	10.9	7.95	2	0.111	0.01 U	0.085	0.042		0.5 U	13

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
10/26/1999 8:10	4.4	160	140	12.1	7.5	1	0.015	0.01 U	0.01 U	0.014		1	3
11/16/1999 8:15	5.2	1140	84	11.6	7.6	20	0.05	0.01 U	0.042	0.027		17	2
pH Recalibrated													
12/14/1999 8:20	2.2	514	112	12.7	7.8	6	0.104	0.01 U	0.057	0.019		4.5	2
pH Recalibrated; pH=7.83 following recalibration													
1/25/2000 7:35	1.4	261	135	13.1	7.9	3	0.083	0.01 U	0.045	0.014		6 J	1
pH Recalibrated													
2/22/2000 7:25	2.1	222	139	12.2	7.9	2	0.048	0.01 U	0.012	0.01 U		1.7	2
pH Recalibrated													
3/28/2000 7:45	3	207	152	12.6	8	2	0.033	0.01 U	0.011	0.01 U		1.5	5
4/25/2000 9:50	6.8	341	123	12.4	7.6	2	0.065	0.01 U	0.038	0.01 U		2	1
5/23/2000 7:55	4.6	846	83	12	7.6	19	0.084	0.01 U	0.056	0.01 U		10	11
6/27/2000 7:45	6.8	870	80	11.3	7.8	8	0.031	0.01 U	0.017	0.01 U		6.8	7
7/25/2000 7:50	8.4		89	10.9	7.99 J	4	0.032	0.01 U	0.012	0.01 U		2.2	2
pH was 7.47 prior to recalibration													
8/29/2000 8:05	9.4		114	11.03	7.54	2	0.039	0.01 U	0.015	0.01 U		0.8	7
9/26/2000 7:40	7.1		128	11.7	7.69	3	0.01 U	0.01 U	0.02	0.01 U		0.9	1

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
10/25/1999	15:45	6.8	572	87	11.6	7.5	2	0.032	0.01 U	0.01 U	0.012		3.1	1
		pH Outside Limits												
11/15/1999	15:20	5.1	3500	60	11.9	7.1	49	0.041 J	0.03	0.028	0.067		60	9
12/13/1999	15:30	3	2980	76	12.7	7.1	9 J	0.045	0.01 U	0.021	0.019		6.4	1 U
		pH Outside Limits; pH=7.14 following recalibration												
1/24/2000	14:35	2.3	967	86	13.2	7.2	1	0.032	0.01 U	0.017	0.012		2.1	1 U
2/21/2000	14:50	3.1	860	90	12.4	7.8	4	0.017	0.01 U	0.01 U	0.01 U		1	1 U
		pH Outside Limits												
3/27/2000	14:00	4.9	800 J	99	12	7.8	2	0.012	0.01 U	0.01 U	0.01 U		1.3	1 U
4/24/2000	10:50	4.9	1300	85	12.1	7.2	2	0.04	0.01 U	0.019	0.01 U		1.4	1 U
5/22/2000	15:35	6	2550	75	11.9	7.6	4	0.052	0.01 U	0.022	0.01 U		3.1	4
6/26/2000	15:15	8.2	2340	63	11.4	7.8	3	0.024	0.01 U	0.014	0.01 U		3.3	1 U
7/24/2000	15:40	10.7	1290	68	11.1	7.7	2	0.019	0.01 U	0.01 U	0.01 U		1.1	1 U
8/28/2000	15:15	14.4	610	80	10.14	7.58 J	6	0.036	0.01 U	0.01 U	0.01 U		0.6	1 U
		pH Outside Limits; pH=7.58 following recalibration												
9/25/2000	15:00	12.4	388	85	10.6	7.84	2	0.01 U	0.01 U	0.01	0.01 U		0.5 U	1 U

Conventional Data Report

Hoh R @ DNR Campground

20B070

Class: AA
Rivermile: 16.5
Latitude: 47 48 25.0
Longitude: 124 14 59.0
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
10/25/1999 13:45	6.5	740	75	11.4	7.6	3	0.068	0.01 U	0.042	0.014		2.3	12
11/15/1999 13:30	6.4	4530	62	11.3	6.8	32	0.139	0.013	0.13	0.039		25	35
12/13/1999 13:30	3.8	6980	48	12.3	6.9	40	0.17	0.011	0.134	0.05		24	7
	pH checked=OK												
1/24/2000 12:55	2.6	1740	58	12.7	7.1	4	0.101	0.01 U	0.095	0.014		5.2	1
2/21/2000 13:15	4.2	1210	68	12	7.6	2	0.06	0.01 U	0.046	0.01 U		2.4	1
3/27/2000 12:25	5.8	1910	69	12	7.5	4	0.062	0.01 U	0.057	0.01 U		4.6	1 U
4/24/2000 12:40	6.9	2005	73	12	8.2	4	0.071	0.01 U	0.035	0.01 U		4	1 U
5/22/2000 13:55	6.1	3370	65	11.7	7.6	23	0.081	0.014	0.048	0.02		19	11
6/26/2000 13:40	9.5	2525	68	10.8	7.6	7	0.036	0.01 U	0.022	0.01 U		9.1	4
7/24/2000 13:50	10.8	1750	63	10.9	7.2	6	0.015	0.01 U	0.01 U	0.01 U		6.4	2
8/28/2000 13:25	12.2	944	70	10.73	7.61	2	0.029	0.01 U	0.01 U	0.01 U		2.8	
9/25/2000 13:00	10.3	702	72	11.4	7.41	3	0.01 U	0.01 U	0.01 U	0.01 U		2.4	1 U

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
10/25/1999	11:05	7.2	380	58	11	7.3	2	0.138	0.01 U	0.104	0.019		1.3	16
		pH Recalibrated												
11/15/1999	10:55	7.1	1990	48	11	7	10	0.203	0.01 U	0.2	0.028		12	8
12/13/1999	11:00	4.5	5710	38	12.2	7.2	69	0.187	0.016	0.15	0.098		60	9
		pH Recalibrated; pH=7.17 following recalibration												
1/24/2000	10:15	3.2	1890	42	12.7	7.2	3	0.162	0.01 U	0.141	0.019		4	4
		pH Recalibrated												
2/21/2000	10:30	4.2	903	48	11.8	7.6	1 U	0.113	0.01 U	0.097	0.011		1.1	2
3/27/2000	9:50	5.7	1300	50	11.6	7.5	3	0.112	0.01 U	0.101	0.011		1.9	1 U
4/24/2000	14:40	6.7	1090	49	12.1	8	2	0.08	0.01 U	0.052	0.01 U		1.5	1 U
5/22/2000	10:30	8.1	923	54	11.5	7.6	2	0.105	0.01 U	0.048	0.01 U		1	3
		WWG Broken; RP measurement 34.69, Corr. -0.08												
6/26/2000	10:40	11.5	803	56	10.3	7.5	1 U	0.099	0.01 U	0.07	0.01 U		1	5
7/24/2000	11:10	14.1		61	10.1	7.5	1	0.056	0.01 U	0.017	0.019		0.5	7
		RP reading corr. -.08, RP 35.57												
8/28/2000	11:00	14.3		66	9.65	7.7	1	0.064	0.01 U	0.02	0.014		0.5 U	14
9/25/2000	10:25	11.2		65	10.5	7.22	2	0.051	0.01 U	0.046	0.014		0.6	8

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
10/25/1999	9:30	9	369	108	10	7.5	4	0.82	0.01 U	0.664	0.053		1.4	16
11/15/1999	9:10	8.4	7930	75	9.5	7.3	28	0.98	0.023	0.825	0.074		18	79 J
		pH Recalibrated												
12/13/1999	9:10	6	19200	50	11.2	7.1	77	0.748	0.017	0.6	0.101		32	360
1/24/2000	8:40	5.7	7820	61	11.5	7	10	0.716	0.015	0.61	0.044		8.9	17
2/21/2000	8:45	4.3	3400	72	11.2	7.2	8	0.78	0.016	0.688	0.04		5.2	20
3/27/2000	8:00	6.9	4230	76	10.8	7.5	7	0.614	0.014	0.52	0.034		5.1	8
4/24/2000	16:45	9.7	2330	91	10.9	7.5	6	0.614	0.01 U	0.475	0.039		3.4	20
5/22/2000	8:50	12.3	1790	87	9.7	7.5	7	0.549	0.01 U	0.379	0.037		3.2	16
6/26/2000	8:50	15.5	1140	84	9.1	7.3	3	0.436	0.01 U	0.328	0.022		2.3	26
7/24/2000	9:25	16.4	570	96	8.5	7.4	5	0.63	0.015	0.469	0.043		1.9	19
8/28/2000	9:10	17.2	428	99	8.47	7.57	4	0.706	0.022	0.538	0.043		2.2	10
9/25/2000	8:55	13.2	401	98	9.6	7.26	4	0.604	0.01 U	0.525	0.047		1.5	11

Conventional Data Report

Chehalis R @ Dryad

23A160

Class: A
Rivermile: 101.7
Latitude: 46 37 54.0
Longitude: 123 14 51.0
Waterbody: WA-23-1100

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
10/27/1999 15:35	5.1	94.2	78	11.5	7.1	2	0.112	0.01 U	0.01 U	0.033		1.3	530 J
11/17/1999 15:05	7.4	907	57	11.1	7.2	3	0.57	0.01 U	0.445	0.028		2.2	46
12/15/1999 14:35	7	10000 J	39	12.3	7.1	282	0.437	0.023	0.359	0.244		90	150
1/26/2000 14:55	4	1800	49	12.8	7.2	2	0.375	0.01 U	0.335	0.028		1.7	6
2/23/2000 13:35	4.3	484	52	12.7	7.1	2	0.354	0.01 U	0.266	0.022		1.6	6
3/29/2000 14:55	5.5	574	55	12.7	7.6	2	0.298	0.01 U	0.243	0.017		1.9	1 U
4/26/2000 16:40	10.6	1034	55	12.1	7.6	2	0.256	0.01 U	0.176	0.021		2.1	4
5/24/2000 14:10	12.6	221	62	11.3	8.1	3	0.185	0.01 U	0.099	0.021		1.2	10
6/28/2000 15:45	18.1	157	66	10.4	8.1	1 U	0.161	0.01 U	0.078	0.016		1	24
7/26/2000 14:45	14.7	97	69	10.9	7.5	3	0.135	0.01 U	0.031	0.029		1.4	28
8/30/2000 14:50	16.8	85	74	10.04	7.65	2	0.136	0.01 U	0.019	0.027		1.4	14
9/27/2000 14:55	12.7	192	76	11	7.82	1	0.051	0.01 U	0.01 U	0.027		1.2	19

