

**Total Dissolved Gas Saturation(%) - Average of
12 Highest Hours, 24 Hours Average and 24 Hours High
(Washington Calculation)**

Date 10/21/2018 9:15:09 AM

Total Dissolved Gas Data at Upper Columbia Sites

Date	Hungry H. Dnst				Boundary				Grand Coulee				Grand C. Tlwr				Chief Joseph				Chief J. Dnst				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07									98.8	99.0	99.0	24	99.5	100.2	106.4	24					98.0	98.7	98.8	24	10/07
10/08									99.2	99.4	99.7	24	98.6	99.1	99.3	24					98.0	98.2	98.4	24	10/08
10/09									99.4	99.7	99.7	24	98.9	99.3	100.0	24					98.4	98.6	99.0	24	10/09
10/10									98.8	99.2	98.9	24	98.4	98.7	99.0	24					98.1	98.3	98.6	14	10/10
10/11									98.7	99.0	99.3	24	97.9	98.6	99.5	24								0	10/11
10/12									99.0	99.2	99.3	24	98.4	98.9	99.3	24								0	10/12
10/13									98.0	99.1	98.9	24	98.1	98.9	98.7	24								0	10/13
10/14									97.2	97.8	97.4	24	97.1	98.0	97.6	24								0	10/14
10/15									97.3	97.3	97.4	21	96.9	97.4	97.9	24								0	10/15
10/16												0	96.8	97.2	97.4	24								0	10/16
10/17												0	97.3	97.7	98.0	24								0	10/17
10/18												0	97.5	98.1	98.6	24								0	10/18
10/19									97.7	99.6	99.6	15	97.2	98.1	97.4	24								0	10/19
10/20									97.5	97.8	97.9	23	97.4	97.7	98.0	23								0	10/20

Total Dissolved Gas Data at Upper Columbia Sites

Date	Wells				Wells Dwnstrm				Rocky Reach				Rocky R. Tlwr				Rock Island				Rock I. Tlwr				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07	97.6	98.5	98.1	24	97.9	98.4	98.8	24	99.1	99.3	99.6	24	98.0	99.0	100.1	19	98.3	98.7	99.1	19	98.1	98.5	99.1	19	10/07
10/08	98.4	98.6	98.8	24	98.4	98.7	98.8	24	99.3	99.5	99.7	23	99.5	100.0	100.5	21	98.5	98.7	99.1	21	98.5	98.8	99.1	21	10/08
10/09	98.3	98.7	98.8	24	98.1	98.7	98.9	24	99.4	99.7	99.9	23	99.4	99.8	100.5	21	98.7	99.1	99.2	23	98.8	99.1	99.3	21	10/09
10/10	97.7	97.9	98.4	24	99.6	102.1	110.9	24	99.0	99.2	99.2	24	100.0	100.2	100.9	22	98.4	98.6	98.8	23	98.4	98.6	98.8	22	10/10
10/11	97.6	97.9	98.2	24	98.0	99.1	102.8	24	98.6	99.0	98.9	24	99.5	100.5	100.8	23	98.3	98.7	98.8	24	98.3	98.6	98.7	21	10/11
10/12	98.1	98.5	98.8	24	97.9	98.6	99.0	24	99.7	100.7	102.2	24	99.8	100.3	102.4	23	98.5	98.8	99.2	24	98.6	98.8	99.1	23	10/12
10/13	97.4	98.4	98.0	24	97.0	98.1	97.9	24	99.3	101.1	101.1	23	99.3	101.4	102.3	22	98.5	99.1	99.5	23	98.3	98.9	99.3	23	10/13
10/14	96.3	97.1	96.5	5	93.7	96.9	95.7	24	98.1	98.5	98.9	24	98.1	98.9	99.5	22	98.0	99.1	98.5	22	98.3	99.0	98.8	21	10/14
10/15	96.8	97.1	97.2	15	96.4	99.1	104.0	24	97.6	98.4	98.0	24	98.3	98.9	99.6	24	97.3	97.7	98.0	24	97.4	98.2	98.0	24	10/15
10/16	96.5	96.9	97.3	24	96.6	97.3	97.7	24	97.5	97.8	98.3	24	97.9	99.2	99.5	20	97.2	97.6	97.6	22	97.4	97.7	97.7	20	10/16
10/17	97.0	97.9	98.5	24	96.9	97.7	98.4	24	98.0	98.4	99.1	24	98.1	98.7	99.7	24	97.5	97.8	98.1	24	97.7	98.1	98.4	23	10/17
10/18	97.3	97.8	98.3	24	97.1	97.8	98.3	24	98.8	99.5	99.9	24	98.9	99.2	100.7	21	97.3	97.8	98.4	22	97.8	98.2	98.7	20	10/18
10/19	97.2	97.7	98.3	23	97.1	97.8	98.9	23	98.5	99.5	99.1	24	98.7	100.1	99.9	21	97.9	98.5	98.7	24	98.2	98.6	98.9	17	10/19
10/20	97.6	98.4	99.1	20	97.9	98.8	99.3	20	98.4	98.8	99.2	22	98.4	99.4	99.5	21	98.4	98.6	99.1	22	98.7	99.1	99.3	19	10/20

