Washington Aqueduct

U.S. ARMY Corps of Engineers

Annual Report of Water Analysis 2021

Prepared by:

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WASHINGTON AQUEDUCT, US ARMY CORPS OF ENGINEERS
ANNUAL REPORT OF WATER ANALYSIS (2021)

Potomac River Raw Water Supply

	Miscellaneous Physical Parameters										Inorganic Ions									Microorganisms			
	pH	ALKALINITY	CONDUCTIVITY	DISSOLVED SOLIDS	SUSPENDED SOLIDS	TOTAL SOLIDS	TEMPERATURE	TOTAL HARDNESS	TOTAL ORGANIC CARBON	TURBIDITY	TOTAL AMMONIA - N	BROMIDE	CHLORIDE	FLUORIDE	NITRATE - N	NITRITE - N	ORTHOPHOSPHATE - PO4	PERCHLORATE	SULFATE	TOTAL COLIFORM	E. COLI	GIARDIA *Great Falls Intake*	CRYPTOSPORIDIUM *Great Falls Intake*
		ppm	uS/cm	ppm	ppm	ppm	°F	ppm	ppm	NTU	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	MPN/100mL	MPN/100mL	cysts/L	Oocysts/L
Jan	7.8	78	307	164	5	169	41	120	2.2	7	ND	ND	27	ND	2.2	ND	ND	0.3	25	2027	80	0.29	ND
Feb	7.9	77	575	316	25	341	38	121	1.5	5	ND	ND	111	ND	1.8	ND	ND	0.3	22	3331	99	1.02	ND
Mar	7.8	69	285	188	7	195	50	113	2.6	10	ND	ND	37	ND	1.7	ND	ND	0.2	20	2392	108	0.10	ND
Apr	7.8	71	255	185	7	192	59	106	2.4	5	0.08	ND	27	ND	1.1	ND	ND	ND	19	3396	74	0.18	ND
May	7.9	84	358	173	12	185	68	120	2.4	5	ND	ND	33	0.13	1.2	ND	ND	ND	23	1797	60	ND	ND
Jun	7.9	89	307	192	24	216	77	128	3.3	4	ND	ND	32	0.16	1.3	ND	ND	ND	25	3180	39	ND	ND
Jul	8.4	90	356	215	3	218	82	133	3.0	6	0.06	ND	36	0.23	0.6	ND	ND	0.3	30	31982	40	0.19	ND
Aug	8.3	94	380	221	11	232	82	138	3.4	6	0.06	ND	38	0.21	0.5	ND	ND	ND	35	9459	153	0.95	ND
Sep	7.8	81	325	200	5	205	73	121	5.2	14	0.05	ND	28	0.15	1.8	ND	ND	0.3	20	18913	712	0.28	ND
Oct	8.0	103	364	216	3	219	67	137	2.4	5	ND	ND	38	0.16	1.7	ND	ND	0.3	24	33145	930	0.55	ND
Nov	8.1	104	345	198	5	203	49	128	3.9	5	ND	ND	28	0.13	1.7	ND	ND	0.2	28	2483	115	0.10	ND
Dec	8.3	122	388	226	ND	226	45	152	1.9	3	ND	ND	35	0.25	1.7	ND	ND	0.3	33	163	14	0.19	ND

	Metals																							
	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	LITHIUM	MAGNESIUM	MANGANESE	MOLYBDENUM	NICKEL	SELENIUM	SILVER	SODIUM	STRONTIUM	THALLIUM	THORIUM	URANIUM	ZINC
	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb
Jan	367	ND	ND	39	ND	ND	34	ND	0.6	2.1	600	0.7	2.0	8	58	ND	1.8	ND	ND	13	118	ND	ND	ND	4.6
Feb	117	ND	ND	41	ND	ND	37	ND	ND	2.3	143	ND	2.4	7	24	ND	0.9	ND	ND	84	179	ND	ND	0.2	2.2
Mar	2943	ND	1.1	76	0.3	ND	31	2.9	5.5	7.0	4670	5.9	5.2	9	343	ND	10.4	ND	ND	17	78	ND	ND	0.3	28.4
Apr	241	ND	ND	38	ND	ND	31	ND	0.4	2.7	474	0.6	1.8	7	51	ND	1.4	ND	ND	16	125	ND	ND	ND	3.5
May	143	ND	ND	43	ND	ND	37	ND	0.3	2.2	267	0.3	1.8	7	41	0.6	1.4	ND	ND	16	143	ND	ND	ND	3.6
Jun	143	ND	ND	44	ND	ND	38	ND	0.2	2.1	231	0.4	2.0	8	40	0.7	1.1	ND	ND	17	167	ND	ND	0.2	2.4
Jul	93	ND	ND	42	ND	ND	39	ND	0.2	3.0	123	0.3	2.6	9	23	0.8	1.0	ND	ND	18	194	ND	ND	0.3	1.5
Aug	272	ND	0.6	49	ND	ND	39	ND	0.5	2.1	395	0.5	3.0	10	142	0.8	1.7	ND	ND	19	199	ND	ND	0.3	4.0
Sep	1480	ND	ND	46	ND	ND	37	2.2	1.8	5.4	2230	2.1	2.8	7	128	0.6	4.0	ND	ND	15	135	ND	0.6	0.4	7.9
Oct	154	ND	ND	40	ND	ND	44	ND	ND	1.9	218	0.3	1.6	7	29	0.6	0.9	ND	ND	16	161	ND	ND	0.3	1.9
Nov	356	ND	ND	44	ND	ND	39	ND	0.5	2.4	581	0.6	2.8	8	52	0.5	1.6	ND	ND	15	182	ND	ND	0.2	3.8
Dec	106	ND	ND	37	ND	ND	44	ND	ND	1.2	101	0.2	2.3	10	13	0.5	0.7	ND	ND	17	192	ND	ND	0.3	2.3

ppm = Parts Per Million ppb = Parts Per Billion ND = Not Detected MPN/100mL = Most Probable Number per 100 milliLiters NTU = Nephelometric Turbidity Units µS/cm = microSiemens per centimeter

WASHINGTON AQUEDUCT, US ARMY CORPS OF ENGINEERS
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	Inorganic Ions									Metals																												
	TOTAL AMMONIA - N	BROMIDE	CHLORIDE	FLUORIDE	NITRATE - N	NITRITE - N	ORTHOPHOSPHATE - PO4	PERCHLORATE	SULFATE	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	LITHIUM	MAGNESIUM	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	SELENIUM	SILVER	SODIUM	STRONTIUM	THALLIUM	THORIUM	URANIUM	VANADIUM	ZINC
EPA MCL*				4	10	1					6	10	2000	4	5		100									2			50					2		30		
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb
Dalecarlia Water Treatment Plant Finished Water																																						
Jan	0.8	ND	28	0.6	2.1	ND	2.5	0.2	35	10	ND	ND	27	ND	ND	34	ND	ND	1.5	ND	ND	1.3	8	0.6	ND	ND	0.5	ND	ND	19	105	ND	ND	ND	ND	0.5
Feb	0.8	ND	102	0.6	1.8	ND	2.6	0.3	35	15	ND	ND	34	ND	ND	39	ND	ND	1.1	ND	ND	1.5	8	0.6	ND	ND	0.7	ND	ND	51	184	ND	ND	ND	ND	1.1
Mar	0.8	ND	43	0.6	1.7	ND	2.4	0.2	32	11	ND	ND	28	ND	ND	33	ND	ND	1.4	ND	ND	2.1	6	0.4	ND	ND	0.6	ND	ND	27	97	ND	ND	ND	ND	ND
Apr	0.8	ND	35	0.7	1.2	ND	2.4	ND	31	24	ND	ND	36	ND	ND	35	ND	ND	1.1	ND	ND	1.8	6	0.4	ND	ND	0.7	ND	ND	21	139	ND	ND	ND	ND	0.5
May	0.8	ND	35	0.7	1.1	ND	2.5	0.3	34	39	ND	ND	42	ND	ND	37	ND	ND	1.4	ND	ND	1.7	6	0.5	ND	ND	0.6	ND	ND	23	162	ND	ND	ND	ND	0.5
Jun	0.9	ND	39	0.7	1.3	ND	2.5	0.2	36	37	ND	ND	39	ND	ND	40	ND	ND	1.4	ND	ND	1.8	7	0.6	ND	0.5	0.7	ND	ND	23	161	ND	ND	ND	ND	0.8
Jul	0.8	ND	39	0.7	0.6	ND	2.5	0.2	44	124	ND	0.3	38	ND	ND	40	ND	ND	1.3	ND	ND	1.9	8	1.0	ND	10.4	0.7	ND	ND	22	184	ND	ND	ND	0.9	ND
Aug	0.9	ND	40	0.7	0.7	ND	2.4	0.3	51	47	ND	0.4	38	ND	ND	41	ND	ND	1.2	ND	ND	2.2	10	1.1	ND	0.8	0.8	ND	ND	25	198	ND	ND	ND	0.8	0.5
Sep	0.9	ND	32	0.8	1.7	ND	2.4	0.3	42	46	ND	0.3	42	ND	ND	38	ND	ND	1.3	ND	ND	2.6	7	1.0	ND	0.9	0.9	ND	ND	20	200	ND	ND	ND	0.9	0.5
Oct	0.9	ND	37	0.7	1.7	ND	2.4	0.3	39	32	ND	ND	37	ND	ND	46	ND	ND	1.1	10.1	ND	1.0	5	0.5	ND	0.5	0.7	ND	ND	22	170	ND	ND	ND	ND	ND
Nov	0.9	ND	33	0.6	1.6	ND	2.4	0.3	39	27	ND	ND	33	ND	ND	41	ND	ND	1.6	ND	ND	1.6	7	0.6	ND	0.5	0.8	ND	ND	22	129	ND	ND	ND	ND	ND
Dec	0.8	ND	38	0.6	1.7	ND	2.3	0.3	47	22	ND	ND	31	ND	ND	44	ND	ND	1.2	21.0	ND	1.2	10	0.7	ND	ND	0.7	ND	ND	23	186	ND	ND	ND	ND	0.8
McMillan Water Treatment Plant Finished Water																																						
Jan	0.8	ND	29	0.7	2.0	ND	2.5	0.2	37	20	ND	ND	29	ND	ND	27	ND	ND	4.2	ND	ND	1.3	6	0.3	ND	ND	0.6	ND	ND	20	116	ND	ND	ND	ND	0.6
Feb	0.8	ND	83	0.6	1.8	ND	2.5	0.3	37	19	ND	ND	35	ND	ND	35	ND	ND	2.4	ND	ND	1.3	8	ND	ND	ND	0.6	ND	ND	46	177	ND	ND	ND	ND	0.8
Mar	0.8	ND	56	0.6	1.7	ND	2.5	0.3	33	14	ND	ND	33	ND	ND	25	ND	ND	3.8	ND	ND	1.7	7	ND	ND	ND	0.7	ND	ND	32	139	ND	ND	ND	ND	ND
Apr	0.8	ND	42	0.7	1.2	ND	2.5	ND	33	33	ND	ND	37	ND	ND	30	ND	ND	3.5	ND	ND	1.5	7	0.2	ND	ND	0.6	ND	ND	25	134	ND	ND	ND	ND	0.5
May	0.8	ND	36	0.7	1.0	ND	2.5	0.2	34	63	ND	ND	39	ND	ND	34	ND	ND	3.1	ND	ND	1.5	7	0.3	ND	ND	0.5	ND	ND	21	148	ND	ND	ND	ND	10.4
Jun	0.8	ND	40	0.6	1.1	ND	2.5	0.2	38	60	ND	ND	39	ND	ND	35	ND	ND	5.9	ND	ND	1.8	7	1.1	ND	ND	ND	ND	ND	24	169	ND	ND	ND	ND	ND
Jul	0.8	ND	41	0.7	0.6	ND	2.5	0.3	43	76	ND	0.3	40	ND	ND	36	ND	ND	6.8	ND	ND	1.9	8	0.7	ND	0.6	ND	ND	ND	23	185	ND	ND	ND	0.5	ND
Aug	0.8	ND	41	0.6	0.5	ND	2.3	0.4	54	49	ND	0.3	37	ND	ND	34	ND	ND	7.7	ND	ND	1.9	11	0.6	ND	0.7	ND	ND	ND	26	193	ND	ND	ND	ND	ND
Sep	0.8	ND	34	0.7	1.3	ND	2.5	0.4	46	36	ND	0.3	41	ND	ND	31	ND	ND	8.7	ND	ND	2.3	7	0.5	ND	0.9	0.7	ND	ND	24	190	ND	ND	ND	0.7	ND
Oct	0.8	ND	34	0.7	1.7	ND	2.4	0.3	40	16	ND	ND	36	ND	ND	33	ND	ND	9.1	ND	ND	1.3	7	ND	ND	ND	0.6	ND	ND	22	143	ND	ND	ND	ND	ND
Nov	0.8	ND	35	0.6	1.5	ND	2.5	0.3	42	50	ND	ND	37	ND	ND	34	ND	ND	13.4	ND	ND	1.5	7	ND	ND	0.6	0.8	ND	ND	22	186	ND	ND	ND	ND	ND
Dec	0.8	ND	37	0.6	1.6	ND	2.4	0.3	46	20	ND	ND	33	ND	ND	40	ND	ND	8.3	ND	ND	1.3	9	0.4	ND	ND	0.7	ND	ND	22	176	ND	ND	ND	ND	0.6

EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters ppm = Parts Per Million ppb = Parts Per Billion ND = Not Detected

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	Miscellaneous Physical Parameters										Microorganisms			Haloacetic Acids (HAAs)							Trihalomethanes (THMs)					Volatile Organic Compounds (VOCs)																					
	pH	ALKALINITY	CONDUCTIVITY	TEMPERATURE	CHLORINE	TOTAL HARDNESS	TOTAL ORGANIC CARBON	TOTAL DISSOLVED SOLIDS	TOTAL SUSPENDED SOLIDS	TURBIDITY (Average)*	TOTAL COLIFORM (% positive)	E. COLI (% positive)	HETEROTROPHIC PLATE COUNT	DIBROMOACETIC ACID	DICHLOROACETIC ACID	MONOBROMOACETIC ACID	MONOCHLOROACETIC ACID	TRICHLOROACETIC ACID	TOTAL HALOACETIC ACIDS	BROMOCHLOROACETIC ACID	CHLOROFORM	BROMODICHLOROMETHANE	CHLORODIBROMOMETHANE	BROMOFORM	TOTAL TRIHALOMETHANES	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMOMETHANE	tert-BUTYLBENZENE	sec-BUTYLBENZENE	n-BUTYLBENZENE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROMETHANE	2-CHLOROTOLUENE	4-CHLOROTOLUENE	DIBROMOMETHANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE	1,2-DICHLOROBENZENE	DICHLORODIFLUOROMETHANE
EPA MCL*																										5							5	100							75	600	
Units		ppm	uS/cm	°F	ppm	ppm	ppm	ppm	ppm	NTU	%+	%+	CFU/mL	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Dalecarlia Water Treatment Plant Finished Water																																													
Jan	7.7	76	335	39	3.6	117	1.4	183	ND	0.01	0.0	0.0	<1	---	---	---	---	---	---	---	---	9.9	5.5	1.4	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb	7.7	76	569	38	3.6	132	1.1	360	1	0.02	0.0	0.0	<1	ND	7.1	ND	1.5	6.9	16	3.0	6.1	5.5	2.3	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar	7.7	66	329	48	3.5	108	1.6	210	ND	0.02	0.0	0.0	<1	---	---	---	---	---	---	---	10.2	6.6	1.8	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr	7.7	70	312	55	3.3	114	1.6	203	ND	0.02	0.8	0.0	<1	---	---	---	---	---	---	---	18.6	5.4	0.5	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May	7.7	79	370	68	3.2	119	1.7	200	ND	0.02	0.0	0.0	<1	ND	18.0	ND	2.2	15.4	36	3.8	25.4	9.2	1.7	ND	36	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun	7.7	82	343	77	3.5	130	2.2	239	ND	0.02	0.0	0.0	2	---	---	---	---	---	---	---	46.5	13.6	2.6	ND	63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul	7.7	82	390	84	3.7	133	2.2	237	ND	0.03	0.0	0.0	4	---	---	---	---	---	---	---	37.3	13.3	3.6	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug	7.7	84	412	83	3.7	142	2.3	268	ND	0.03	0.0	0.0	2	ND	17.4	ND	2.5	17.4	37	4.9	30.5	14.2	4.0	ND	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep	7.7	75	347	75	3.8	122	2.7	225	ND	0.02	0.0	0.0	6	---	---	---	---	---	---	---	44.2	8.2	0.6	ND	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct	7.7	96	404	68	3.7	138	1.8	236	ND	0.02	0.0	0.0	5	---	---	---	---	---	---	---	20.9	7.9	1.6	ND	31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov	7.7	95	372	54	3.8	133	2.3	216	ND	0.02	0.0	0.0	<1	ND	16.1	ND	1.9	17.2	35	2.6	20.6	8.0	1.1	ND	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec	7.7	113	413	49	3.6	149	1.4	233	ND	0.02	0.0	0.0	<1	---	---	---	---	---	---	---	8.8	7.8	2.8	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
McMillan Water Treatment Plant Finished Water																																													
Jan	7.7	60	315	48	3.6	105	1.6	172	ND	0.01	0.0	0.0	6	---	---	---	---	---	---	---	---	10.6	5.5	1.3	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb	7.7	78	509	46	3.5	133	1.2	322	1	0.01	0.0	0.0	1	ND	7.9	ND	1.9	7.5	17	2.6	5.6	4.9	2.0	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mar	7.7	58	357	54	3.5	104	1.3	181	ND	0.02	0.0	0.0	2	---	---	---	---	---	---	---	10.9	6.7	2.0	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr	7.7	61	318	63	3.2	107	1.6	192	ND	0.03	0.0	0.0	<1	---	---	---	---	---	---	---	15.9	6.3	1.5	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May	7.7	71	357	67	3.3	117	1.7	199	ND	0.03	0.0	0.0	<1	ND	18.8	1.1	2.0	22.8	45	3.2	35.3	10.3	2.0	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun	7.7	76	340	74	3.7	125	1.9	238	1	0.03	0.0	0.0	3	---	---	---	---	---	---	---	39.7	13.1	3.1	ND	56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul	7.7	78	388	79	3.6	130	2.0	234	ND	0.04	0.0	0.0	6	---	---	---	---	---	---	---	61.6	19.0	4.7	ND	85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug	7.7	74	399	79	3.7	132	2.0	242	ND	0.03	0.8	0.0	9	ND	19.1	ND	2.6	17.7	39	4.4	35.7	14.0	3.9	ND	54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep	7.7	66	351	75	3.7	113	2.5	192	ND	0.03	0.0	0.0	6	---	---	---	---	---	---	---	38.4	9.6	1.2	ND	49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct	7.7	82	375	68	3.7	128	2.0	222	ND	0.03	0.0	0.0	1	---	---	---	---	---	---	---	29.0	8.7	1.6	ND	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov	7.7	90	376	55	3.7	121	2.0	216	ND	0.02	0.0	0.0	<1	ND	15.9	ND	1.7	15.9	34	3.0	23.5	9.7	1.6	ND	35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec	7.7	107	399	48	3.5	143	1.3	226	ND	0.02	0.0	0.0	<1	---	---	---	---	---	---	---	9.0	7.8	2.8	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters
ppm = Parts Per Million
ppb = Parts Per Billion
ND = Not Detected
"---" = No Analysis Required
Turbidity* = Water turbidity after filters
CFU/mL = Colony Forming Units per milliLiter
NTU = Nephelometric Turbidity Units
µS/cm = microSiemens per centimeter

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	Volatile Organic Compounds																															Oxygenates & Other VOCs								
	1,1-DICHLOROETHANE	1,2-DICHLOROETHANE	trans-1,2-DICHLOROETHYLENE	cis-1,2-DICHLOROETHYLENE	1,1-DICHLOROETHYLENE	1,3-DICHLOROPROPANE	2,2-DICHLOROPROPANE	1,2-DICHLOROPROPANE	trans-1,3-DICHLOROPROPENE	cis-1,3-DICHLOROPROPENE	1,1-DICHLOROPROPENE	ETHYLBENZENE	HEXACHLOROBUTADIENE	ISOPROPYLBENZENE	4-ISOPROPYLTOLUENE	METHYLENE CHLORIDE	NAPHTHALENE	n-PROPYLBENZENE	STYRENE	1,1,1,2-TETRACHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	TETRACHLOROETHYLENE	TOLUENE	1,2,3-TRICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	TRICHLOROETHYLENE	TRICHLOROFLUOROMETHANE	1,2,3-TRICHLOROPROPANE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	TOTAL XYLENES	VINYL CHLORIDE	2-BUTANONE (MEK)	4-METHYL-2-PENTANONE (MIBK)	DI-ISOPROPYL ETHER	METHYL TERT-BUTYL ETHER (MTBE)	TERT-AMYL ETHYL ETHER (TAME)	TERT-BUTYL ETHYL ETHER (TBEE)	BROMOETHANE	CARBON DISULFIDE	TRICHLOROTRIFLUOROETHANE
EPA MCL*		5	100	70	7			5				700				5			100			5	1000		70	200	5	5					10,000	2								
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Dalecarlia Water Treatment Plant Finished Water																																							
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Mar	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Apr	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Jun	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Jul	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
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Oct	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Dec	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
McMillan Water Treatment Plant Finished Water																																							
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
Mar	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---
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EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters ppb = Parts Per Billion ND = Not Detected "---" = No Analysis Required

