

From: [Loehr, Lincoln C.](#)
Date: Friday, February 15, 2008 10:06:04 AM
Posted At: Inbox
Conversation: metals data for station on Columbia River near Highway 2 bridge
Subject: 07-1of2-metals data for station on Columbia River near Highway 2 bridge
Attachments: [station.htm](#)

<<station.htm>>

Ken,

This is Ecology's data from 2006. I think the metals results should be added to the data base for the 2008 list.

Lincoln

=====

This email is sent by a law firm and contains information that may be privileged and confidential. If you are not the intended recipient, please delete the email and notify us immediately.

=====

<http://www.ecy.wa.gov/apps/watersheds/riv/station.asp?sta=44A190>

From: [Brown, Chad \(ECY\)](#)
To: [303d](#);
Subject: 07-2of2-
FW: Can you provide me with a list of the river and stream stations where DOE has sampled for various dissolved metals?
Date: Friday, February 15, 2008 1:08:56 PM

Ken,

I am sure Lincoln will send in another comment but I am submitting this to the 303(d) email just so we don't lose track of his comments. Susan is aware of this email string.

Chad

From: Hallock, David (ECY)
Sent: Friday, February 15, 2008 12:43 PM
To: 'Loehr, Lincoln C.'
Cc: Brown, Chad (ECY)
Subject: RE: Can you provide me with a list of the river and stream stations where DOE has sampled for various dissolved metals?

You are welcome.

Except in the Spokane River, results exceeding the criteria are infrequent and scattered.

I forwarded your initial email to the folks that do the water quality assessment. They should be getting back to you soon. I expect they will say that Ecology's assessment policy (http://www.ecy.wa.gov/programs/wq/303d/wqp01-11-ch1_final2006.pdf) requires 10 sample values in a three year period for a Category 1 determination.

You are right, some of our stations have sufficient ambient data to meet that requirement and I believe the assessment folks are looking into including those. However the study reported in #95-352 only collected 2 samples and that reported in 02-03-039 collected 6, so these, by themselves, could not lead to a category 1 listing.

Dave Hallock

Environmental Assessment Program

Watershed Technical Support

P.O. Box 47710

Olympia, WA 98504-7710

360 407-6681 (Tues, Thurs, Fri)

From: Loehr, Lincoln C. [mailto:Lincoln.Loehr@hellerehrman.com]
Sent: Friday, February 15, 2008 12:13 PM
To: Hallock, David (ECY)
Subject: RE: Can you provide me with a list of the river and stream stations where DOE has sampled for various dissolved metals?

Thanks David,

That is a much more sizeable number of stations than is in the 303(d)/305(b) assessment, and will provide a better representation on what is known.

Off the top of your head, do you recall if any of these showed problems with meeting the metal water quality standards? I suspect most will be OK.

I note also that Ecology Pub No. 02-03-039 includes results of 303(d) specific metals sampling for 9 other

river stations and Ecology Report #95-352 provides 303(d) specific metals sampling for 48 locations, many of which are not part of the regular metals monitoring stations you described below. I think that data needs to also get into the system.

Lincoln

From: Hallock, David (ECY) [mailto:daha461@ECY.WA.GOV]
Sent: Friday, February 15, 2008 11:16 AM
To: Loehr, Lincoln C.
Cc: Brown, Chad (ECY)
Subject: RE: Can you provide me with a list of the river and stream stations where DOE has sampled for various dissolved metals?

Hi Lincoln,

The list of stations where we have sampled for dissolved metals is below. I've passed on your question about why these stations weren't included in the most recent assessment to the folks that do the assessment. They should be getting back to you soon.

Let me know if there's anything else you need.

STATION	STANAME
01A050	Nooksack R @ Brennan
01A140	Nooksack R above the MF
01F070	SF Nooksack @ Potter Rd
01G070	MF Nooksack R
03A060	Skagit R nr Mount Vernon
03B050	Samish R nr Burlington
04A100	Skagit R @ Marblemount
04C070	Sauk R nr Rockport
04C120	Sauk R @ Backman Park
05A070	Stillaguamish R nr Silvana
05A110	SF Stillaguamish nr Granite Falls
05B110	NF Stillaguamish nr Darrington
07A090	Snohomish R @ Snohomish
07C070	Skykomish R @ Monroe
07M120	SF Snoqualmie R @ 468th Ave. SE
08C070	Cedar R @ Logan St/Renton
08C110	Cedar R nr Landsburg
08M070	SF Thornton Cr @ 107th Ave NE
09A080	Green R @ Tukwila
09A190	Green R @ Kanaskat
09B090	Big Soos Cr nr Auburn
09D070	Miller Cr nr Mouth
09J090	Longfellow Cr abv 24-25th St junctn
09K070	Fauntleroy Cr. nr Mouth
10A050	Puyallup R @ Puyallup
10A070	Puyallup R @ Meridian St
10C095	White River @ R Street
11A070	Nisqually R @ Nisqually
12A100	Chambers Cr blw Steilacoom Lk
12A110	Clover Cr abv Steilacoom Lk

12B070	Leach Cr nr Steilacoom
12D050	Ponce de Leon Ck nr mouth
13A060	Deschutes R @ E St Bridge
15B050	Chico Cr nr Chico
15C070	Clear Cr @ Silverdale
16C090	Duckabush R nr Brinnon
18A050	Dungeness R nr Mouth
23A070	Chehalis R @ Porter
23A100	Chehalis R @ Prather Rd
23A130	Chehalis R @ Claquato
23A160	Chehalis R @ Dryad
23E070	Black River @ Moon Road Bridge
24B090	Willapa R nr Willapa
25E060	Abernathy Cr. nr mouth
26B070	Cowlitz R @ Kelso
26F050	Olequa Cr. at 7th Street
28A100	Columbia R @ Vancouver
28B070	Washougal R @ Washougal
28C070	Burnt Br Cr @ Mouth
30A070	Columbia R @ The Dalles
30C090	Little Klickitat R. @ Olson Rd.
31A070	Columbia R @ Umatilla
32A070	Walla Walla R nr Touchet
32B140	Touchet R above Dayton
33A050	Snake R nr Pasco
34A070	Palouse R @ Hooper
34F090	Pine Cr @ Rosalia
35A150	Snake R @ Interstate Br
36A070	Columbia R nr Vernita
37A090	Yakima R @ Kiona
37E050	Wide Hollow Cr. @ Main Street
37F080	Sulfur Creek @ Holaday Road
37I070	Moxee Drain @ Birchfield Rd.
38A050	Naches R @ Yakima on US HWY 97
39C070	Wilson Cr @ Highway 871
41A070	Crab Cr nr Beverly
44A190	Columbia River @ Hwy 2 Bridge
45A070	Wenatchee R @ Wenatchee
46A070	Entiat R nr Entiat
48A070	Methow R nr Pateros
48A140	Methow R @ Twisp
49A070	Okanogan R @ Malott
49B070	Similkameen R @ Oroville
49B090	Similkameen R @ Nighthawk
49B110	Similkameen R @ Chopaka, BC
52A110	Sanpoil R 13 mi S. Republic
53A070	Columbia R @ Grand Coulee
54A120	Spokane R @ Riverside State Pk
55B070	Little Spokane R nr Mouth
56A070	Hangman Cr @ Mouth

57A150	Spokane R @ Stateline Br
60A070	Kettle R nr Barstow
61A070	Columbia R @ Northport
61C070	Onion Cr nr Northport
62A150	Pend Oreille R @ Newport

Dave Hallock

***Environmental Assessment Program
Watershed Technical Support
P.O. Box 47710
Olympia, WA 98504-7710
360 407-6681 (Tues, Thurs, Fri)***

From: Loehr, Lincoln C. [mailto:Lincoln.Loehr@hellerehrman.com]
Sent: Friday, February 15, 2008 10:19 AM
To: Hallock, David (ECY)
Subject: Can you provide me with a list of the river and stream stations where DOE has sampled for various dissolved metals?

Dave,

I am aware that you have a number of stations where clean dissolved metals data are available, and I was noticing that the information is not presented in the state's draft 303(d)/305(b) report. I think it should get in. I know most of the metals data show metals are meeting standards, so do not require listing on Category 5 as impaired, but the report is also trying to identify where waters are also meeting standards (Category 1), so it is important to get the data into the system. Otherwise, someone could conclude that we haven't been looking at metals.

Lincoln

Lincoln Loehr | Environmental Analyst | **HellerEhrman**LLP | 701 Fifth Avenue, Suite 6100 | Seattle, WA 98104
tel: +1.206.389.6219 | fax: +1.206.447.0849 | email: lincoln.loehr@hellerehrman.com | web: www.hellerehrman.com

=====
This email is sent by a law firm and contains information that may be privileged and confidential. If you are not the intended recipient, please delete the email and notify us immediately.

=====

=====

This email is sent by a law firm and contains information that may be privileged and confidential. If you are not the intended recipient, please delete the email and notify us immediately.

=====

River & Stream Water Quality Monitoring



[environmental information](#) > [river & stream WQ monitoring](#) > [state network](#) >

Water quality monitoring station

44A190 - Columbia River @ Hwy 2 Bridge



Selected [station details](#)

type	class	uwa	ecoregion	county	contact	map detail
basin	A		Columbia Basin	Douglas	Coffin	TopoZone.com@ Local Live (satellite photo)

Years when sampling has occurred:

[2006](#)

[station overview](#)

[assessment](#)

[exceedences](#)

[finalized data](#)



relief x1.33 historical

WRIA: [state map](#)

1 station (long-term or sampled since 2005)

id	station name	type	last yr
1 44A190	Columbia River @ Hwy 2 Bridge	basin	2006

44A190 - Columbia River @ Hwy 2 Bridge Finalized results (2006)

Click on a [yellow year](#) to view data for that year:

[2006*](#)

* indicates that metal parameters were sampled at least once during the year

2006 results divided between two tables: [conventional parameters](#) and [metals](#)