**Total Dissolved Gas Saturation(%) - Average of
12 Highest Hours, 24 Hours Average and 24 Hours High
(Washington Calculation)**

Date 10/21/2018 9:15:09 AM

Total Dissolved Gas Data at Upper and Mid-Columbia Sites

Date	Wanapum				Wanapum Tlwr				Priest Rapids				Priest R. Dnstr				Pasco				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07	99.2	100.7	101.0	24	99.4	100.1	100.2	24	99.2	99.8	99.6	24	100.2	100.7	100.9	24					10/07
10/08	99.8	100.1	100.4	24	99.8	100.0	100.2	24	100.3	100.6	101.2	24	100.5	100.9	101.0	24					10/08
10/09	99.7	100.1	100.2	24	99.9	100.1	100.4	24	99.8	100.7	100.5	24	100.4	100.9	100.9	24					10/09
10/10	99.4	100.0	100.8	24	99.3	99.8	99.8	24	99.2	99.5	99.9	24	99.7	100.2	100.0	24					10/10
10/11	98.7	99.9	99.7	24	98.6	99.3	99.1	24	98.8	99.6	99.4	24	99.5	99.9	100.1	24					10/11
10/12	98.9	99.3	99.7	24	99.0	99.4	99.9	24	99.0	99.3	99.7	24	99.8	100.2	100.6	24					10/12
10/13	98.0	99.3	98.9	24	98.2	99.3	98.5	24	97.9	99.2	98.7	24	98.9	100.1	99.4	24					10/13
10/14	97.5	98.2	99.1	24	97.6	98.2	98.3	24	97.3	97.7	97.9	24				0					10/14
10/15	98.2	98.9	99.4	24	97.7	98.0	98.2	24	97.6	97.7	98.2	24	98.3	98.5	98.6	24					10/15
10/16	98.5	98.9	99.9	24	97.8	98.1	98.2	24	97.8	98.0	98.1	24	98.3	98.5	98.6	24					10/16
10/17	98.7	99.1	100.2	24	98.2	98.5	98.8	24	98.1	98.4	98.5	24	98.8	99.1	99.3	22					10/17
10/18	99.5	100.0	101.2	24	98.6	99.0	99.2	24	98.3	98.4	98.8	24				0					10/18
10/19	98.7	100.0	100.9	24	98.6	99.0	99.0	24	98.2	98.6	98.9	24				0					10/19
10/20				0				0				0				0					10/20

Total Dissolved Gas Data at Snake and Clearwater Sites

Date	Dworshak				Clrwr Peck				Anatone				Clrwr-Lewiston				Lower Granite				Lower G. Tlwr				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07	104.4	105.0	106.0	24													95.9	96.2	96.6	24				10/07	
10/08	104.8	105.5	106.6	24													95.9	96.3	96.8	24				10/08	
10/09	105.1	105.5	106.2	24													96.4	96.6	97.1	24				10/09	
10/10	104.7	105.3	106.0	24													96.1	96.4	96.9	24				10/10	
10/11	104.3	104.9	106.0	24													95.7	96.0	96.5	24				10/11	
10/12	104.6	105.5	106.4	24													95.9	96.3	96.6	24				10/12	
10/13	104.2	105.3	105.6	24													95.3	96.3	96.0	24				10/13	
10/14	107.7	109.3	110.6	24													94.6	95.2	95.4	24				10/14	
10/15	106.3	109.1	108.0	24													94.9	95.3	95.4	24				10/15	
10/16	104.6	105.3	106.4	24													95.2	95.6	96.3	24				10/16	
10/17	103.9	105.1	105.2	24													95.7	96.1	96.6	24				10/17	
10/18	103.6	104.2	105.3	24													95.9	96.2	96.8	24				10/18	
10/19	103.3	104.4	104.8	17													95.7	96.1	96.4	16				10/19	
10/20				0																				0	10/20

**Total Dissolved Gas Saturation(%) - Average of
12 Highest Hours, 24 Hours Average and 24 Hours High
(Washington Calculation)**