Conventional Data Report

Willapa R nr Willapa

24B090

Class: A
Rivermile: 17.7
Latitude: 46 39 00.0
Longitude: 123 39 10.0
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
10/27/1999	14:35	6.5	72	69	10.8	6.9	5	0.261	0.01 U	0.103	0.032		3.1	1300 J
		pH Calibration checked=OK												
11/17/1999	14:10	8	979	56	10.7	6.8	11	0.902	0.01 U	0.794	0.032		5.2	46
12/15/1999	13:40	7.5	7600	38	11.4	6.6	275	0.741	0.033	0.638	0.203		80	170
		pH checked-within limits												
1/26/2000	14:00	4.6	830	48	12.4	7.3	4	0.68	0.01 U	0.632	0.025		2.5	4
2/23/2000	12:40	4.8	458	50	12	7.3	5	0.632	0.01 U	0.52	0.021		3.2	32
3/29/2000	13:35	6.3	555	54	12.3	7.5	5	0.574	0.01 U	0.498	0.017		3.1	1
4/26/2000	15:40	11	472	51	11.6	7.5	5	0.457	0.01 U	0.395	0.02		3	33
5/24/2000	13:15	12.6	225	60	10.7	7.6	3	0.414	0.01	0.303	0.019		1.5	10
6/28/2000	14:45	17.7	175	63	9.8	7.5	4	0.383	0.01 U	0.286	0.015		1.8	47
7/26/2000	13:25	15.8	67	65	10	7.2	3	0.306	0.01 U	0.186	0.024		1.5	130
8/30/2000	14:00	17.5	34	71	9.65	7.51	4	0.309	0.012	0.159	0.026		2	100
9/27/2000	14:50	14.4	25	71	10.3	7.44	2	0.187	0.01 U	0.123	0.025		1.8	26

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
10/27/1999 12:25	5.7	47.4	60	11.2	6.8	3	0.331	0.01 U	0.211	0.029		1.1	41
pH Calibration checked=OK													
11/17/1999 12:40	7.4	666	48	11.2	6.9	11	0.57	0.01 U	0.518	0.025		2.6	23
12/15/1999 12:00	7.2	6250	35	11.9	6.9	272	0.497	0.059	0.424	0.223		120	86
1/26/2000 12:30	4.8	493	43	12.4	7.3	2	0.442	0.01 U	0.417	0.02		1.2	9
2/23/2000 11:15	4.7	283	45	12	7.6	3	0.422	0.01 U	0.346	0.013		1.2	18
pH Recalibrated													
3/29/2000 11:40	4.7	313	48	12.5	7.8	4	0.36	0.01 U	0.325	0.013		2.3	4
4/26/2000 14:10	10.6	225	49	11.6	7.8	3	0.319	0.01 U	0.259	0.014		2	8
5/24/2000 11:30	9.6	146	53	11.3	7.9	2	0.27	0.01 U	0.235	0.013		0.6	5
6/28/2000 12:50	13.6	135	54	9.9	7.4	1 U	0.31	0.01 U	0.267	0.012		0.7	120
7/26/2000 11:50	12.3	55	54	10.7	7.6	2	0.15	0.01 U	0.084	0.017		0.7	48
8/30/2000 11:55	14.9	36	57	9.85	7.63	2	0.205	0.01 U	0.135	0.017		0.7	51
9/27/2000 12:30	11	22	58	11	7.36	3	0.103	0.01 U	0.089	0.014		0.7	22

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 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
10/27/1999 10:45	8.5	5290	84	10.6	7.3	9	0.072	0.01 U	0.026	0.029		2.9	7
11/17/1999 10:55	8.6	9560	71	10.5	7.1	238	0.298	0.01 U	0.19	0.141		75	39 J
12/15/1999 10:25	6.1	23200	49	11.7	7.2	221	0.477	0.016	0.397	0.095		50	48
1/26/2000 10:45	4.2	9470	68	12.2	7.4	55	0.304	0.01 U	0.25	0.05		13	3
2/23/2000 9:35	4.2	10100	70	11.6	7.5	203	0.282	0.01 U	0.205	0.086		35	19 J
3/29/2000 10:00	5.2	8350	76	11.8	7.6	60	0.228	0.01 U	0.18	0.024		8.8 J	1 U
4/26/2000 12:25	9.8	8070	80	11.3	7.2	33	0.157	0.01 U	0.106	0.024		7.7	47
5/24/2000 9:45	8.5	10300	70	10.8	7.2	49	0.136	0.01 U	0.084	0.015		3.9	14
7/26/2000 10:00	11.4		81	10.9	7.4	13	0.072	0.01 U	0.024	0.02		2.4	5
8/30/2000 10:15	14.4		89	9.75	7.35	11	0.08	0.01 U	0.026	0.019		2.2	20
9/27/2000 10:40	12.2		77	10.19	7.56	8	0.029	0.01 U	0.022	0.018		2.1	11

Conventional Data Report

Kalama R nr Kalama

27B070

Class: A
Rivermile: 2.8
Latitude: 46 02 52.0
Longitude: 122 50 11.0
Waterbody: WA-27-1010

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
10/26/1999 14:50	6.8	270	60	11.8	7.9	3	0.199	0.01 U	0.108	0.047		1.4	42
11/16/1999 14:30	7.3	910	39	11.1	7.3	4	0.297	0.01 U	0.267	0.029		3.1	36
12/14/1999 14:05	4.6	3980	34	12.7	7.5	20	0.626	0.015	0.587	0.033		11	27
1/25/2000 14:45	4.3	1570	37	12.6	7.7	3	0.453	0.01 U	0.427	0.028		2	7
2/22/2000 14:40	5.1	1390	37	11.9	7.6	5	0.4	0.01 U	0.323	0.024		3.5	21
3/28/2000 14:10	5	1260	41	12.5	8	3	0.297	0.01 U	0.271	0.017		2.2	3
4/25/2000 17:00	9.2	1000	39	12.2	7.9	3	0.188	0.01 U	0.173	0.019		2	1
Windy during RP measurement													
5/23/2000 14:50	11.1	820	39	12	8.1	4	0.182	0.01 U	0.1	0.015		1.2	2
pH Recalibrated													
6/27/2000 15:35	14.9	550	49	10.7	7.9	5	0.149	0.01 U	0.091	0.018		1.3	5
7/25/2000 14:50	13.3	380	52	11.3	8.1	3	0.113	0.01 U	0.058	0.034		1.1	8
8/29/2000 15:10	14.2	280	57	11.13	7.93	2	0.107	0.011	0.054	0.032		0.8	2
9/26/2000 14:45	10.3	240	58	11.9	7.81	1	0.077	0.01 U	0.069	0.032		0.7	2

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	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
10/26/1999 15:25	8.5	153	56	11.5	7.5	3	0.345	0.01 U	0.224	0.027		1.5	88
	pH Outside Limits												
11/16/1999 15:20	8.4	460	39	9.9	7	3	0.472	0.01 U	0.402	0.017		1.4	12
12/14/1999 15:10	5.2	2960	27	12.2	7.1	8	0.606	0.01 U	0.567	0.018		4.6	14
1/25/2000 15:30	4.1	894	30	12.4	7.2	2	0.487	0.01 U	0.453	0.017		1.8	14
2/22/2000 15:30	5	936	30	11.9	7.3	3	0.405	0.01 U	0.34	0.011		1.7	7
3/28/2000 15:15	5.3	794	32	12.3	7.6	7	0.311	0.01 U	0.266	0.01 U		2.1	1
4/25/2000 18:00	9.9	590	31	11.5	7.7	23	0.218	0.01 U	0.173	0.01 U			4
5/23/2000 15:45	12.6	497	32	10.7	8.1	3	0.217	0.01 U	0.154	0.01 U		0.9	5
6/27/2000 16:45	18.8	225	41	9	7.8	5	0.214	0.01 U	0.126	0.01 U		1.5	39 J
7/25/2000 15:45	17.5	96	51	9.8	7.7	3	0.202	0.01 U	0.124	0.014		0.8	29
8/29/2000 16:05	19.3	52	59	9.85	8.09	2	0.18	0.01 U	0.102	0.015		0.8	16
9/26/2000 15:40	15	47	61	10.6	7.72 J	1	0.112	0.01 U	0.094	0.015		0.6	6
	pH Outside Limits; pH=7.72 following recalibration												

Conventional Data Report

Washougal R blw Canyon Ck

28B110

Class: A
Rivermile: 13.4
Latitude: 45 36 26.6
Longitude: 122 13 53.8
Waterbody: WA-28-2030

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
10/27/1999 9:05	6.4	55	37	10.9	7.3	1	0.547	0.01 U	0.451	0.031		0.6	24
11/17/1999 9:05	6.9	510	24	11.6	7.3	3	0.329	0.01 U	0.255	0.016		0.7	12
pH Recalibrated													
12/15/1999 8:45	5.2	9300 J	17	12.8	6.9	91	0.23	0.019	0.209	0.046		33	14
pH Recalibrated; pH=6.89 following recalibration													
1/26/2000 8:55	3.6	760	22	12.6	7.4	1 U	0.316	0.01 U	0.287	0.014		1	15
pH Recalibrated													
2/23/2000 8:00	3.5	1720	18	12.5	7.5	2	0.209	0.01 U	0.164	0.01 U		1	1
pH Recalibrated													
3/29/2000 7:25	3.3	800	22	12.6	6.7	1 U	0.194	0.01 U	0.168	0.01 U		1	3
4/26/2000 10:05	8	530	24	12.3	7.1	1	0.18	0.01 U	0.141	0.01 U		0.7	4
5/24/2000 8:05	8.9	415	25	10.8	7	1	0.226	0.01 U	0.18	0.01 U		1	5
6/28/2000 8:55	12.5	180	28	9.9	7.6	1 U	0.208	0.01 U	0.157	0.01 U		0.6	21
7/26/2000 8:25	13.4	71	31	9.8	7.3	2	0.232	0.01 U	0.159	0.021		0.6	54
pH was 7.47 prior to recalibration													
8/30/2000 8:40	14.9	53	36	9.35	7.6	1	0.268	0.015	0.19	0.025		0.5	22
9/27/2000 8:30	10.4	55	37	10.3	7.07	1 U	0.23	0.01 U	0.163	0.023		0.6	21