2006 conventional parameters Parameter, unit, and data-qualifier descriptions

date	time	COND (umhos/cm)	FC (#/100ml)	NH3_N (mg/L)	NO2_NO3 (mg/L)	OP_DIS (mg/L)	OXYGEN (mg/L)	PH (pH)	PRESS (mm/Hg)	SUSSOL (mg/L)	TEMP (deg C)	TP_P (mg/L)	TPN (mg/L)	TURB (NTU)
10/3/2005	12:45	136	4	0.01 U	0.065	0.003 U	9.17	7.94	748.792	1 U	17.6	0.0058	0.13	0.5 U
11/7/2005	12:15	133	4	0.01 U	0.086	0.0049	9.59	7.9	746.506	1	13.3	0.0064	0.13	0.5
12/5/2005	12:35	136	3	0.01 U	0.114	0.0053	10.4	7.88	758.698	2	9.1	0.0068	0.16	0.6
1/11/2006	12:40	145	1 UJ	0.01 U	0.117	0.004	12.16	8.13	742.442	2	5.1	0.0064	0.349	0.9
2/6/2006	11:11	144	1 U	0.01 U	0.186	0.003 U	12.75	8.04	758.698	2	3.8	0.0045	0.22	1.1
3/6/2006	11:02	144	1 U	0.01 U	0.234	0.0045	12.98	7.99	743.204	2	3.7	0.0077	0.283	1.8
4/10/2006	11:45	151	1 U	0.01 U	0.131	0.003 U	13.71	8.27	742.95	2	4.9	0.0046	0.21	0.9
5/8/2006	12:24		1				12.78		752.094		9.4			
6/6/2006	11:35	118	2	0.01 U	0.054	0.0042	11.95	7.85	748.792	5	13	0.0065	0.12	3.3
7/17/2006	11:35	122	1	0.01 U	0.045	0.003 U	10.51	7.77	750.316	2	17.4	0.0056	0.12	0.7
8/14/2006	11:59	127	1	0.01 U	0.053	0.0038	9.48 J	7.86	745.998	1	19.3	0.0052	0.12	0.7

9/11/2006	12:03	130		2		0.01	U	0.057		0.003	U	9.07		7.98	752.602	1		19.6		0.0048	0.1		0.7	
-----------	-------	-----	--	---	--	------	---	-------	--	-------	---	------	--	------	---------	---	--	------	--	--------	-----	--	-----	--

Common data qualifiers: U - not detected at the reported level, J - estimated value
 Colored background indicates that result exceeded water quality standards -OR- contrasted strongly with historical results.

with this extension:

2006 metals Parameter, unit, and data-qualifier descriptions

date	time	Ag_DIS (ug/L)	Ag_TR (ug/L)	As_DIS (ug/L)	As_TR (ug/L)	Cd (ug/L)	Cd_DIS (ug/L)	Cr (ug/L)	Cr_DIS (ug/L)	Cu (ug/L)	Cu_DIS (ug/L)	HARD (mg/L)	Hg (ug/L)	NI_DIS (ug/L)	NI_TR (ug/L)	Pb (ug/L)	Pb_DIS (ug/L)	Zn (ug/L)	Zn_DIS (ug/L)										
10/3/2005	12:45	0.02	U	0.1	U	0.57	0.6	0.1	U	0.02	U	0.5	U	0.3	0.6	0.55	64.3	0.002	U	0.58	0.75	0.1	U	0.02	U	5	U	1.5	
12/5/2005	12:35	0.02	U	0.1	U	0.53	0.53	0.1	U	0.056	0.5	U	0.44	0.56	0.5	64.9	0.002	U	0.49	0.66	0.1	U	0.02	U	5	U	1.2		
2/6/2006	11:11	0.02	U	0.1	U	0.59	0.49	0.1	U	0.02	U	0.5	U	0.29	0.59	0.56	69.1	0.002	U	0.58	0.61	0.1	U	0.02	U	5	U	5.2	
4/10/2006	11:45	0.02	U	0.1	U	0.59	0.49	0.1	U	0.027	0.5	U	0.25	U	0.81	0.55	71.9	0.002	U	0.54	0.61	0.13	0.02	U	5.1	4.6			
6/6/2006	11:35	0.02	U	0.1	U	0.73	0.85	0.1	U	0.02	U	0.5	U	0.58	1.4	0.96	55.2	0.0029	0.63	0.58	0.2	0.02	U	5	U	6.8			
8/14/2006	11:59	0.02	U	0.1	U	0.59	0.61	0.1	U	0.02	U	0.5	U	0.25	U	0.83	0.63	61.6	0.002	U	0.51	0.66	0.1	U	0.02	U	5	U	1.8

Common data qualifiers: U - not detected at the reported level, J - estimated value
 Colored background indicates that result exceeded water quality standards -OR- contrasted strongly with historical results.

with this extension:

Bulk data download options for 44A190

- 14 standard parameters, all finalized years, cross-tab html table.
 with this extension: [view table](#) ~ 10 kilobytes
- [All project data for WRIA 44](#)
 tab-delimited text format, 15 kilobytes, requires WinZip®, PkZip®, or compatible



Data users please read [disclaimer](#).

Questions or comments on content may be sent to [Dave Hallock](#)
 Questions or comments on presentation may be sent to [Steve Barrett](#).