Date 10/21/2018 9:15:09 AM

Total Dissolved Gas Data at Lower Snake Sites

Date	Little Goose				L. Goose Tlwr				Lower Mon.				Lwr. Mon. Tlwr				Ice Harbor				Tlwr Ice Harbor				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07					95.6	95.9	96.3	24					96.6	97.0	97.8	24					96.9	97.6	98.6	24	10/07
10/08					95.8	96.0	96.1	24					97.1	97.5	98.6	24					97.3	97.7	98.3	24	10/08
10/09					95.9	96.1	96.3	24					97.2	97.6	98.5	24					97.3	97.8	98.6	24	10/09
10/10					95.4	95.6	95.9	24					96.7	96.8	98.3	24					97.4	98.0	100.0	20	10/10
10/11					101.0	107.1	113.2	24					96.0	96.5	96.8	24					97.3	97.8	99.5	24	10/11
10/12					104.8	112.6	115.1	24					96.0	96.5	97.0	24					98.1	99.2	102.2	24	10/12
10/13					95.3	110.5	99.1	24					95.4	96.4	96.8	24					97.5	99.1	99.4	24	10/13
10/14					93.4	94.1	94.2	24					94.7	95.2	95.4	24					96.8	98.0	98.4	24	10/14
10/15					93.5	93.7	94.3	24					94.6	95.0	95.6	24					96.5	97.0	97.7	24	10/15
10/16					93.5	93.8	94.3	24					94.8	95.2	96.3	24					97.1	97.5	99.1	24	10/16
10/17					106.4	117.2	120.5	24					94.9	95.3	97.1	24					97.3	98.0	99.5	24	10/17
10/18					95.6	115.6	100.8	24					96.1	97.3	103.0	24					97.2	97.9	98.6	24	10/18
10/19					94.0	94.6	94.4	17					95.1	97.1	95.9	17					97.1	98.2	100.0	17	10/19
10/20								0								0								0	10/20

Total Dissolved Gas Data at Mid-Columbia Sites

Date	McNary-Wash.				Tlwr McNary				John Day				Tlwr John Day				The Dalles				Dnstr T. Dalles				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07					97.4	97.7	97.9	24					99.7	100.0	100.4	24					99.5	99.8	99.8	24	10/07
10/08					97.7	98.0	98.2	24					100.0	100.5	101.1	24					99.9	100.2	100.3	24	10/08
10/09					97.9	98.1	98.3	24					100.2	100.5	100.7	24					100.3	100.5	100.6	24	10/09
10/10					97.3	97.6	97.7	24					99.8	100.2	100.9	24					99.8	100.0	100.1	24	10/10
10/11					97.3	97.7	97.9	24					99.3	99.9	100.4	24					99.3	99.7	99.9	24	10/11
10/12					98.3	99.1	99.6	24					99.3	99.9	100.5	24					99.5	99.7	99.9	24	10/12
10/13					98.4	99.1	99.1	24					99.0	99.8	99.9	24					99.1	99.7	99.4	24	10/13
10/14					97.5	98.5	98.2	24					98.6	99.1	99.6	24					98.6	99.1	98.9	24	10/14
10/15					97.4	97.8	98.0	24					98.7	99.0	100.3	24					98.4	98.7	98.8	24	10/15
10/16					97.8	98.2	98.3	24					98.7	99.3	100.4	24					98.7	99.2	99.5	24	10/16
10/17					98.4	98.7	99.0	24					99.1	99.7	100.8	24					99.2	99.5	99.8	24	10/17
10/18					98.6	98.9	99.2	24					99.5	99.8	101.6	24					99.6	99.9	100.3	24	10/18
10/19					98.4	98.8	99.2	24					99.0	99.6	100.9	24					98.9	99.7	99.3	24	10/19
10/20					98.7	99.2	99.4	22					99.4	100.0	100.3	22					100.1	100.9	101.0	22	10/20

**Total Dissolved Gas Saturation(%) - Average of
12 Highest Hours, 24 Hours Average and 24 Hours High
(Washington Calculation)**

Date 10/21/2018 9:15:09 AM

Total Dissolved Gas Data at Mid-Columbia Sites

Date	Bonneville				Warrendale				Camas\Washug.				Cascade Isld.				Date
	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	24 h Avg	12 h Avg	High	# Hr	
10/07					102.0	102.5	102.7	24									10/07
10/08					102.4	103.0	103.2	24									10/08
10/09					102.3	102.9	103.0	24									10/09
10/10					102.4	102.8	103.2	24									10/10
10/11					102.4	102.9	103.8	24									10/11
10/12					102.4	102.8	103.4	24									10/12
10/13					102.4	102.7	103.4	24									10/13
10/14					101.1	102.6	102.0	24									10/14
10/15					101.6	102.8	103.6	24									10/15
10/16					101.2	102.7	102.5	24									10/16
10/17					102.1	103.5	105.5	24									10/17
10/18					101.6	103.5	102.3	24									10/18
10/19					101.5	101.8	102.5	24									10/19
10/20					101.6	102.3	102.9	22									10/20

Hours used in calculating values:

