

Screening Values

[Screening values](#) are taken from Agency for Toxic Substance and Disease Registry (ATSDR) comparison values (CVs) for drinking water when available. When ATSDR values were not available, [EPA Regional Screening Levels \(RSLs\)](#) for residential tap water were used. Total metal data was used for assessment of human-health based effects.

Agricultural Screening Values are derived from National Academy of Science (NAS) Water Quality Criteria, 1972 (the Blue Book). Those guidelines are reprinted in [EPA's Guidelines for the Reuse of Waters for Irrigation](#). Dissolved metal values were used for the assessment of agricultural use waters.

Contaminants that do not exceed screening values are not considered to pose a risk of adverse health effects.

Analyte	CAS #	Units	Drinking Water CV (ppb)			Irrigation Waters (ug/L) [NAS, 1972]		Utah WQ Standards for San Juan River [Dissolved metals]					
			Health-Based Comparison Value for Water Ingestion (CV) [Total Metals]	CV Type and Source	Livestock Water (ug/L)	Long-Term	Short-Term	1C (Domestic)	3B (warm water fish) [1-hour]	3B (warm water fish) [4-day]	4 (agriculture)		
Hardness	-	mg/L			180 mg/L (UA)								Hardness
Aluminum	7429-90-5	ug/L	10,000	Child Intermediate EMEG	5,000 (NAS)	5,000	20,000			750	87		Aluminum
Antimony	7440-36-0	ug/L	4	Child RMEG	No Data Available	No Data Available	No Data Available						Antimony
Arsenic	7440-38-2	ug/L	3	Child RMEG & Chronic EMEG	200 (NAS)	100	2,000	10	340	150	100		Arsenic
Barium	7440-39-3	ug/L	2,000	Child Intermediate EMEG	No Data Available	No Data Available	No Data Available	1000					Barium
Beryllium	7440-41-7	ug/L	20	Child RMEG & Chronic EMEG	No Data Available	No Data Available	No Data Available	<4					Beryllium
Cadmium	7440-43-9	ug/L	5	Child Intermediate EMEG	50 (NAS)	10	50	10	2	0.25	10		Cadmium
Calcium	7440-70-2	ug/L	-	No CVs available	500,000 (UA)	No Data Available	No Data Available						Calcium
Chromium	7440-47-3	ug/L	60	Child RSL, non-cancer, Cr(VI)	1,000 (NAS)	100	1,000	50	16 (VI);	11 (VI);		100	Chromium
Cobalt	7440-48-4	ug/L	100	Child Intermediate EMEG	1,000 (NAS)	50	5,000						Cobalt
Copper	7440-50-8	ug/L	100	Child Intermediate EMEG	500 (NAS)	200	5,000		13	9	200		Copper
Iron	7439-89-6	ug/L	14,000	Child RSL, non-cancer	Limit Not Considered Necessary (NAS)	5,000	20,000		1000	1000			Iron
Lead	7439-92-1	ug/L	15	Child non-carcinogenic RSL	100 (NAS)	5,000	10,000	15	65	2.5	100		Lead
Magnesium	7439-95-4	ug/L	-	No CVs available	250,000 (UA)	No Data Available	No Data Available						Magnesium
Manganese	7439-96-5	ug/L	500	Child RMEG	Limit Not Considered Necessary (NAS)	200	10,000						Manganese
Molybdenum	7439-98-7	ug/L	50	Child RMEG	No Data Available	10	50						Molybdenum
Nickel	7440-02-0	ug/L	200	Child RMEG	No Data Available	200	2,000		468	52			Nickel
Potassium	7440-22-4	ug/L	-	No CVs available	No Data Available	No Data Available	No Data Available						Potassium
Selenium	7782-49-2	ug/L	50	Child RMEG	50 (NAS)	20	20	50	18.4	4.6	50		Selenium
Silver	7440-22-4	ug/L	50	Child RMEG	No Data Available	No Data Available	No Data Available	50	1.6	-			Silver
Sodium	7440-23-5	ug/L	-	No CVs available	1,000,000 (UA)	No Data Available	No Data Available						Sodium
Thallium	7440-28-0	ug/L	0.2	Child non-carcinogenic RSL	No Data Available	No Data Available	No Data Available						Thallium
Vanadium	7440-62-2	ug/L	100	Child Intermediate EMEG	100 (NAS)	100	1,000						Vanadium
Zinc	7440-66-6	ug/L	3,000	Child Intermediate EMEG	25,000 (NAS)	2,000	10,000		120	120			Zinc
Mercury	7439-97-6	ug/L	0.63	Child non-carcinogenic RSL, elemental Hg, ug/L	10 (NAS)	No Data Available	No Data Available	2	-	0.012			Mercury
TDS		mg/L			1200 (Utah)		500,000-1,000,000 (NAS)						
pH					6.5-9 (Utah)		4.5-9 (NAS)						