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	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
10/6/1999 9:45	14.3	135400	129	9.7	7.8	5	0.277	0.025	0.179	0.023		2.6	4
11/3/1999 6:55	8.5	127500	375	10.8		11 J	0.266	0.01 U	0.181	0.025		3.8	13
Bank sample. Sample taken by wading from shore.													
12/8/1999 10:10	6.8	183700	141	11.4	7.9	3	0.279	0.01 U	0.211	0.022		2.2	3
1/5/2000 10:00	3.8	178000	138	12.3	7.6	2	0.295	0.01 U	0.241	0.019		1.6	1
2/9/2000 9:15	2.2	206100	192	14.2	8.4	3	0.533	0.01 U	0.437	0.043		2.2	3
3/8/2000 9:00	3.4	191900	173	12.4	7.6	8	0.616	0.01 U	0.529	0.037		4.6	1
4/5/2000 10:00	7.1	208000	147	12.6	7.8	7	0.361	0.01 U	0.315	0.022		4.1	3
5/3/2000 9:50	9.3	285600	128	12.4		9	0.248	0.01 U	0.121	0.025		5.5	3
6/7/2000 18:45	13.6	250000	96	10.6		10	0.16	0.01 U	0.07	0.015		6.4	6
7/12/2000 13:45	16.5	170000	116	9.9	8	5	0.157	0.01 U	0.052	0.014		4.3	1
8/16/2000 10:45	18.5	158000	116	10.3	7.92	5	0.153	0.01 U	0.085	0.018		3	4
9/6/2000 6:30	17.2	107000	121	9.89	7.97	5	0.154	0.01 U	0.076	0.015		2.7	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 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
10/13/1999	10:05	10.8	67	264	10.2	8	19	0.587	0.01 U	0.335	0.13		7.3	28
11/17/1999	9:20	7.3	105	235	10.5	7.3	7	0.496	0.01 U	0.368	0.098		4.6	25
		too windy for RP												
12/15/1999	11:25	4.3	754	118	12.3	7.3	37	0.723	0.041	0.565	0.134		14	130
1/12/2000	12:30	2.1	610	114	12.8	7.4	16	0.974	0.039	0.799	0.127		11	27
2/8/2000	14:35	3.7	1080	93	12.5	8.1	52	0.906	0.023	0.729	0.184		22	60
3/15/2000	9:45	5.7	1330	106	11.7	7.7	100	1.15	0.012	0.957	0.163		32	43
4/12/2000	8:05	11.6	754	114	9.3	8	42	0.679	0.01 U	0.523	0.104		8.6	45
5/10/2000	8:30	11.3	554	174	9.6	7.3	39	0.607	0.018	0.415	0.097		15	230
6/14/2000	11:05	15.2	790	107	8.2	7.1	63	0.578	0.02	0.42	0.147		29	260
7/12/2000	7:30	19.4	35	278	7.4	8.1	13	0.595	0.01	0.378	0.091		6.5	80
8/9/2000	11:15	22.3	12	466	10.85	8.45	5	1.2	0.025	0.904	0.119		3.8	28
9/13/2000	6:15	18.9	115	201	7.83	7.41	23	0.474	0.01 U	0.365	0.134		9.5	92

Conventional Data Report

Walla Walla at east Detour Road Br

32A100

Class: A
Rivermile: 32.8
Latitude: 46 02 35.0
Longitude: 118 29 23.0
Waterbody: WA-32-1050

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
10/13/1999 7:30	9.9		222	9.3	7.9	4	1.7	0.042	1.45	0.239		1.8	99

Conventional Data Report

Touchet at Sims Road

32B080

Class: A
Rivermile: 9
Latitude: 46 09 30.0
Longitude: 118 38 47.0
Waterbody: WA-32-1020

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
10/13/1999 9:20	10.1		115	10.4	8.2	3	0.164	0.01 U	0.01 U	0.093		2.4	23

Conventional Data Report

Touchet R @ Bolles

32B100

Class: A
Rivermile: 40.4
Latitude: 46 16 27.0
Longitude: 118 13 12.0
Waterbody: WA-32-1020

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
10/13/1999 8:30	9.3		111	10.8	8.1	5	0.416	0.01 U	0.259	0.094		1.8	43

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
10/13/1999 11:00	14.6	30400	243	8.8	7.9	4	0.621	0.01 U	0.455	0.066		2.9	1
11/17/1999 10:35	10.5	9400	332	9.6	7.7	4	0.768	0.01 U	0.66	0.132		4	3
12/15/1999 12:40	6.2	33200	265	11.5	7.8	6	0.844	0.019	0.693	0.088		3.9	2
1/12/2000 14:15	3	32500	275	12.3	8	5	1.09	0.023	0.921	0.068		3.9	1
2/8/2000 13:30	2.6	53000	266	12	8.2	4	1.18	0.01 U	1.05	0.099		3.7	1 U
3/15/2000 10:50	5.9	72000	224	12.5	8.1	7	1.16	0.01 U	1.01	0.09		14	1 U
4/12/2000 9:10	8.5	89000	192	12.1	8.1	9	0.695	0.011	0.534	0.067		9.2	1 U
5/10/2000 10:10	10.7	107500	103	11.8	7.7	19	0.194	0.01 U	0.072	0.033		11	1 U
6/14/2000 12:30	13.6	66500	107	11.5	7.9	8	0.222	0.01 U	0.138	0.033		6	3
7/12/2000 8:25	17.8	37000	111	9.5	8	6	0.181	0.01 U	0.074	0.026		4.9	2
8/9/2000 12:45	20.5	23000	154	8.94	7.94	2	0.296	0.01 U	0.169	0.031		2.4	190 J
9/13/2000 7:15	18.6	14000	169	9.64	7.96	4	0.223	0.01 U	0.155	0.039		3.2	4

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
10/12/1999 12:45	10.8	72	345	11.3	8.8	14	1.35	0.01 U	0.929	0.107		7.5	89
11/16/1999 15:30	8	114	341	12.6	8.1	13	1.84	0.01 U	1.56	0.168		6.1	10
12/14/1999 16:25	1.3	978	249	9.4	8	92	3.37	0.048	2.83	0.292		35	80
1/11/2000 17:10	0.5	519	267	12.9	7.8	15	3.87	0.016	3.78	0.188		16	12
2/8/2000 11:50	2.7	1880	196	12.1	8.3	61	6.24	0.024	5.8	0.279		55	63
3/14/2000 12:50	5.6	1800	197	12.1	8.1	42	4.1	0.01 U	3.88	0.175		33	9
4/11/2000 12:50	10	1270	175	10.4	8.2	24	2.8	0.01 U	2.48	0.111		16	15
5/9/2000 14:50	13.4	628	219	11	8.6	8	1.61	0.01 U	1.46	0.037		3.4	16
6/13/2000 16:10	15.4	378	241	9.5	7.8	32	2.05	0.03	1.73	0.185		16	110
7/11/2000 13:40	21.8	129	295	10.1	8.8	9	1.29	0.01 U	1	0.117		5.8	24
8/8/2000 17:05	22.5	31	299	11.45	9.23	30	0.43	0.023	0.012	0.14		16	35
9/12/2000 18:50	19.6	87	353	9.04	8.43	24	1.05	0.01 U	0.845	0.088		12	52

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
10/12/1999 8:15	8.1	83 J	79	9.2	7.7	1	0.179	0.01 U	0.01 U	0.033		1.2	16
11/16/1999 9:45	3.9	44 J	90	10.6	6.8	2	0.187	0.01 U	0.01 U	0.045		2.1	23
12/14/1999 11:20	-0.8	315 J	49	12.6	7.5	17	0.758	0.023	0.5	0.136		32	210
1/11/2000 11:40	-1.4	119 J	88	13.6	7.5	3	1.19	0.012	0.039	0.084		12	15
2/8/2000 6:15	1	860 J	181	11.7	7.4	44	2.46	0.015	2.07	0.285		65	120
3/14/2000 6:55	2.9	680 J	56	11.9	7.2	19	0.689	0.01 U	0.509	0.102		23	14
4/11/2000 8:35	5.7	770 J	36	10.5	7.6	16	0.214	0.01 U	0.108	0.056		12	25
5/9/2000 9:35	8.8	205 J	49	10.6	7.5	4	0.167	0.01 U	0.061	0.052		7.5	21
6/13/2000 9:55	10.4	490 J	64	9.7	6.8	48	0.163	0.01 U	0.021	0.085		25	1100 J
7/11/2000 8:55	17.5	29.5 J	62	8.1	7.9	2	0.138	0.01 U	0.01 U	0.036		2.4	60
8/8/2000 11:30	20	1 J	78	8.94	8.46	2	0.212	0.013	0.01 U	0.031		1.6	35
9/12/2000 10:55	13.6	83 J	65	8.74	7.63	4	0.077	0.01 U	0.01 U	0.043		3.1	510

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
10/12/1999 8:50	8.6	5.6	505	8.5	7.6	3	7.37	0.02	6.17	1.84		2.2	110
11/16/1999 9:05	5.9	6.3	550	9.3	6.9	2	5.95	0.154	5.3	1.95		2.2	27
12/14/1999 9:40	1.1	46	302	11.6	7.8	28	7.39	0.22	5.2	0.508		110	340
1/11/2000 10:00	0	45	349	11.9	7.7	6	6.79	0.344	6.15	0.473		21	33
2/8/2000 5:40	1.9	210 J	181	11.1	7.3	98	8.3	0.071	8.52	0.415		120	240
3/14/2000 6:55	4.4	95	244	10.6	7.6	22	6.06	0.037	5.7	0.345		34	31
4/11/2000 9:15	7.3	52	264	10.3	8	7	5.33	0.165	4.51	0.398		15	34
5/9/2000 8:45	10.3	27	337	8.9	7.1	11	4.54	0.016	4.34	0.802		8.7	180 J
6/13/2000 11:20	11.6	27	278	9.3	8	14	2.52	0.042	2.16	0.436		30	640 J
7/11/2000 9:35	14.2	5.8	438	9	8.2	8	4.89	0.01 U	3.53	1.73		4	410
8/8/2000 12:25	16.2	6.3	520	10.75	7.9	8	4.65	0.02	3.26	1.62		4.3	1000
9/12/2000 11:45	14.5	6.9	337	9.14	7.33	3	2.17	0.01 U	1.91	0.772		4	160

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-35-1010

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
10/12/1999 10:00	13.8	23700	318	9.5	8.4	6	0.859	0.01 U	0.641	0.086		2.6	1
11/16/1999 11:25	8.3	18700	363	10.3	7.4	3	0.948	0.033	0.812	0.096		2.2	3
12/14/1999 12:50	4	25700	312	11.7	8.2	5	1.06	0.036	0.898	0.072		2.4	1
1/11/2000 13:40	2.5	28400	372	12.3	8.2	3	1.42	0.029	1.25	0.076		1.7	5
2/8/2000 8:20	1.9	31000	307	13	8	4	1.22	0.01 U	1.06	0.107		4.7	2
3/14/2000 9:40	4.3	31200	271	12.3	8.3	5	1.04	0.018	0.867	0.103		8.4	1 U
4/11/2000 10:20	9	48600	220	10.5	8.6	16	0.633	0.016	0.446	0.067		9.1	2
5/9/2000 11:20	10.2	46000	133	10.9	7.6	17	0.242	0.01 U	0.119	0.033		8	6
6/13/2000 12:45	12	42100	126	10.5	8	8	0.215	0.01 U	0.141	0.029		3.7	5
7/11/2000 10:40	18.5	29900	198	8.6	8.4	7	0.331	0.01 U	0.208	0.028		2.5	3
8/8/2000 13:50	19.6	162000	268	8.24	8.22	4	0.53	0.013	0.349	0.065		1.5	1 U
9/12/2000 13:15	19.2	23400		9.34		5	0.564	0.01 U	0.457	0.083		2.1	27

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
10/12/1999 11:45	11.6	89	130	11.4	8.4	6	0.184	0.01 U	0.091	0.095		1.1	32
11/16/1999 14:05	8.6	124	147	11	8	5	0.24	0.01 U	0.184	0.102		3.2	49
12/14/1999 14:50	4.7	166	110	12.2	7.8	12	0.395	0.014	0.303	0.099		4.6	28
1/11/2000 15:35	4	145	118	12.1	7.8	10	0.39	0.01 U	0.325	0.086		3.1	4
2/8/2000 10:40	4.9	249	104	11.8	7.7	22	0.445	0.01 U	0.356	0.151		10	27
3/14/2000 11:30	7.3	259	114	12.1	8.2	13	0.43	0.01 U	0.341	0.091		7.1	12
4/11/2000 11:50	9.9	299	98	11.7	8.7	20	0.168	0.01 U	0.054	0.067		6.6	8
5/9/2000 13:30	13.2	252	95	10.8	8.4	14	0.12	0.01 U	0.028	0.071		5.8	7
6/13/2000 14:35	15.7	215	95	10.5	8.3	15	0.144	0.01 U	0.054	0.085		4	67
7/11/2000 12:40	19.8	78	135	10.3	8.7	7	0.18	0.01 U	0.082	0.077		2	72
8/8/2000 16:10	23	46	147	9.34	8.66	5	0.223	0.013	0.088	0.098		1.6	80
9/12/2000 16:25	19.9	98	142	9.64	7.96	9	0.137	0.01 U	0.081	0.092		2.6	80

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
10/13/1999 12:35	14.1	171000	112	10.1	8.1	3	0.164	0.01 U	0.103	0.011		1.1	2
11/17/1999 12:00	10.1	64000	126	10.1	7.6	3	0.173	0.01 U	0.138	0.014		2.1	2
12/15/1999 14:05	6.4	180000	116	13.5	8.2	3	0.147	0.01 U	0.135	0.01 U		1.8	1 U
1/12/2000 15:40	3.2	155000	125	12.5	7.4	2	0.218	0.01 U	0.165	0.01 U		0.9	1
2/9/2000 16:10	2	105000	116	13.2	8.2	1	0.191	0.01 U	0.153	0.012		1.1	1 U
3/15/2000 12:25	5.8	146000 J	132	13.3	7.8	4	0.182	0.01 U	0.146	0.011		2.4	1 U
4/12/2000 10:50	6	140000	131	12.5	8.1	2	0.277	0.01 U	0.207	0.01 U		1.6	1 U
5/10/2000 11:50	8.3	158000	110	13	6.9	3	0.187	0.01 U	0.106	0.01		2.3	2
6/14/2000 14:45	11.9	127000	109	11.7	8.1	4	0.111	0.01 U	0.061	0.01 U		2.1	1
7/12/2000 9:40	14.8	118000 J	107	11.2	8.1	2	0.111	0.01 U	0.055	0.01 U		1.4	1 U
8/9/2000 14:40	18.1	180000 J	108	10.95	8.13	2	0.092	0.01 U	0.041	0.01 U		1.2	3
9/13/2000 11:00	18.2	99000	120	9.54	8.12	2	0.141	0.01 U	0.08	0.011		0.8	2

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
10/6/1999	10:50	11.9	1990	241	10.6	8.5	11	1.37	0.03	1.19	0.129		4.2	13
11/3/1999	8:00	6.8	2650	250	11.5	6.7	9	1.34	0.01 U	1.19	0.115		4.2	9
12/8/1999	11:15	3	5910	182	12.5	6.5	27	0.606	0.01 U	0.521	0.073		11	8 J
		staff = 5.57												
1/5/2000	11:25	2	4110	147	12.8	7.8	15	0.863	0.022	0.77	0.08		7.2	8
2/9/2000	11:20	3.8	3340	173	12.9	8.7	7	0.839	0.01 U	0.706	0.1		4.5	8
3/8/2000	10:50	5.5	4250	174	11.6	8.1	28	0.812	0.01 U	0.669	0.099		7.1	12
4/5/2000	11:25	8.8	8720	113	10.7	8	211	0.434	0.034	0.31	0.148		52 J	85 J
5/3/2000	10:55	14.3	3660	162	10.5		107	0.689	0.01 U	0.44	0.09		10 J	14
6/7/2000	20:15	17.3	5470	134	10.8		64	0.681	0.016	0.506	0.116		22	180 J
7/12/2000	14:50	22	1400 J	229	10.1	8.7	19	1.24	0.015	1.01	0.135		6.5	9
8/16/2000	12:10	19.6	1640	210	10.19	8.29	19	1.1	0.01 U	1.01	0.131		7.2	19
9/6/2000	7:40	15.1	2160	208	9.79	7.98	23	1.26	0.024	1.07	0.12		8.3	36

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
10/6/1999 12:20	11.2	2400 J	91	11.3	8.3	5	0.231	0.023	0.142	0.071		2.9	11
11/3/1999 9:55	3.4	1860	129	12.6	7.8	7 J	0.293	0.01 U	0.208	0.057		2.1	27
12/8/1999 13:25	2.2	5000	71	13.1	7.5	7	0.134	0.01 U	0.079	0.027		6.3	10
1/5/2000 13:45	2.4	2750	84	12.9	7.7	3	0.22	0.015	0.173	0.032		3.3	1
2/9/2000 13:10	2.2	2570	93	13.6	8.3	4	0.156	0.01 U	0.106	0.046		4.8	1
3/8/2000 13:30	3.5	2640	115	12.9	8.3	6	0.281	0.01 U	0.191	0.037		3.9	1
4/5/2000 14:05	5.8	7500 J	81	11.9	8.1	47	0.167	0.01	0.076	0.055		28	24
5/3/2000 12:50	9.2	3820	88	11.1		22	0.179	0.01 U	0.075	0.039		5.3	38
6/7/2000 12:40	9.8	9420	56	10.8		58	0.151	0.01 U	0.065	0.044		20	240 J
7/12/2000 17:15	15.3	3780	74	10.7	9.2	7	0.2	0.01 U	0.105	0.026		2.9	31
8/16/2000 13:35	17.4	3560	71	10.19	8.21	7	0.189	0.01 U	0.103	0.035		3.3	9
9/6/2000 12:15	13.4	2840	88	10.3	8.11	4	0.185	0.01 U	0.081	0.038		3.5	23

Conventional Data Report

Naches R @ Yakima on US HWY 97

38A050

Class: A
Rivermile: 0.1
Latitude: 46 37 48.0
Longitude: 120 30 52.0
Waterbody: WA-38-1010

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
10/6/1999 12:35	11.7	1476	67	10.5	8.3							4.1	
11/3/1999 10:25	3.6	708	95	13	7.3							1.1	
12/8/1999 13:45	1.2	1580	64	13.1	7.6							3	
1/5/2000 14:10	1.4	1045	72	13	7.6							3	
2/9/2000 13:35	1.9	1067	77	13.6	8.2							8.9	
3/8/2000 14:15	3.2	863	89	13.4	8.6							4.1	
4/5/2000 14:30	3.8	3437	67	12.4	7.5	33						19	
5/3/2000 14:00	7.6	2490	62	11.2								6.4	
6/7/2000 12:10	8.9	4328	46	10.5								12	
7/12/2000 17:45	17.5	760	67	9.3	8.6							1.9	
8/16/2000 14:30	18.1	548	83	10.7	8.65	3	0.173	0.01 U	0.106	0.029		1.8	2
9/6/2000 12:50	13.8	1270	67	11.11	8.43							3.8	

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	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
10/6/1999 13:00	11.9	548	118	12.8	9	3	0.366	0.027	0.206	0.053		1.8	12
11/3/1999 11:00	3.7	1044	115	13.1	7.7	7 J	0.354	0.01 U	0.252	0.044		2	1 U
Found crack in DO bottle when sample was run in lab.													
12/8/1999 14:12	2.1	2462	68	13.1	7.8	8	0.143	0.01 U	0.083	0.021		3.1	5
1/5/2000 14:45	1.5	740	88	13	7.7	3	0.26	0.014	0.206	0.042		3	2
2/9/2000 14:05	3.2	625	99	13.5	8.4	2	0.204	0.01 U	0.134	0.039		1.4	1 U
3/8/2000 15:15	3.8	876	120	13.2	8.5	6	0.358	0.01 U	0.242	0.039		4.1	1 U
4/5/2000 15:00	4.9		85	12.3	7.6	32	0.177	0.011	0.091	0.046		20	20
5/3/2000 16:20	10.3	1320	106	11.3		11	0.261	0.01 U	0.13	0.042		5.1	20
6/7/2000 11:25	9.4		61	10		64	0.202	0.013	0.096	0.053		28	310 J
7/12/2000 18:10	13.2	1980	72	10.9	9	6	0.203	0.01 U	0.105	0.02		2.6	
8/16/2000 14:45	16.1	2370	73	10.6	7.92	9	0.165	0.01 U	0.104	0.032		3.5	12
9/6/2000 13:10	15.8	480 J	103	11.81	8.72	2	0.222	0.01 U	0.086	0.041		2.3	13

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
10/6/1999 14:00	11.4	1050	70	10.2	7.6	2	0.246	0.023	0.177	0.03		1.4	25
11/3/1999 11:55	4.4	846	68	12.3	7.8	2	0.088	0.01 U	0.042	0.019		0.8	1 U
12/8/1999 15:15	3.4	4738	53	12.1	7.2	3	0.074	0.01 U	0.033	0.014		2.4	2
1/5/2000 15:50	1.6	2082	66	12.5	7.7	2	0.127	0.01 U	0.088	0.018		1.8	1
2/9/2000 15:15	1.9	1254	67	13.3	8	2	0.071	0.01 U	0.037	0.02		1.3	1 U
3/8/2000 16:25	2.9	1548	85	13.5	9	3	0.178	0.01 U	0.091	0.021		3.3	2
4/5/2000 16:45	4.3	5122	77	12.5	7.5	22	0.109	0.01 U	0.045	0.031		15	4
5/3/2000 17:35	8	2305	77	11.2		6	0.132	0.01 U	0.04	0.016		3.9	13
6/7/2000 10:15	7.7	6346	50	11.3		47	0.111	0.01 U	0.052	0.027		16	96
7/12/2000 19:15	11.4	3530	52	10.4	8.4	5	0.116	0.01 U	0.056	0.013		2.8	36
8/16/2000 16:20	16.2	3852	47	9.8	7.83	6	0.075	0.01 U	0.043	0.013		2.9	9
9/6/2000 14:50	14.1	1060	64	10.1	8.03	5	0.165	0.01 U	0.104	0.024		2.8	11

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
10/4/1999 10:45	8.9	820	47	10.1	7.5	1	0.044	0.034 J	0.01 U	0.01 U		0.6	1
11/1/1999 13:25	5.7	361		11.5	7.9	1 U	0.042	0.01 U	0.01 U	0.016		1.2	1 U
Bank Sample													
12/6/1999 11:40	1.7	754	50	12.3	7.3	3	0.097	0.01 U	0.061	0.015		2.9	1
1/3/2000 13:00	0.2	1688	47	12.3	6.8	4	0.116	0.01	0.078	0.015		6.7	1 U
2/7/2000 8:45	1.1	514	54	12.1	7.4	2	0.102	0.01 U	0.06	0.016		5 J	
3/7/2000 9:40	1.6	532	142	12.5	7.4	7	0.083	0.01 U	0.037	0.01 U		10	1
4/3/2000 10:15	3	1190	97	11	7.4	62	0.091	0.01 U	0.049	0.02		13 J	2
5/1/2000 10:00	5.5	795	56	11.1	7.1	3	0.069	0.01 U	0.013	0.012		1.8	1 U
6/5/2000 10:30	7.9	288	171	10.4		3	0.038	0.01 U	0.01 U	0.01 U		2.4	42
7/10/2000 10:20	9.8	734	49	10	6.6	2	0.083	0.01 U	0.014	0.01 U		1.4	17
8/14/2000 11:00	14.3	968	48	9.4	7.43	3	0.131	0.01 U	0.01	0.014		2.4	13
9/4/2000 11:50	12.7	606	50	9.49	7.25	7	0.046	0.01 U	0.011	0.012		1.5	1

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	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
10/13/1999 13:30	12.5	320	512	11.8	8.6	13	1.67	0.01 U	1.34	0.064		6.4	31
11/17/1999 12:50	8	222	710	11.2	7.9	12	2.35	0.01 U	2.08	0.089		4.7	9
12/15/1999 15:15	1	162	698	11.6	8.4	18	3.26	0.031	2.7	0.104		9	2
1/12/2000 16:40	0.7	153	717	12.9	8.3	11	3.39	0.022	3.27	0.103		6	1 U
2/9/2000 14:40	4.1	171	683	13.2	8.5	15	2.61	0.01 U	2.36	0.152		10	1
3/15/2000 13:25	7.8	193	730	14.5	8.5	25	2.44	0.01 U	2.06	0.105		12	5
4/12/2000 11:50	13.8	186	553	9.7	8.5	94	1.86	0.01 U	1.56	0.169		32	350 J
5/10/2000 12:55	11.7	257	457	11.6	7.8	52	3.23	0.105	1.9	0.077		17	29
6/14/2000 15:50	17.8	314	470	10.2	8.4	78	1.32	0.01 U	1.14	0.064		31	130
7/12/2000 10:30	19.6	242	456	8.6	8.5	114	1.67	0.01 U	1.37	0.123		34	120
	High and turbid with debris (plant fragments)												
8/9/2000 15:55	24.2		447	11.55	8.71	56	1.47	0.014	1.15	0.079		20	100 J
9/13/2000 12:45	19		540	8.94	8.17	22	1.23	0.01 U	1	0.083		4.4	160

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
10/4/1999 15:50	9.8	762	77	12.3	8.9	2	0.283	0.038	0.196	0.017		0.7	1 U
11/1/1999 17:30	6	1530	61	12.6	8.4	3	0.165	0.01 U	0.085	0.019		2.1	10
12/6/1999 16:55	6	2490	56	12.5	7.5	1	0.095	0.01 U	0.057	0.011		0.8	1 U
1/3/2000 18:40	0.5	1950	57	13.3	7.8	3	0.189	0.01	0.143	0.014		1.1	1
2/7/2000 15:15	2.3	1090	74	14.1	7.9	2	0.217	0.01 U	0.16	0.023		0.7 J	
3/6/2000 14:30	4.4	1170	94	13.8	8.7	4	0.246	0.01 U	0.138	0.019		2	5
4/3/2000 16:25	7.9	3420	71	12.4	8.8	22	0.122	0.01 U	0.045	0.022		8.4	3
5/1/2000 15:00	8.8	5020	48	12	8	5	0.113	0.01 U	0.059	0.01 U		3.5	1
6/5/2000 16:00	8.9	10000	29	11		28	0.094	0.01 U	0.055	0.01 U		4.7	38
7/10/2000 16:00	12.5	4700	35	9.9	8.3	3	0.114	0.01 U	0.067	0.01		1.9	2
8/14/2000 15:40	17	1210	52	11.2	8.83	2	0.147	0.01 U	0.117	0.016		1.3	3
9/4/2000 16:50	13.5	629	71	11.61	9.37	44 J	0.235	0.01 U	0.151	0.015		1.1 J	1

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
10/4/1999 13:10	7.9	509	55	10.8	7.5	1 U	0.048	0.034	0.01 U	0.01 U		0.5 U	1 U
11/1/1999 15:25	4.6	1050		11.7	7.8	1 U	0.081	0.01 U	0.015	0.014		0.6	1
12/6/1999 14:40	2.5	1640	33	12.2	7.2	2	0.17	0.01 U	0.125	0.015		1.2	59
1/3/2000 15:20	0.1	1280	33	12.9	7.7	1	0.105	0.01 U	0.06	0.01 U		1.6	1 U
2/7/2000 10:45	0.8	705	41	12.7	8	1 U	0.074	0.01 U	0.052	0.017		0.6 J	
3/6/2000 11:40	1.4	649	43	12.4	7.8	1	0.095	0.01 U	0.033	0.01		1.8	1 U
4/3/2000 12:35	4.5	1870	37	11.6	7.5	10	0.11	0.01 U	0.069	0.016		6.9	1
5/1/2000 12:00	5.7	3450	32	11.4	7.4	2	0.098	0.01	0.055	0.01 U		1.6	1
6/5/2000 12:15	6.4	7100	23	11.2		15	0.084	0.01 U	0.051	0.01 U		4.2	9
7/10/2000 12:35	9.6	3570	25	10.3	7.5	3	0.061	0.01 U	0.029	0.01 U		1.4	2
8/14/2000 12:40	13.4	950	28	10	7.62	2	0.047	0.01 U	0.013	0.013		1.9	2
9/4/2000 14:05	11.4	542	32	9.59	7.89	2	0.039	0.01 U	0.011	0.01		0.6	1 U

Conventional Data Report

Chumstick Cr nr Leavenworth

45C070

Class: A
Rivermile: 0.2
Latitude: 47 36 26.0
Longitude: 120 38 46.0
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
10/4/1999	13:45	6.8	3.2	288	10.5	7.8	3	0.611	0.029	0.548	0.049		1.1	35
11/1/1999	16:05	4.5	6.9	330	10.9	6.8	2	0.467	0.01 U	0.373	0.049		1.3	15
12/6/1999	15:10	3	12.8	311	11.6	7.8	5	0.395	0.01 U	0.304	0.052		3.9	7
		staff = 0.78												
1/3/2000	16:45	0.7	11.2	301	12.3	7.3	7	0.485	0.01 U	0.378	0.046		4.1	2
2/7/2000	12:45	1.8	11.2	276	12.2	8	4	0.392	0.01 U	0.294	0.062		2.5 J	
3/6/2000	12:25	2.4	37.6	219	12	8.1	53 J	0.323	0.01 U	0.181	0.061		7.9 J	1
4/3/2000	13:25	5.8	57	224	11.1	8.2	32	0.294	0.01 U	0.182	0.061		17	9
5/1/2000	13:00	8.2	25.5	281	10.7	7.9	8	0.253	0.01 U	0.153	0.043		3.1	13
6/5/2000	13:05	10.5	13.5	259	9.9		7	0.318	0.01 U	0.225	0.049		3.4	16
7/10/2000	13:45	10.5	7.8	285	9.5	8	4 J	0.513	0.01 U	0.428	0.043		1.6	57
8/14/2000	13:30	10.4	0.2	229	9.3	7.32	9	1.05	0.01 U	1.11	0.047		5.7	24
9/4/2000	14:50	9.4	3.2	202	8.88	7.75	2	0.889	0.01 U	0.843	0.038		1.4	36

Conventional Data Report

Brender Cr nr Cashmere

45D070

Class: A
Rivermile: 0.2
Latitude: 47 31 17.0
Longitude: 120 28 33.0
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
10/4/1999	14:50	9.9	2.9	440	10.4	8	5	5.88	0.032	3.84	0.068		3.3	80
11/1/1999	17:00	5.8	4.6	500	9.8	7.6	2	5.57	0.068	3.88	0.07		2.4	7
12/6/1999	15:55	6	3.9	522	10.2	7.8	9	3.95	0.01 U	3.78	0.071		2.1	99
1/3/2000	17:30	5	3.1	473	10.2	8.2	7	3.88	0.019	3.96	0.07		5.3	150
2/7/2000	14:00	6.6	2.5	481	12.4	8	4	4.03	0.01 U	3.58	0.095		2.7 J	
3/7/2000	13:10	7.4	3.4	455	13.2	8.1	9	3.48	0.01 U	3.55	0.079		7.5	3
4/3/2000	14:20	10	5.6	386	11.9	8.2	8	2.84	0.01 U	2.48	0.051		6.8	36
5/1/2000	13:35	9.8	8.8	239	10.8	8	19	1.28	0.014	1.15	0.052		16	18
6/5/2000	14:35	12.5	6.4	233	10		25	1.75	0.014	1.54	0.045		9.7	470
7/10/2000	14:40	13.7	7.7	266	10	8.1	7	1.79	0.01 U	1.69	0.033		3.7	170
8/14/2000	14:35	14.3	3.6	285	10.5	7.86	4	2.61	0.01 U	2.42	0.049		3.7	240
9/4/2000	15:30	11.4	8.3	196	10	8.06	12	1.25	0.01 U	1.17	0.049		8.4	250

Conventional Data Report

Mission Cr nr Cashmere

45E070

Class: A
Rivermile: 0.2
Latitude: 47 31 17.0
Longitude: 120 28 29.0
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
10/4/1999 15:10	7.6	3 J	308	11.7	8.6	1 U	1.05	0.028	0.979	0.024		1.1	380
11/1/1999 16:45	3.7	9 J	301	11.8	7.8	2	0.405	0.01 U	0.352	0.019		3.1	31
12/6/1999 16:10	2.3	13 J	294	12.2	8.1	4	0.52	0.01 U	0.462	0.029		5.3	24
1/3/2000 18:00	-0.6	13 J	270	13.1	8.2	6	0.525	0.01 U	0.451	0.022		3.1	22
2/7/2000 14:35	1.9	10 J	277	13.4	8.6	4	0.409	0.01 U	0.338	0.032		3.5 J	
3/6/2000 13:35	3.5	31 J	259	12.5	8.5	25	0.347	0.01 U	0.257	0.017		4.4	3
4/3/2000 15:15	6.6	76 J	178	10.3	8.3	259	0.214	0.01 U	0.138	0.073		53 J	3
5/1/2000 14:00	8.3	31 J	201	11.2	8.4	10	0.248	0.01 U	0.163	0.012		3.1	47
6/5/2000 15:00	12.2	21 J	179	10.2		8	0.199	0.01 U	0.147	0.01 U		3.3	40
7/10/2000 15:05	14.5	15 J	209	9.6	8.6	9	0.465	0.01 U	0.393	0.024		4.5	48
8/14/2000 15:05	18.2	1 J	188	8.9	8.38	1 U	0.805	0.01 U	0.77	0.028		2.2	47
9/4/2000 15:55	8.5	2 J	164	8.78	8.1	6	0.521	0.01 U	0.447	0.021		3.7	180

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
10/5/1999	14:00	8.7	170	150	11	8.5	2	0.204	0.027	0.137	0.02		0.6	1 U
		used staff reading,gage house read 6.83 --												
11/2/1999	14:50	3.2	170	130	13.1	7.6	4 J	0.16	0.01 U	0.116	0.024		0.5 U	1 U
12/7/1999	16:30	0	296	87	13.6	7.6	1	0.122	0.01 U	0.088	0.018		0.6	4
		staff = 7.15												
1/4/2000	18:00	-0.4	284	83	13.4	7.7	1	0.171	0.01 U	0.12	0.02		0.6	9
2/8/2000	17:10	3.1	210	105	12.3	8.3	1	0.171	0.01 U	0.131	0.033		0.6	
3/7/2000	17:20	4.1	216	126	12	8.2	2	0.174	0.01 U	0.145	0.018		0.9	1
4/4/2000	17:55	7.4	611	85	11.1	8.4	26	0.105	0.01 U	0.057	0.031		11	3
5/2/2000	18:00	8.2	923	58	11.1		6	0.072	0.01 U	0.01 U	0.015		2.6	30
6/6/2000	21:05	6.4	1900	27	11.2		29	0.063	0.01 U	0.02	0.01 U		4.6	8
7/11/2000	19:35	12.6	750	43	9.7	8.2	5	0.059	0.01 U	0.026	0.012		1	6
8/15/2000	18:20	16.7	223	68	9.9	8.15	2	0.092	0.01 U	0.055	0.015		0.7	4
9/5/2000	19:20	12.7	167		10		3	0.12	0.01 U	0.071	0.015		0.6	64

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
10/5/1999 12:45	8.3	475	237	11.2	8.3	1	0.265	0.021	0.223	0.012		0.5	1
11/2/1999 13:20	2.5	433	180	12.8	8.2	1 U	0.213	0.01 U	0.177	0.017		0.5 U	1 U
12/7/1999 14:45	14.4	955	142	13.2	7.9	4	0.148	0.01 U	0.129	0.013		0.5 U	1 U
1/4/2000 16:20	-0.4	725	142	13.5	8.1	1	0.2	0.01 U	0.174	0.013		0.6	1
2/8/2000 15:45	3.3	499	158	12.8	8.1	2	0.212	0.01 U	0.162	0.019		0.9	
3/7/2000 16:10	5.7	514	169	12.2	8.6	1	0.195	0.01 U	0.14	0.01 U		0.6	1 U
4/4/2000 16:25	9.4	1540	129	10.8	8.6	14	0.138	0.01 U	0.087	0.011		6.4	6
5/2/2000 16:15	9.2	3080	92	10.9		5	0.085	0.01 U	0.02	0.01 U		2.3	2
6/6/2000 18:50	8	5810	52	11		28	0.077	0.01 U	0.026	0.01 U		7.9	25
7/11/2000 18:00	14.6	2050	93	9.6	8.6	3	0.101	0.01 U	0.053	0.01 U		1	1
8/15/2000 16:30	17.9	535	147	8.9	7.88	2	0.185	0.01 U	0.147	0.014		1.5	1
9/5/2000 18:00	13.8	367	158	9.29	8.5	3	0.235	0.01 U	0.176	0.012		0.6	2

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
10/5/1999	11:50	7.3	420	196	10.8	8.5	1	0.193	0.022	0.172	0.011		0.6	1
11/2/1999	12:00	3	375		12.3	8		0.172	0.01 U	0.14	0.017			1 U
		Unable to locate gage house.												
12/7/1999	13:30	1.1	747	122	13.1	7.9	1	0.109	0.01 U	0.083	0.012		0.5 U	3
1/4/2000	15:00	0.2	587	114	13	8	1	0.141	0.01 U	0.103	0.01		0.5 U	1 U
2/8/2000	14:50	3.1	390	129	12.4	8	2	0.142	0.01 U	0.117	0.017		0.6	
3/7/2000	15:12	4.7	360	138	12.1	8.2	1	0.142	0.01 U	0.113	0.01 U		0.5 U	1 U
4/4/2000	15:10	6.5	1650	109	11.3	8.5	11	0.121	0.01 U	0.072	0.012		6.2	6
5/2/2000	14:50	7.1	3040	81	11.3		4	0.089	0.01 U	0.025	0.01 U		2.4	1
6/6/2000	17:45	7.5	5460	51	10.9		16	0.074	0.01 U	0.023	0.01 U		6	4
7/11/2000	17:00	12.8	1830	81	9.8	8.3	2	0.085	0.01 U	0.048	0.01 U		1	1
8/15/2000	15:20	15.2	428	116	10.3	7.85	1	0.155	0.01 U	0.138	0.013		0.5	2
9/5/2000	15:50	11.5	271	129	9.69	8.2	2	0.215	0.01 U	0.186	0.012		0.5 U	2

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 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
10/5/1999 10:50	10	1140	347	10	8.1	2	0.272	0.023	0.01 U	0.018		0.7	8
11/2/1999 10:50	4.8	1340	225	11.5	7.6	3	0.176	0.01 U	0.033	0.021		1.1	8
12/7/1999 12:15	1.3		219	14	7.8	3	0.18	0.01 U	0.08	0.021		1.7	11
1/4/2000 13:40	-0.2	1060	241	13.4	8.1	3	0.223	0.01 U	0.099	0.019		1.3	5
2/8/2000 13:30	1.6	1310	253	13	8.3	4	0.185	0.01 U	0.077	0.029		1.1	
3/7/2000 13:55	4.8	1130	281	12.4	8.1	3	0.191	0.01 U	0.041	0.02		2	1
4/4/2000 14:05	11.9	1240	261	9.7	8.4	12	0.124	0.01 U	0.025	0.025		7.6	9
5/2/2000 13:45	11.1	6240	142	10		37	0.177	0.01 U	0.01 U	0.028		14	15
6/6/2000 15:55	13.3	8890	97	10		40	0.104	0.01 U	0.01 U	0.017		11	71
7/11/2000 15:45	17.9	4675	176	8.9	8.5	13	0.134	0.01 U	0.01 U	0.014		5.8	41
8/15/2000 14:15	20.7	1000	249	9.1	8.4	3	0.119	0.01 U	0.015	0.022		1.7	4
9/5/2000 14:20	16.9	1050	252	9.19	8.21	4	0.153	0.01 U	0.03	0.018		1	8

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	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
10/5/1999 9:15	13.6	332	315	8.5	8.2	4	0.062	0.029	0.01 U	0.011		1.3	8
11/2/1999 9:35	8.1	430	235	10.1	7.9	3	0.297	0.01 U	0.01 U	0.021		1.4	2
12/7/1999 9:40	4.5	538	281	10.4	8.1	3	0.237	0.019	0.04	0.02		1.3	2
1/4/2000 11:00	1.5	915	264	11.5	8.1	3	0.291	0.011	0.095	0.023		1.5 J	2
2/8/2000 12:00	0.6	419	267	13.5	8.4	4	0.256	0.01 U	0.081	0.026		1.2	
3/7/2000 12:15	2	447	268	13.4	7.6	4	0.231	0.01 U	0.022	0.017		1.5	1 U
4/4/2000 12:15	6.5	186	264	8	8.6	15	0.143	0.01 U	0.024	0.01		23	2
high organic content in DO bottle													
5/2/2000 11:45	11.6	1150	272	11.1		4	0.209	0.01 U	0.01 U	0.01 U		3.2	1 U
6/6/2000 13:45	16.3	1670	239	10.2		3	0.171	0.01 U	0.01 U	0.01 U		1.6	2
7/11/2000 13:00	19.5		252	10.1	8.9	3	0.205	0.01 U	0.01 U	0.011		1.8	21
8/15/2000 12:05	21	504	237	10.19	9.02	5	0.181	0.01 U	0.01 U	0.014		2.7	27
9/5/2000 12:35	17.4	447	245	10.4	8.78	5	0.189	0.01 U	0.01 U	0.015		1.7	4

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
10/5/1999	8:55	9.3	690	244	10.5	7.8	1	0.169	0.031	0.042	0.018		0.9	1
11/2/1999	9:00	3.3	970	181	12.8	7.5	2	0.053	0.01 U	0.01 U	0.017		1.1	2
		CB 38.67												
12/7/1999	10:30	0.9	1360	162	12.7	8	3	0.114	0.01 U	0.045	0.019		1.4	1
1/4/2000	10:35	-1.4	920	160	14.5	8.1	1	0.105	0.01 U	0.038	0.015		0.8	1 U
2/8/2000	11:20	1.2	750	179	15.1	8.3	3	0.078	0.01 U	0.023	0.021		1.1	
3/7/2000	11:45	3.6	670	231	13	7.7	3	0.096	0.01 U	0.01 U	0.01 U		1.4	1 U
4/4/2000	11:55	10.5	1030	187	10.7	8.2	6	0.081	0.01 U	0.016	0.011		2.8	8
5/2/2000	11:00	8.5	6120	93	11.7	7.8	35	0.158	0.01 U	0.016	0.027		13	11
6/6/2000	12:45	9	10000	54	11.8		69	0.089	0.01 U	0.01 U	0.031		22	29
7/11/2000	12:35	14.2	3090	107	10.2	8.2	5	0.077	0.01 U	0.01 U	0.012		3.1	15
8/15/2000	11:05	17.9	680	162	9.4	8.38	2	0.054	0.01 U	0.01 U	0.017		1.9	1
9/5/2000	11:00	14.3	680	163	9.39	8.23	10	0.063	0.01 U	0.01 U	0.016		1.6	1

Metals 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		Flow	Hardness	Tot. Rec. Cadmium	Dissolved Cadmium	Tot. Rec. Chromium	Dissolved Chromium	Tot. Rec. Copper	Dissolved Copper	Tot. Rec. Lead	Dissolved Lead	Total Mercury	Dissolved Nickle	Tot. Rec. Arsenic	Tot. Rec. Zinc	Dissolved Zinc
		CFS	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
5/2/2000	11:00													3.4		
6/6/2000	12:45													4.6		
7/11/2000	12:35													2.1		
8/15/2000	11:05													4.4		
9/5/2000	11:00													3.3		

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
5/2/2000 9:20	6.6		88	10.5	6.3	38	0.144	0.01 U	0.01 U	0.024		9.6	15
6/6/2000 10:15	7.7		51	10.8		79	0.094	0.01 U	0.01 U	0.035		18	42
7/11/2000 11:30	12.4		99	9.6	7.8	4	0.084	0.01 U	0.01 U	0.01		2.4	4
8/15/2000 9:15	13.5		146	9.8	8.2	2	0.058	0.01 U	0.01 U	0.016		1	18
9/5/2000 8:25	10.3		140	9.69	7.8	5	0.066	0.01 U	0.01 U	0.014		1.1	28

Metals 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		Flow	Hardness	Tot. Rec. Cadmium	Dissolved Cadmium	Tot. Rec. Chromium	Dissolved Chromium	Tot. Rec. Copper	Dissolved Copper	Tot. Rec. Lead	Dissolved Lead	Total Mercury	Dissolved Nickle	Tot. Rec. Arsenic	Tot. Rec. Zinc	Dissolved Zinc
		CFS	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
5/2/2000	9:20													2.5		
6/6/2000	10:15													2.8		
7/11/2000	11:30													0.93		
8/15/2000	9:15													1.8		
9/5/2000	8:25													1.5		

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
10/5/1999 6:25	15.7	110000	115	8.7	7.8	1 U	0.156	0.033	0.098	0.01 U		0.5 U	
11/2/1999 6:30	12	180000	120	9.3	7.3	1	0.157	0.01 U	0.099	0.011		0.5 U	1 U
12/7/1999 6:45	8.6	200000	124	10.6	7.9	1 U	0.168	0.01 U	0.118	0.01 U		0.6	1 U
1/4/2000 7:00	4.1	227000	129	11.4	7.7	1	0.21	0.01 U	0.157	0.01 U		1.3	1 U
2/8/2000 8:30	1.6	190000	132	12.4	7.7	2	0.176	0.01 U	0.136	0.01 U		0.7 J	
3/7/2000 8:20	2.2		136	12.5	6.8	1	0.179	0.01 U	0.16	0.01 U		0.8	1 U
4/4/2000 8:45	3.8	160000	140	12.1	7.9	1	0.273	0.01 U	0.256	0.01 U		2.1	1 U
5/10/2000 16:15	7.9	185000	109	11.7	8.4	2	0.173	0.01	0.077	0.01 U		2.1	1 U
6/14/2000 19:40	10.1	167000	115	10	8.1	2	0.12	0.014	0.065	0.01 U		1.6	2
7/12/2000 12:55	14.8	180000	104	10	8	3	0.14	0.01 U	0.05	0.01 U		1	3
8/9/2000 19:30	17	189000	116	10.05	8.14	1 U	0.095	0.01	0.037	0.01 U		1.9	1 U
9/13/2000 18:30	18.4	120000	117	8.64	8.63	4	0.13	0.01 U	0.083	0.01 U		0.7	1 U

Conventional Data Report

Spokane R @ Ninemile Br

54A090

Class: A
Rivermile: 56.7
Latitude: 47 46 30.0
Longitude: 117 32 37.0
Waterbody: WA-54-1020

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
6/11/2000 19:20	11.6		90	10.8	6.9	2	0.426	0.01 U	0.378	0.013		1.2	7
7/9/2000 15:00	14.9		146	10	8.3	4	0.793	0.01 U	0.727	0.016		1.2	8
8/6/2000 19:35	16.7		212	10.45	8.31	1	1.72	0.011	1.67	0.027		8.3	3
9/10/2000 17:30	12.9		229	10.25	8.11	2	1.57	0.01 U	1.52	0.028		0.8	12

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
10/10/1999 13:25	10.2	2330	143	10.7	8.2	1 U	0.986	0.01	0.884	0.018		0.7	8
11/14/1999 15:10	9.8	2930	133	10.8	6.8	2	0.804	0.01 U	0.687	0.092		1.9	4
12/12/1999 17:45	5.9	6050	92	11.8	7.7	3	0.496	0.01 U	0.409	0.045		2.1	60
1/9/2000 16:35	3.8	4980	103	12.3	7.8	2	0.604	0.016	0.569	0.051		1.2	5
2/6/2000 15:20	2.3	6980	135	12.7	7.8	13	1.21	0.013	1.1	0.072		7.8	38
3/12/2000 18:10	3.1	9760 J	66	13.7	7.9	6	0.653	0.01 U	0.584	0.047		6.2	7
4/9/2000 12:55	4.5	14700	65	13.4	8.2	5	0.349	0.01 U	0.26	0.025		3	1
5/7/2000 15:20	8.8	20800	60	11.1	8.5	5	0.283	0.01 U	0.156	0.017		3.6	1
6/11/2000 18:00	10.4	8060	86	10.6	8.3	2	0.387	0.01 U	0.329	0.013		1	5
7/9/2000 13:50	15.4	3180	136	10	8.5	2	0.829	0.01 U	0.761	0.015		1	6
8/6/2000 18:35	16.4	1270	210	9.84	8.16	1	1.61	0.01 U	1.53	0.029		1.1	5
9/10/2000 16:35	12.9	1410	210	10.25	7.6	2	1.39	0.01 U	1.32	0.204		1.3	760 J

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
10/10/1999 13:35	8.2	436	254	10.3	8.1	4	1.44	0.017	1.33	0.03		1	4
11/14/1999 15:50	8	493	272	9.8	7.6	7	1.36	0.01 U	1.23	0.033		1.9	17
12/12/1999 18:10	5.2	567	256	10.3	7.9	12	1.35	0.01 U	1.22	0.036			31
1/9/2000 17:25	4.2	592	230	10.7	7.9	7	1.41	0.011	1.25	0.037		7	3
2/6/2000 15:50	3.7	700	207	10.7	7.8	16	1.28	0.023	1.13	0.065		10	18
3/12/2000 18:45	4.7	1571	136	11.1	7.7	26	0.92	0.01 U	0.686	0.073		24	18
4/9/2000 13:30	8.5	1093	172	10	8.1	11	0.812	0.01 U	0.612	0.042		5.8	7
5/7/2000 16:00	10.1	918	189	9.9	6.7	16	0.985	0.012	0.701	0.06		8.1	10
6/11/2000 19:20	11.6	650	90	10.8	6.9	9	1.06	0.01 U	0.936	0.038		3.9	44
7/9/2000 14:20	13.7	527	226	9.6	8.4	7	1.14	0.01 U	1.06	0.024		2	29
8/6/2000 20:15	15.7	422	241	9.14	8.14	8	1.29	0.01 U	1.22	0.033		2.6	36
9/10/2000 18:25	11.2	438	278	9.44	8.07	5	1.31	0.01 U	1.28	0.027		1.7	140

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 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
10/10/1999 12:45	7.8	25	350	13.2	8.4	1	1.27	0.021	1.04	0.049		0.8	4
11/14/1999 14:35	7.8	41	356	12.1	7.5	2	1.02	0.01 U	0.76	0.053		1.4	4
12/12/1999 17:00	2.6	90	272	11.9	7.8	7	3.93	0.041	3.19	0.128			17
1/9/2000 16:05	0.3	132	224	11.8	7.8	6 J	2.95	0.023	3.07	0.114		12	24
2/6/2000 14:30	0.3	909	157	12.6	7.2	40	8.13	0.031	6.93	0.218		50	190
3/12/2000 17:35	3	647	181	12.3	7.8	30	4.61	0.018	4.51	0.183		52	20
4/9/2000 12:10	8.1	240	169	10.6	8.2	6	2.23	0.01 U	1.99	0.07		13	1
5/7/2000 14:35	12.4	184	240	12.6	7.2	5	1.85	0.015	1.39	0.065		5.5	7
	All pH values were not measured using a star electrode												
6/11/2000 17:05	13.3	80	266	10.1	8.3	5	1.01	0.012	0.727	0.058		3.1	29
7/9/2000 13:10	17.8	41	314	11.1	8.6	11	0.863	0.01 U	0.578	0.053		5.3	76
	Gel-filled pH probe used for entire run.												
8/6/2000 17:30	22.3	17	343	11.05	8.63	5	1.1	0.023	0.854	0.074		2.9	19
9/10/2000 15:00	13.4	22	381	10.85	8.31	6	1.12	0.01 U	0.979	0.077		3.8	1000 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
10/10/1999	15:10	11.9	1750 J	45	10	8.1	1 U	0.53	0.137	0.253	0.014		0.6	3
11/14/1999	13:25	9.2	2430 J	59	10.2	6.3	2	0.169	0.01 U	0.054	0.026		1.8	1
12/12/1999	15:50	5.6	5540 J	62	10.7	7	2	0.115	0.01 U	0.05	0.017		6.8	1 U
1/9/2000	15:10	3	4250 J	47	11.8	7.2	1 U	0.153	0.026	0.086	0.02		1.1	3
2/6/2000	17:05	2	6500 J	45	12	7.8	2	0.116	0.01 U	0.059	0.023		1.4	4
3/12/2000	20:00	2.4	8750 J	42	12.8	7.2	3	0.112	0.01 U	0.059	0.015		1.8	6
4/9/2000	14:45	4.4	14200 J	50	12.5	8	2	0.176	0.01 U	0.096	0.01		2	1 U
5/7/2000	17:10	8.6	20000 J	43	11.7	7.8	3	0.142	0.01 U	0.029	0.019		2.8	3
6/11/2000	21:40	11.9	7000 J	42	10.2	6.8	2	0.058	0.01 U	0.013	0.011		1.4	71
7/9/2000	16:00	18.5	2210 J	44	8.9	7.9	1	0.118	0.01 U	0.053	0.011		1	7
8/6/2000	21:40	23.4		49	7.73	7.54	1	0.173	0.014	0.093	0.014		1.6	37
9/10/2000	19:50	16.6	924 J	54	9.24	7.43	2	0.194	0.01 U	0.122	0.011		1	110

Conventional Data Report

Colville R abv Kettle Falls

59A080

Class: A
Rivermile: 9.2
Latitude: 48 35 19.1
Longitude: 117 59 28.5
Waterbody: WA-59-1010

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
10/11/1999 13:50	7.4	173	326	12	8.4	5	0.483	0.015	0.302	0.053		3.1	26
11/15/1999 14:00	7.5	243	347	10.3	7.5	7	0.657	0.061	0.384	0.083		14	16
12/13/1999 16:35	1.3	287	383	12.2	8.1	38	0.739	0.059	0.522	0.083		17	13
1/10/2000 17:30	-1.4	223	358	11.8	7.9	23	0.802	0.093	0.53	0.072		12	2
2/7/2000 17:25	1.4	248	343	12.2	8.3	25	0.866	0.088	0.569	0.108		14	36
3/13/2000 14:10	3.8	894	289	11.8	8.2	71	0.811	0.027	0.524	0.092		41	3
4/10/2000 13:30	7.1	1110	214	10.5	8.2	63	0.309	0.016	0.136	0.107		31	20
5/8/2000 16:00	8.8	1070	220	10.4	7.4	55	0.306	0.019	0.135	0.076		26	12
6/12/2000 22:00	10.4	618	268	9.8	8	104	0.305	0.01 U	0.171	0.068		21	460
7/10/2000 13:30	14.6	337	269	8.8	8.1	60	0.534	0.011	0.377	0.154		180	1500
Very turbid with small debris (e.g., plant fragments)													
8/7/2000 15:00	21	126	323	10.75	8.56	18	0.251	0.012	0.106	0.042		6.5	38
9/11/2000 17:15	14.2	201	315	11.15	8.42	24	0.302	0.01 U	0.228	0.056		12	350

Conventional Data Report

Colville R @ Blue Creek

59A110

Class: A
Rivermile: 32.2
Latitude: 48 19 12.0
Longitude: 117 49 07.0
Waterbody: WA-59-1010

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
10/11/1999	14:55	6.6	97	312	10.7	8.1	8 J	0.559	0.026	0.36	0.064		6.4	29
11/15/1999	15:40	6.9	114	350	8.3	8	26	0.779	0.064	0.424	0.087		17	25
12/13/1999	17:40	1.2	171	362	11.4	8	30	0.845	0.067	0.573	0.088		17	110
1/10/2000	19:00	-1.5	121	356	7.5	7.8	19	0.857	0.086	0.558	0.072		11	53
2/7/2000	19:25	1.7	153	338	11.1	8.1	22	0.918	0.081	0.628	0.094		11	130
3/13/2000	15:35	4.1	510	263	10.3	7.9	16	0.771	0.012	0.466	0.082		26	6
4/10/2000	14:45	9	450	225	10.2	8.2	13	0.326	0.01 U	0.102	0.043		12	13
5/8/2000	17:05	9.1	370	224	9.8	7.3	17	0.417	0.03	0.168	0.074		14	26
6/12/2000	23:30	9.7	270	261	9	7.9	61	0.508	0.059	0.229	0.073		40	1500 J
7/10/2000	14:40	13.1	180	250	8.8	8.1	33	0.484	0.02	0.242	0.074		24	1600
		Turbid, but not as much as at Kettle Falls												
8/7/2000	16:20	18.7	69	297	10.95	8.47	7	0.306	0.013	0.167	0.05		5.9	140
9/11/2000	18:50	12.4	106	319	9.54	8.2	21	0.494	0.047	0.295	0.068		12	340

Conventional Data Report

Little Pend Oreille @ Hwy 395

59B070

Class: A
Rivermile: 0.3
Latitude: 48 27 36.6
Longitude: 117 52 46.2
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
10/11/1999	14:30	7.1	25.3	205	11.7	8.6	3	0.16	0.01 U	0.026	0.038		1.2	19
11/15/1999	14:50	6	33.2	180	11.2	8.4	6	0.225	0.01 U	0.046	0.048		4	7
12/13/1999	17:40	0	29.5	168	13.1	8.1	10	0.243	0.01 U	0.134	0.047		3.1	11
1/10/2000	18:20	-1.7	205	224	14.1	7.9	6	0.314	0.01 U	0.225	0.039		2	4
2/7/2000	18:30	-0.9	32.8	181	12.4	8.4	5	0.245	0.01 U	0.16	0.065		2.6	6
3/13/2000	15:05	3.1	62	152	12.4	8.3	11	0.223	0.01 U	0.096	0.052		8.1	2
4/10/2000	14:15	6.2	260	79	10.9	8	56	0.211	0.01 U	0.039	0.079		20	5
5/8/2000	16:40	9.2	270	83	10.1	7.5	49	0.173	0.01 U	0.015	0.052		13	18
6/12/2000	22:45	9.8	210	112	9.9	8	108	0.173	0.01 U	0.027	0.073		25	470
7/10/2000	14:05	14.2	80	130	9.6	8.4	19	0.152	0.01 U	0.016	0.046		9.3	470
8/7/2000	15:55	20.8	39.7	191	8.64	8.46	6	0.108	0.01 U	0.01 U	0.035		1.8	300
9/11/2000	18:15	13.6	59	172	9.84	8.55	8	0.056	0.01 U	0.01 U	0.037		2.3	77

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
10/11/1999 12:55	7.6	920 J	174	11.5	8.3	2	0.184	0.01 U	0.077	0.014		0.5	13
11/15/1999 13:10	5.1	3950 J	64	11.8	7.8	16	0.23	0.01 U	0.027	0.023		5.3	46
12/13/1999 15:45	0.3	1525 J	118	13.6	8	1 U	0.121	0.01 U	0.064	0.013		0.5 U	1 U
1/10/2000 16:55	-1.4	935 J	130	14.7	8.1	3	0.168	0.01 U	0.11	0.012		0.5	1
2/7/2000 16:40	-0.9	835 J	142	14.7	8.7	7	0.17	0.01 U	0.111	0.021		1	1 U
3/13/2000 13:15	4.9	1430 J	136	13.4	8.6	3	0.084	0.01 U	0.01 U	0.013		1	1 U
4/10/2000 12:45	6.5	5575 J	96	12	8.3	10	0.141	0.01 U	0.018	0.017		3.8	2
5/8/2000 14:45	6.5	10400 J	66	12.6	8.1	15	0.12	0.01 U	0.015	0.023		4.7	2
6/12/2000 20:50	6.6	11100 J	49	12	8.3	20	0.074	0.01 U	0.014	0.015		6.7	14
7/10/2000 12:40	13.1	5200 J	58	10.3	7.8	6	0.084	0.01 U	0.018	0.014		1.6	40
8/7/2000 14:05	21.2	865 J	131	9.04	8.07	1	0.102	0.01 U	0.034	0.016		0.7	9
9/11/2000 16:30	15.1	500 J	183	10.65	8.42	2	0.11	0.01 U	0.031	0.014		0.6	3

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-9010

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
10/11/1999 11:40	11	83600	110	10.3	8.2	1	0.16	0.01	0.068	0.01 U		0.9	62
11/15/1999 11:50	7.3	126000	120	11.6	8.6	4	0.153	0.01 U	0.085	0.01 U		1.7	1
12/13/1999 14:10	4.4	124000	138	12	7.6	1	0.151	0.01 U	0.102	0.01 U		0.7	2
1/10/2000 15:10	3.4	119000	129	12.3	7.9	2	0.157	0.01 U	0.122	0.01 U		0.7	21
2/7/2000 14:45	1.8	113000	129	12.8	8.2	2	0.157	0.01 U	0.114	0.01 U		0.9	27
3/13/2000 12:00	2.9	96700	129	13.1	8.1	3	0.164	0.01 U	0.1	0.01 U		1.3	1 U
4/10/2000 11:30	5.1	75000	136	12.4	8.2	2	0.159	0.01 U	0.082	0.01 U		1.8	1
5/8/2000 13:30	6.9	122000	130	13	7.4	8	0.139	0.01 U	0.061	0.01		4	1
6/12/2000 16:30	8.7	135000	117	12	8.5	5	0.106	0.01 U	0.062	0.01 U		3.5	9
7/10/2000 11:20	13.2	130000	111	10.8	8.2	2	0.115	0.01 U	0.055	0.01 U		1.4	
8/7/2000 12:45	16.7	132000	108	10.55	8.19	2	0.104	0.01 U	0.053	0.011		1	4
9/11/2000 14:40	14.7	107000	114	10.85	8.65	2	0.113	0.01 U	0.087	0.01 U		0.8	7

Conventional Data Report

Deep Ck nr Mouth

61B070

Class: AA
Rivermile: 1
Latitude: 48 55 30.7
Longitude: 117 44 50.0
Waterbody: WA-61-

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
10/11/1999 11:00	6.4	29.5	329	11.4	8.5	1 U	0.101	0.01 U	0.01 U	0.025		0.5 U	13
11/15/1999 11:10	6.6	44.4	349	10.6	8.1	25	0.161	0.01 U	0.032	0.034		2.9	6
12/13/1999 13:35	0.5	46.4	354	13.4	8.5	2	0.145	0.01 U	0.071	0.032		1	3
1/10/2000 14:30	-1.7	40.4	347	14.4	8.2	4	0.141	0.01 U	0.069	0.028		1.3	2
2/7/2000 14:05	1.4	52	323	12.7	8.4	4	0.172	0.01 U	0.051	0.042		0.8	1
3/13/2000 11:00	2.1	133	294	12.7	8.6	16	0.194	0.01 U	0.085	0.037		7.3	1 U
4/10/2000 11:00	3.9	510	229	11.7	8.2	96	0.2	0.01 U	0.058	0.144		28	5
5/8/2000 12:55	6.5	445	244	11.5	8	78	0.125	0.01 U	0.02	0.048		18	2
6/12/2000 15:25	9.2	215	275	10.3	8.4	48	0.079	0.01 U	0.012	0.038		7.9	40
7/10/2000 10:50	12.6	81	321	9.8	8.4	3	0.082	0.01 U	0.01 U	0.019		1.5	71
8/7/2000 12:30	16.7	35.6	305	9.34	8.7	1	0.062	0.01 U	0.01 U	0.023		1	29
9/11/2000 14:10	13	41.4	329	10.05	7.85	2	0.037	0.01 U	0.01 U	0.022		0.8	7

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
10/11/1999 8:45	10.8	17100	134	9.6	8.5	2	0.111	0.01 U	0.01 U	0.01 U		1.2	1 U
11/15/1999 9:05	7.2	22000	174	9.8	7.7	2	0.095	0.01 U	0.01 U	0.011		1.3	6
12/13/1999 10:45	2.8	25800	160	11.3	8.1	1	0.07	0.01 U	0.016	0.01 U		1.3	1 U
1/10/2000 11:30	0.7	16900	148	12.7	8	3	0.091	0.01 U	0.029	0.01 U		1.5	2
2/7/2000 11:05	0	15100	150	13.2	8.1	15	0.062	0.01 U	0.012	0.015		1.8	1 U
Temp was 0.0													
3/13/2000 8:40	2.8	23000	142	12.5	7.7	5	0.091	0.01 U	0.016	0.014		3.2	1
4/10/2000 8:45	6.2	26800	134	11.2	8.3	5	0.1	0.01 U	0.02	0.011		3.2	1 U
5/8/2000 9:45	7.9	51600	131	13	6.7	8	0.076	0.01 U	0.01 U	0.01		5.1	3
6/12/2000 12:15	11.9	34700	154	10.3	8.4	5	0.054	0.01 U	0.01 U	0.01 U		3.7	4
7/10/2000 8:45	16.5	26300	138	9.4	8.3	3	0.088	0.01 U	0.01 U	0.01 U		2.9	3
8/7/2000 8:40	21.7	11000	135	8.64	8.29	2	0.065	0.01 U	0.01 U	0.013		1.4	1
9/11/2000 9:55	16.5	11900	144	9.44	8.4	2	0.041	0.01 U	0.01 U	0.01 U		1.1	1

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
10/11/1999 7:00	11.4		141	9.5	8.1	2	0.102	0.01 U	0.01 U	0.01 U		1.1	1
11/15/1999 7:10	7.7		158	10.4	6.5	3	0.088	0.01 U	0.01 U	0.01		2	1
12/13/1999 8:20	3.7		160	11.2	7.9	4	0.086	0.01 U	0.025	0.01		3.2	1 U
1/10/2000 7:25	2.1		151	11.9	7.9	3	0.083	0.01 U	0.04	0.01 U		2.8	1
2/7/2000 8:05	1.6		146	12.5	7.1	4	0.067	0.01 U	0.028	0.015		2.4	1
3/13/2000 6:55	3.2		144	13	7.5	4	0.075	0.01 U	0.017	0.011		3	1
4/10/2000 7:00	5.7		144	11.7	8	5	0.088	0.01 U	0.023	0.01 U		3.1	1 U
5/8/2000 7:00	8.1		136	12.2	7	10	0.075	0.01 U	0.01 U	0.01 U		3.5	1 U
6/12/2000 9:50	11.8		130	10.4	7.9	4	0.05	0.01 U	0.01 U	0.01 U		2.8	3
7/10/2000 7:10	18		138	9.1	8.3	2	0.074	0.01 U	0.01 U	0.01 U		1.9	1
Temps bounced from ~16 to 19													
8/7/2000 5:15	20.7		131	8.94	8.52	1	0.061	0.01 U	0.01 U	0.011		1.2	4 J
9/11/2000 7:15	18.3		164	8.74	7.31	2	0.032	0.01 U	0.01 U	0.01 U		1.3	2

Metals 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		Flow CFS	Hardness mg/L	Tot. Rec. Cadmium ug/L	Dissolved Cadmium ug/L	Tot. Rec. Chromium ug/L	Dissolved Chromium ug/L	Tot. Rec. Copper ug/L	Dissolved Copper ug/L	Tot. Rec. Lead ug/L	Dissolved Lead ug/L	Total Mercury ug/L	Dissolved Nickle ug/L	Tot. Rec. Arsenic ug/L	Tot. Rec. Zinc ug/L	Dissolved Zinc ug/L
1/10/2000	7:25		88					2.4	0.831						2.6 J	3.1 J
2/7/2000	8:05		83					1.1	0.833						1.3	1.5
4/10/2000	7:00		82					1.1	0.736						6.9	0.98
6/12/2000	9:50		70					1	0.22						3.7	2.8