RMEG: ATSDR Reference Dose Media Evaluation Guide
 EMEG: ATSDR Environmental Media Evaluation Guide
 RSL: EPA Regional Screening Level

Domestic Source Water - Dissolved Metals

				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
Utah Domestic Source Criteria				(blank)		10	1000	4	10	(blank)	50		(blank)		15	(blank)		2	(blank)		50			(blank)			
Monitoring Location	Site Description	Collection Date	Collection Time	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	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	ug/L	ug/L	ug/L	ug/L
4954000	San Juan R @ US160 Xing in CO	8/8/2015	1:23:00 PM	217	ND	ND	222	ND	ND	51.5	ND	ND	2.24	ND	ND	7,850	2.94	ND	ND	ND	2,960	ND	ND	32,200	ND	4.86	15.3
		8/9/2015	12:02:00 PM	258	ND	ND	274	ND	ND	50.6	ND	ND	2.48	119	ND	6,860	2.69	ND	2.01	ND	2,610	ND	ND	28,500	ND	ND	18.5
		8/9/2015	9:02:00 PM	329	ND	ND	341	ND	ND	46	ND	ND	3.47	198	ND	6,300	4.14	ND	ND	ND	2,380	ND	ND	30,000	ND	ND	15.4
		8/10/2015	9:11:00 AM	172	ND	ND	233	ND	ND	44.6	ND	ND	3.21	103	ND	6,010	ND	ND	2.03	ND	2,510	ND	ND	34,100	ND	ND	19.7
		8/10/2015	2:06:00 PM	1,050	ND	ND	220	ND	ND	44.2	ND	ND	3.35	732	ND	6,020	12.8	ND	ND	ND	2,720	ND	ND	35,100	ND	ND	18
		8/11/2015	8:50:00 AM	3,290	ND	ND	451	ND	ND	39.8	ND	ND	4.85	1520	ND	5,050	19	ND	ND	ND	3,000	ND	ND	43,700	ND	ND	19.1
		8/11/2015	1:17:00 PM	720	ND	ND	334	ND	ND	41.7	ND	ND	3.03	366	ND	5,110	5.1	ND	ND	ND	2,910	ND	ND	37,000	ND	ND	14.9
		8/12/2015	9:50:00 AM	104	0.59	ND	178	ND	ND	52.1	ND	ND	2.39	ND	ND	7,200	ND	ND	ND	ND	2,790	ND	ND	30,300	ND	ND	14.8
		8/12/2015	2:04:00 PM	155	0.55	ND	151	ND	ND	47.9	ND	ND	2.61	ND	ND	6,970	ND	ND	ND	ND	2,740	ND	ND	27,300	ND	ND	16.5
		8/13/2015	10:01:00 AM	257	ND	ND	213	ND	ND	48.3	ND	ND	3.67	148	ND	6,480	3.16	ND	ND	ND	2,870	ND	ND	42,500	ND	ND	21.9
8/14/2015	2:33:00 PM	ND	ND	ND	72.3	ND	ND	53.4	ND	ND	3.86	ND	ND	6,610	ND	ND	3.65	3.14	3,660	ND	ND	52,400	ND	ND	ND		
4953990	San Juan R @ Town of Montezuma	8/8/2015	2:54:00 PM	136	ND	ND	223	ND	ND	71.5	ND	ND	2.72	ND	ND	9,920	ND	ND	2.62	ND	3,840	ND	ND	43,500	ND	ND	21
		8/10/2015	10:13:00 AM	218	ND	ND	262	ND	ND	49.8	ND	ND	3.24	144	ND	7,700	3.22	ND	2.03	ND	2,690	ND	ND	32,100	ND	ND	17.3
		8/10/2015	2:58:00 PM	ND	ND	ND	200	ND	ND	48.6	ND	ND	2.48	ND	ND	7,350	ND	ND	2.32	ND	2,590	ND	ND	31,800	ND	ND	14.6
		8/11/2015	9:44:00 AM	462	ND	ND	314	ND	ND	44.6	ND	ND	2.66	227	ND	6,490	3.31	ND	ND	ND	2,640	ND	ND	37,100	ND	ND	12.9
		8/11/2015	2:20:00 PM	1,400	ND	ND	298	ND	ND	44.8	ND	ND	3.47	668	ND	6,570	9.99	ND	ND	ND	2,960	ND	ND	38,300	ND	ND	14.3
		8/12/2015	10:37:00 AM	ND	0.8	ND	202	ND	ND	48.3	ND	ND	2.49	ND	ND	7,230	ND	ND	ND	ND	2,670	ND	ND	31,900	ND	ND	13.5
		8/12/2015	2:57:00 PM	375	0.82	ND	176	ND	ND	48.9	ND	ND	4.34	296	ND	7,500	2.28	ND	ND	ND	2,840	ND	ND	33,800	ND	ND	15.9
		8/13/2015	4:46:00 PM	330	ND	ND	240	ND	ND	49.4	ND	ND	3.75	192	ND	8,080	5.3	ND	ND	ND	2,620	ND	ND	32,900	ND	ND	32.7
8/14/2015	9:55:00 AM	ND	ND	ND	85.1	ND	ND	55.1	ND	ND	3.79	ND	ND	7,810	ND	ND	2.84	ND	3,510	ND	ND	53,000	ND	ND	ND		
4953250	San Juan R @ Sand Island	8/8/2015	4:19:00 PM	214	ND	ND	294	ND	ND	73.7	ND	ND	3.86	104	ND	9,240	2.55	ND	3.3	ND	4,110	ND	ND	51,200	ND	ND	19
		8/10/2015	11:15:00 AM	124	ND	ND	192	ND	ND	53.2	ND	ND	2.07	ND	ND	8,400	ND	ND	2.38	ND	2,860	ND	ND	28,400	ND	ND	13.7
		8/10/2015	3:58:00 PM	108	ND	ND	184	ND	ND	48.4	ND	ND	ND	ND	7,830	ND	ND	2.26	ND	2,670	ND	ND	30,600	ND	ND	13.2	
		8/11/2015	10:53:00 AM	684	ND	ND	278	ND	ND	45.8	ND	ND	2.87	328	ND	6,930	4.12	ND	ND	ND	2,720	ND	ND	36,800	ND	ND	13.7
		8/11/2015	3:01:00 PM	158	ND	ND	251	ND	ND	45.3	ND	ND	2.69	ND	ND	6,650	ND	ND	ND	ND	2,760	ND	ND	36,600	ND	ND	14.9
		8/12/2015	11:12:00 AM	623	1.08	ND	205	ND	ND	46.8	ND	ND	3.44	310	ND	6,980	4.47	ND	ND	ND	2,910	ND	ND	37,800	ND	ND	14.5
		8/12/2015	5:06:00 PM	605	1.78	ND	260	ND	ND	46.6	ND	ND	2.98	314	ND	7,070	5.16	ND	ND	ND	2,790	ND	ND	33,500	ND	ND	13.2
		8/13/2015	11:28:00 AM	509	ND	ND	156	ND	ND	53.6	ND	ND	3.1	275	ND	8,210	8.9	ND	ND	ND	2,960	ND	ND	29,200	ND	ND	20.4
8/14/2015	11:02:00 AM	ND	ND	2.03	78.6	ND	ND	53.2	ND	ND	3.31	ND	ND	8,260	7.02	ND	5.31	2.38	3,270	ND	ND	49,500	ND	5.88	ND		
4953000	San Juan R @ Mexican Hat US163 Xing	8/8/2015	5:40:00 PM	264	ND	ND	308	ND	ND	49.2	ND	ND	3.95	144	ND	5,750	2.81	ND	3.15	ND	4,150	ND	ND	62,600	ND	ND	14.2
		8/10/2015	11:53:00 AM	325	ND	ND	299	ND	ND	44.6	ND	ND	2.95	140	ND	7,840	2.55	ND	2.43	ND	3,410	ND	ND	43,600	ND	7.59	17.6
		8/10/2015	4:44:00 PM	149	ND	ND	265	ND	ND	44.2	ND	ND	2.48	ND	ND	7,870	ND	ND	2.63	ND	3,350	ND	ND	41,900	ND	6.67	18.5
		8/11/2015	11:31:00 AM	907	ND	ND	391	ND	ND	37.2	ND	ND	3.13	382	ND	6,720	4.55	ND	2.46	ND	3,290	ND	ND	51,300	ND	7.82	12.4
		8/11/2015	3:43:00 PM	1,790	ND	ND	445	ND	ND	43.6	ND	ND	5.28	787	ND	7,190	11.6	ND	ND	ND	3,110	ND	ND	41,400	ND	4.55	17.4
		8/12/2015	12:09:00 PM	125	1.41	ND	245	ND	ND	59.8	ND	ND	3.34	ND	ND	7,860	ND	ND	2.27	ND	3,090	ND	ND	42,100	ND	ND	14.2
		8/12/2015	5:50:00 PM	105	2.23	ND	185	ND	ND	48.9	ND	ND	3.19	ND	ND	7,220	ND	ND	2.64	ND	3,160	ND	ND	48,700	ND	ND	16.1
		8/13/2015	12:05:00 PM	293	ND	2.06	201	ND	ND	42.6	ND	ND	3.46	143	ND	7,210	3.54	ND	2.33	ND	3,300	ND	ND	44,400	ND	7.13	19.8
8/14/2015	11:43:00 AM	120	ND	2.33	157	ND	ND	46.2	ND	ND	5.86	ND	ND	10,500	2.43	ND	5.87	ND	4,290	ND	ND	68,000	ND	8.06	ND		
4952940	San Juan R @ Clay Hills	8/13/2015	2:42:00 PM	643	ND	ND	411	ND	ND	52.3	ND	ND	4.36	388	ND	7,500	13.8	ND	2.16	ND	3,090	ND	ND	47,000	ND	4.99	19.2
		8/14/2015	2:33:00 PM	ND	ND	ND	121	ND	ND	51.1	ND	ND	3.6	ND	ND	8,230	ND	ND	3.3	ND	3,690	ND	ND	49,800	ND	5.38	ND

These data are provisional and subject to change and are undergoing DWQ's quality assurance and quality control procedures. Data are released in the interest of providing timely data to the public. Neither DWQ nor the State of Utah may be held liable for any damages resulting from its use.

Dissolved metals results should always be less than the total metals result. This is because dissolved metals are a subset of total metals; they make up part of the total metals result. Dissolved metals are usually considered more mobile and biologically available (can be absorbed by the body). The screening values used in this table are from [Utah's water quality standards](#) protective of source water for domestic use.

For drinking water quality, it is best to use the total metals analysis result to determine how safe the water is to drink because the MCL is based on the total metals analysis and the total metals results are considered to be more protective of public health.

The [Water Quality Interpretation Tool](#) developed by Utah State University Extension Services allows users to enter their water quality data online and receive interpretation of those data pertaining to drinking water, irrigation water, livestock water, and environmental water state standards. The explanation of results from this tool provides information on the analyte health effects, the susceptible populations, and typical routes of exposure.

These data are provisional and subject to change and are undergoing DWQ's quality assurance and quality control procedures. Data are released in the interest of providing timely data to the public. Neither DWQ nor the State of Utah may be held liable for any damages resulting from its use.

Agricultural Uses

				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Sulfate	Total Dissolved Solids	
Livestock Water				5,000	(blank)	200	(blank)	(blank)	50	500	1,000	500	(blank)	100	250,000	(blank)	10	(blank)	(blank)	(blank)	(blank)	(blank)	50	(blank)	1,000,000	(blank)	100	25,000	(blank)	1,200
Irrigation Water Short-term NAS, 1972				5,000	(blank)	100	(blank)	(blank)	10	(blank)	100	50	200	5000	(blank)	200	(blank)	10	200	(blank)	(blank)	(blank)	20	(blank)	(blank)	(blank)	100	2,000	(blank)	500,000
Irrigation Water Long-term NAS, 1972				20,000	(blank)	2,000	(blank)	(blank)	50	(blank)	1,000	5,000	20,000	10,000	(blank)	10,000	(blank)	50	2,000	(blank)	(blank)	(blank)	20	(blank)	(blank)	(blank)	1000	10,000	(blank)	(blank)
Utah DWQ Agricultural Use Criteria 4				(blank)	(blank)	100	(blank)	(blank)	10	(blank)	100	(blank)	200	(blank)	100	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	50	(blank)	(blank)	(blank)	(blank)	(blank)	(blank)	1,200
Monitoring Location	Site Description	Collection Date	Collection Time	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	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	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	
4954000	San Juan R @ US160 Xing in CO	8/8/2015	1:23:00 PM	217	ND	ND	222	ND	ND	51.5	ND	ND	2.24	ND	ND	7,850	2.94	ND	ND	ND	2,960	ND	ND	32,200	ND	4.86	15.3	111	460	
		8/9/2015	12:02:00 PM	258	ND	ND	274	ND	ND	50.6	ND	ND	2.48	119	ND	6,860	2.69	ND	2.01	ND	2,610	ND	ND	28,500	ND	ND	18.5	120	400	
		8/9/2015	3:05:00 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/9/2015	6:00:00 PM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/9/2015	9:02:00 PM	329	ND	ND	341	ND	ND	46	ND	ND	3.47	198	ND	6,300	4.14	ND	ND	ND	2,380	ND	ND	30,000	ND	ND	15.4	97.3	430	
		8/10/2015	9:11:00 AM	172	ND	ND	233	ND	ND	44.6	ND	ND	3.21	103	ND	6,010	ND	2.03	ND	2,510	ND	ND	34,100	ND	ND	19.7	99.7	380		
		8/10/2015	2:06:00 PM	1,050	ND	ND	220	ND	ND	44.2	ND	ND	3.35	732	ND	6,020	12.8	ND	ND	ND	2,720	ND	ND	35,100	ND	ND	18	102	490	
		8/11/2015	8:50:00 AM	3,290	ND	ND	451	ND	ND	39.8	ND	ND	4.85	1520	ND	5,050	19	ND	ND	ND	3,000	ND	ND	43,700	ND	ND	19.1	100	380	
		8/11/2015	1:17:00 PM	720	ND	ND	334	ND	ND	41.7	ND	ND	3.03	366	ND	5,110	5.1	ND	ND	ND	2,910	ND	ND	37,000	ND	ND	14.9	99.2	290	
		8/12/2015	9:50:00 AM	104	0.586	ND	178	ND	ND	52.1	ND	ND	2.39	ND	ND	7,200	ND	ND	ND	ND	2,790	ND	ND	30,300	ND	ND	14.8	118	620	
		8/12/2015	2:04:00 PM	155	0.548	ND	151	ND	ND	47.9	ND	ND	2.61	ND	ND	6,970	ND	ND	ND	ND	2,740	ND	ND	27,300	ND	ND	16.5	102	450	
		8/13/2015	10:01:00 AM	257	ND	ND	213	ND	ND	48.3	ND	ND	3.67	148	ND	6,480	3.16	ND	ND	ND	2,870	ND	ND	42,500	ND	ND	21.9	121	450	
		8/14/2015	2:33:00 PM	ND	ND	ND	72.3	ND	ND	53.4	ND	ND	3.86	ND	ND	6,610	ND	ND	3.65	3.14	3,660	ND	ND	52,400	ND	ND	ND	NS	NS	
		8/6/2015	2:54:00 PM	136	ND	ND	223	ND	ND	71.5	ND	ND	2.72	ND	ND	9,920	ND	ND	2.62	ND	3,840	ND	ND	43,500	ND	ND	21	195	610	
4953990	San Juan R @ Town of Montezuma	8/10/2015	10:13:00 AM	218	ND	ND	262	ND	ND	49.8	ND	ND	3.24	144	ND	7,700	3.22	ND	2.03	ND	2,690	ND	ND	32,100	ND	ND	17.3	115	610	
		8/10/2015	2:58:00 PM	ND	ND	ND	200	ND	ND	48.6	ND	ND	2.48	ND	ND	7,350	ND	ND	2.32	ND	2,590	ND	ND	31,800	ND	ND	14.6	108	460	
		8/11/2015	9:44:00 AM	462	ND	ND	314	ND	ND	44.6	ND	ND	2.66	227	ND	6,490	3.31	ND	ND	ND	2,640	ND	ND	37,100	ND	ND	12.9	110	460	
		8/11/2015	2:20:00 PM	1,400	ND	ND	298	ND	ND	44.8	ND	ND	3.47	668	ND	6,570	9.99	ND	ND	ND	2,960	ND	ND	36,300	ND	ND	14.3	110	620	
		8/12/2015	10:37:00 AM	ND	0.799	ND	202	ND	ND	48.3	ND	ND	2.49	ND	ND	7,230	ND	ND	ND	ND	2,670	ND	ND	31,900	ND	ND	13.5	114	560	
		8/12/2015	2:57:00 PM	375	0.822	ND	176	ND	ND	48.9	ND	ND	4.34	296	ND	7,500	2.28	ND	ND	ND	2,840	ND	ND	33,800	ND	ND	15.9	123	460	
		8/13/2015	4:46:00 PM	330	ND	ND	240	ND	ND	49.4	ND	ND	3.75	192	ND	8,080	5.3	ND	ND	ND	2,620	ND	ND	32,900	ND	ND	32.7	125	370	
		8/14/2015	9:55:00 AM	ND	ND	ND	85.1	ND	ND	55.1	ND	ND	3.79	ND	ND	7,810	ND	ND	2.84	ND	3,510	ND	ND	53,000	ND	ND	ND	NS	NS	
		8/6/2015	4:19:00 PM	214	ND	ND	294	ND	ND	73.7	ND	ND	3.86	104	ND	9,240	2.55	ND	3.3	ND	4,110	ND	ND	51,200	ND	ND	19	226	640	
		8/10/2015	11:15:00 AM	124	ND	ND	192	ND	ND	53.2	ND	ND	2.07	ND	ND	8,400	ND	ND	2.38	ND	2,860	ND	ND	28,400	ND	ND	13.7	124	370	
4953250	San Juan R @ Sand Island	8/10/2015	3:58:00 PM	108	ND	ND	184	ND	ND	48.4	ND	ND	ND	ND	7,830	ND	ND	2.26	ND	2,670	ND	ND	30,600	ND	ND	13.2	118	490		
		8/11/2015	10:53:00 AM	684	ND	ND	278	ND	ND	45.8	ND	ND	2.87	328	ND	6,930	4.12	ND	ND	ND	2,720	ND	ND	36,800	ND	ND	13.7	114	390	
		8/11/2015	3:01:00 PM	158	ND	ND	251	ND	ND	45.3	ND	ND	2.69	ND	ND	6,650	ND	ND	ND	2,760	ND	ND	36,600	ND	ND	14.9	112	360		
		8/12/2015	11:12:00 AM	623	1.08	ND	205	ND	ND	46.8	ND	ND	3.44	310	ND	6,980	4.47	ND	ND	ND	2,910	ND	ND	37,800	ND	ND	14.5	112	450	
		8/12/2015	5:06:00 PM	605	1.78	ND	260	ND	ND	46.6	ND	ND	2.98	314	ND	7,070	5.16	ND	ND	ND	2,790	ND	ND	33,500	ND	ND	13.2	109	410	
		8/13/2015	11:28:00 AM	509	ND	ND	156	ND	ND	53.6	ND	ND	3.1	275	ND	8,210	8.9	ND	ND	ND	2,960	ND	ND	29,200	ND	ND	20.4	121	450	
		8/14/2015	11:02:00 AM	ND	ND	2.03	78.6	ND	ND	53.2	ND	ND	3.31	ND	ND	8,260	7.02	ND	5.31	2.38	3,270	ND	ND	49,500	ND	5.88	ND	NS	NS	
		8/6/2015	5:40:00 PM	264	ND	ND	308	ND	ND	49.2	ND	ND	3.95	144	ND	5,750	2.81	ND	3.15	ND	4,150	ND	ND	62,600	ND	ND	14.2	154	730	
		8/10/2015	11:53:00 AM	325	ND	ND	299	ND	ND	44.6	ND	ND	2.95	140	ND	7,840	2.55	ND	2.43	ND	3,410	ND	ND	43,600	ND	7.59	17.6	126	590	
		8/10/2015	4:44:00 PM	149	ND	ND	265	ND	ND	44.2	ND	ND	2.48	ND	ND	7,870	ND	ND	2.63	ND	3,350	ND	ND	41,900	ND	6.67	18.5	132	660	
4953000	San Juan R @ Mexican Hat US163 Xing	8/11/2015	11:31:00 AM	907	ND	ND	391	ND	ND	37.2	ND	ND	3.13	382	ND	6,720	4.55	ND	2.46	ND	3,290	ND	ND	51,300	ND	7.82	12.4	117	980	
		8/11/2015	3:43:00 PM	1,790	ND	ND	445	ND	ND	43.6	ND	ND	5.28	787	ND	7,190	11.6	ND	ND	3,110	ND	ND	41,400	ND	4.55	17.4	129	600		
		8/12/2015	12:09:00 PM	125	1.41	ND	245	ND	ND	59.8	ND	ND	3.34	ND	ND	7,860	ND	ND	2.27	ND	3,090	ND	ND	42,100	ND	ND	14.2	157	450	
		8/12/2015	5:50:00 PM	105	2.23	ND	185	ND	ND	48.9	ND	ND	3.19	ND	ND	7,220	ND	ND	2.64	ND	3,160	ND	ND	48,700	ND	ND	16.1	143	470	
		8/13/2015	12:05:00 PM	293	ND	2.06	201	ND	ND	42.6	ND	ND	3.46	143	ND	7,210	3.64	ND	2.33	ND	3,300	ND	ND	44,400	ND	7.13	19.8	135	490	
		8/14/2015	11:43:00 AM	120	ND	2.33	157	ND	ND	46.2	ND	ND	5.86	ND	ND	10,500	2.43	ND	5.87	ND	4,290	ND	ND	68,000	ND	8.06	ND	NS	NS	
		8/13/2015	2:42:00 PM	643	ND	ND	411	ND	ND	52.3	ND	ND	4.36	388	ND	7,500	13.8	ND	2.16	ND	3,090	ND	ND	47,000	ND	4.99	19.2	158	500	
4952940	San Juan R @ Clay Hills	8/14/2015	2:33:00 PM	ND	ND	ND	121	ND	ND	51.1	ND	ND	3.6	ND	ND	8,230	ND	ND	3.3	ND	3,690	ND	ND	49,800	ND	6.38	ND	NS	NS	

The Utah Department of Agriculture and Food (UDAF) is lifting any advisories against using San Juan River water for crop irrigation and livestock watering.

These data are provisional

Based on the latest DEQ evaluation of the San Juan River water sample data, Utah State University's veterinary toxicologist reports that the river's highest levels of contamination posed no adverse effects on plants, soils and animals, only short-term and minimal exposure risks. The UDAF advises farmers and ranchers to remain cautious and report any changes in the health of their crops and livestock.

These data are provisional and subject to change and are undergoing DWQ's quality assurance and quality control procedures. Data are released in the interest of providing timely data to the public. Neither DWQ nor the State of Utah may be held liable for any damages resulting from its use.

Aquatic Life Uses

				Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc		
Utah Aquatic Life Use Criteria 1-hr				750	(blank)	340	(blank)		2	(blank)	570	(blank)	13	1,000	65	(blank)				468	(blank)	18.4	1.6	(blank)			120		
Utah Aquatic Life Use Criteria 4-day				87	(blank)	150	(blank)		0.25	(blank)	74	(blank)	9	1,000	2.5	(blank)	0.01	(blank)		52	(blank)	4.6	(blank)				120		
Monitoring Location	Site Description	Collection Date	Collection Time	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	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	ug/L	ug/L	ug/L	ug/L		
4954000	San Juan R @ US160 Xing in CO	8/8/2015	1:23:00 PM	217	ND	ND	222	ND	ND	52	ND	ND	2	ND	ND	7,850	3	ND	ND	ND	2,960	ND	ND	32,200	ND	5	15		
		8/9/2015	12:02:00 PM	258	ND	ND	274	ND	ND	51	ND	ND	2	119	ND	6,860	3	ND	2	ND	2,610	ND	ND	28,500	ND	ND	19		
		8/9/2015	9:02:00 PM	329	ND	ND	341	ND	ND	46	ND	ND	3	198	ND	6,300	4	ND	ND	ND	2,380	ND	ND	30,000	ND	ND	15		
		8/10/2015	9:11:00 AM	172	ND	ND	233	ND	ND	45	ND	ND	3	103	ND	6,010	ND	ND	2	ND	2,510	ND	ND	34,100	ND	ND	20		
		8/10/2015	2:06:00 PM	1,050	ND	ND	220	ND	ND	44	ND	ND	3	732	ND	6,020	13	ND	ND	ND	2,720	ND	ND	35,100	ND	ND	18		
		8/11/2015	8:50:00 AM	3,290	ND	ND	451	ND	ND	40	ND	ND	5	1,520	ND	5,050	19	ND	ND	ND	3,000	ND	ND	43,700	ND	ND	19		
		8/11/2015	1:17:00 PM	720	ND	ND	334	ND	ND	42	ND	ND	3	366	ND	5,110	5	ND	ND	ND	2,910	ND	ND	37,000	ND	ND	15		
		8/12/2015	9:50:00 AM	104	1	ND	178	ND	ND	52	ND	ND	2	ND	ND	7,200	ND	ND	ND	ND	2,790	ND	ND	30,300	ND	ND	15		
		8/12/2015	2:04:00 PM	155	1	ND	151	ND	ND	48	ND	ND	3	ND	ND	6,970	ND	ND	ND	ND	2,740	ND	ND	27,300	ND	ND	17		
		8/13/2015	10:01:00 AM	257	ND	ND	213	ND	ND	48	ND	ND	4	148	ND	6,480	3	ND	ND	ND	2,870	ND	ND	42,500	ND	ND	22		
		8/14/2015	2:33:00 PM	ND	ND	ND	72	ND	ND	53	ND	ND	4	ND	ND	6,610	ND	ND	4	3	3,660	ND	ND	52,400	ND	ND	ND		
		4953990	San Juan R @ Town of Montezuma	8/8/2015	2:54:00 PM	136	ND	ND	223	ND	ND	72	ND	ND	3	ND	ND	9,920	ND	ND	3	ND	3,840	ND	ND	43,500	ND	ND	21
				8/10/2015	10:13:00 AM	218	ND	ND	262	ND	ND	50	ND	ND	3	144	ND	7,700	3	ND	2	ND	2,690	ND	ND	32,100	ND	ND	17
				8/10/2015	2:58:00 PM	ND	ND	ND	200	ND	ND	49	ND	ND	2	ND	ND	7,350	ND	ND	2	ND	2,590	ND	ND	31,800	ND	ND	15
8/11/2015	9:44:00 AM			462	ND	ND	314	ND	ND	45	ND	ND	3	227	ND	6,490	3	ND	ND	ND	2,640	ND	ND	37,100	ND	ND	13		
8/11/2015	2:20:00 PM			1,400	ND	ND	298	ND	ND	45	ND	ND	3	668	ND	6,570	10	ND	ND	ND	2,960	ND	ND	38,300	ND	ND	14		
8/12/2015	10:37:00 AM			ND	1	ND	202	ND	ND	48	ND	ND	2	ND	ND	7,230	ND	ND	ND	ND	2,670	ND	ND	31,900	ND	ND	14		
8/12/2015	2:57:00 PM			375	1	ND	176	ND	ND	49	ND	ND	4	296	ND	7,500	2	ND	ND	ND	2,840	ND	ND	33,800	ND	ND	16		
8/13/2015	4:46:00 PM			330	ND	ND	240	ND	ND	49	ND	ND	4	192	ND	8,080	5	ND	ND	ND	2,620	ND	ND	32,900	ND	ND	33		
4953250	San Juan R @ Sand Island	8/8/2015	4:19:00 PM	214	ND	ND	294	ND	ND	74	ND	ND	4	104	ND	9,240	3	ND	3	ND	4,110	ND	ND	51,200	ND	ND	19		
		8/10/2015	11:15:00 AM	124	ND	ND	192	ND	ND	53	ND	ND	2	ND	ND	8,400	ND	ND	2	ND	2,860	ND	ND	28,400	ND	ND	14		
		8/10/2015	3:58:00 PM	108	ND	ND	184	ND	ND	48	ND	ND	ND	ND	ND	7,830	ND	ND	2	ND	2,670	ND	ND	30,600	ND	ND	13		
		8/11/2015	10:53:00 AM	684	ND	ND	278	ND	ND	46	ND	ND	3	328	ND	6,930	4	ND	ND	ND	2,720	ND	ND	36,800	ND	ND	14		
		8/11/2015	3:01:00 PM	158	ND	ND	251	ND	ND	45	ND	ND	3	ND	ND	6,650	ND	ND	ND	ND	2,760	ND	ND	36,600	ND	ND	15		
		8/12/2015	11:12:00 AM	623	1	ND	205	ND	ND	47	ND	ND	3	310	ND	6,980	4	ND	ND	ND	2,910	ND	ND	37,800	ND	ND	15		
		8/12/2015	5:06:00 PM	605	2	ND	260	ND	ND	47	ND	ND	3	314	ND	7,070	5	ND	ND	ND	2,790	ND	ND	33,500	ND	ND	13		
		8/13/2015	11:28:00 AM	509	ND	ND	156	ND	ND	54	ND	ND	3	275	ND	8,210	9	ND	ND	ND	2,960	ND	ND	29,200	ND	ND	20		
8/14/2015	11:02:00 AM	ND	ND	2	79	ND	ND	53	ND	ND	3	ND	ND	8,260	7	ND	5	2	3,270	ND	ND	49,500	ND	6	ND				
4953000	San Juan R @ Mexican Hat US163 Xing	8/8/2015	5:40:00 PM	264	ND	ND	308	ND	ND	49	ND	ND	4	144	ND	5,750	3	ND	3	ND	4,150	ND	ND	62,600	ND	ND	14		
		8/10/2015	11:53:00 AM	325	ND	ND	299	ND	ND	45	ND	ND	3	140	ND	7,840	3	ND	2	ND	3,410	ND	ND	43,600	ND	8	18		
		8/10/2015	4:44:00 PM	149	ND	ND	265	ND	ND	44	ND	ND	2	ND	ND	7,870	ND	ND	3	ND	3,350	ND	ND	41,900	ND	7	19		
		8/11/2015	11:31:00 AM	907	ND	ND	391	ND	ND	37	ND	ND	3	382	ND	6,720	5	ND	2	ND	3,290	ND	ND	51,300	ND	8	12		
		8/11/2015	3:43:00 PM	1,790	ND	ND	445	ND	ND	44	ND	ND	5	787	ND	7,190	12	ND	ND	ND	3,110	ND	ND	41,400	ND	5	17		
		8/12/2015	12:09:00 PM	125	1	ND	245	ND	ND	60	ND	ND	3	ND	ND	7,860	ND	ND	2	ND	3,090	ND	ND	42,100	ND	ND	14		
		8/12/2015	5:50:00 PM	105	2	ND	185	ND	ND	49	ND	ND	3	ND	ND	7,220	ND	ND	3	ND	3,160	ND	ND	48,700	ND	ND	16		
		8/13/2015	12:05:00 PM	293	ND	2	201	ND	ND	43	ND	ND	3	143	ND	7,210	4	ND	2	ND	3,300	ND	ND	44,400	ND	7	20		
4952940	San Juan R @ Clay Hills	8/13/2015	2:42:00 PM	643	ND	ND	411	ND	ND	52	ND	ND	4	388	ND	7,500	14	ND	2	ND	3,090	ND	ND	47,000	ND	5	19		
		8/14/2015	2:33:00 PM	ND	ND	ND	121	ND	ND	51	ND	ND	4	ND	ND	8,230	ND	ND	3	ND	3,690	ND	ND	49,800	ND	5	ND		

These data are provisional and subject to change and are undergoing DWQ's quality assurance and quality control procedures. Data are released in the interest of providing timely data to the public. Neither DWQ nor the State of Utah may be held liable for any damages resulting from its use.

Most metals were screened against two different standards: the acute criterion that established thresholds that should not be exceeded to protect organisms from short term exposure, and the chronic criterion that protects against long-term exposure. The acute criterion is most relevant to the immediate threat of the plume to fish and wildlife.

One important caveat with respect to interpreting the results is that the criteria have not been adjusted for pH or hardness. Given current conditions in the San Juan River, most metals criteria will become less stringent once these adjustments are made, so these results reflect a worst-case scenario. DEQ will update the table with these adjustments tomorrow.

Based on these results, aluminum is the only metal that is of potential threat to fish and wildlife. With one exception, aluminum concentrations do not exceed the acute criterion. The aluminum concentrations were equally high before and after the presence of the plume at the sample locations.

Overall, based on results received so far, DEQ concludes that any elevated concentration in metals that were caused from the mine release plume is not sufficiently high to threaten fish and wildlife.

These data are provisional and subject to change and are undergoing DWQ's quality assurance and quality control procedures. Data are released in the interest of providing timely data to the public. Neither DWQ nor the State of Utah may be held liable for any damages resulting from its use.