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	Synthetic Organic Compounds																																							
	ACENAPHTHENE	ACENAPHTHYLENE	ACETOCHLOR	ACIFLUORFEN	ALACHLOR	ALDICARB	ALDICARB SULFONE	ALDICARB SULFOXIDE	ALDRIN	ANTHRACENE	AROCHLOR 1016 (PCBs)	AROCHLOR 1221 (PCBs)	AROCHLOR 1232 (PCBs)	AROCHLOR 1242 (PCBs)	AROCHLOR 1248 (PCBs)	AROCHLOR 1254 (PCBs)	AROCHLOR 1260 (PCBs)	TOTAL PCBs	ATRAZINE	BAYGON	BENTAZON	BENZ(a)ANTHRACENE	BENZO(b)FLUORANTHENE	BENZO(g,h,i)PERYLENE	BENZO(a)PYRENE	BENZO(K)FLUORANTHENE	alpha-BHC	beta-BHC	delta-BHC	BROMACIL	BUTACHLOR	BUTYLBENZYLPHTHALATE	CAFFEINE	CARBARYL	CARBOFURAN	alpha-CHLORDANE	gamma-CHLORDANE	CHLORDANE	CHLORPYRIFOS (DURSBAN)	CHLOROBENZILATE	CHLORONEB	CHLOROTHALONIL
EPA MCL*					2													0.5	3						0.2									40			2				
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Dalecarlia Water Treatment Plant Finished Water																																								
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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May	ND	ND	ND	---	ND	---	---	---	---	ND	---	---	---	---	---	---	---	---	0.2	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	ND	ND	---	ND	ND	ND	ND	ND
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McMillan Water Treatment Plant Finished Water																																								
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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Jul	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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Oct	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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	Synthetic Organic Compounds																																							
	CHRYSENE	2,4-D	DALAPON	2,4-DB	DCPA MONO & DIACID DEGRADATE	2,4'-DDD	2,4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	DIBENZ(a,h)ANTHRACENE	DICAMBA	3,5-DICHLOROBENZOIC ACID	DICHLORPROP	DICHLORVOS (DDVP)	DIELDRIN	DIETHYLPHTHALATE	di-(2-ETHYLHEXYL)ADIPATE	di-(2-ETHYLHEXYL)PHTHALATE	DIMETHOATE	DIMETHYLPHTHALATE	DI-N-BUTYLPHTHALATE	DI-N-OCTYLPHTHALATE	2,4-DINITROTOLUENE	2,6-DINITROTOLUENE	DINOSEB	DIQUAT	ENDOTHALL	ENDRIN	ENDRIN ALDEHYDE	EPTC	FLUORANTHENE	FLUORENE	GLYPHOSATE	HEPTACHLOR	HEPTACHLOR EPOXIDE	HEXACHLOROBENZENE	HEXACHLOROCYCLOPENTADIENE	3-HYDROXYCARBOFURAN	INDENO(1,2,3,c,d)PYRENE	ISOPHORONE
EPA MCL*		70	200																400	6							7	20	100	2					700	0.4	0.2	1	50			
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Dalecarlia Water Treatment Plant Finished Water																																								
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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Apr	---	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	ND	---	ND	ND	ND	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	ND
May	ND	---	---	---	---	ND	ND	ND	ND	ND	ND	ND	---	---	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	---	---	---	ND	ND	ND	ND	---	ND	ND	ND	ND	---	ND	ND
Jun	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
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McMillan Water Treatment Plant Finished Water																																								
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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Apr	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters ppb = Parts Per Billion ND = Not Detected "---" = No Analysis Required

WASHINGTON AQUEDUCT, US ARMY CORPS OF ENGINEERS
ANNUAL REPORT OF WATER ANALYSIS (2021)

	Synthetic Organic Compounds																												Miscellaneous				Nitrosamines							
	LINDANE	ENDOSULFAN I (alpha)	ENDOSULFAN II (beta)	ENDOSULFAN SULFATE	MALATHION	METHIOCARB	METHOMYL	METHOXYCHLOR	METOLACHLOR	METRIBUZIN	MOLINATE	trans-NONACHLOR	OXAMYL	PARAQUAT	PARATHION	PENDIMETHALIN	PERMETHRIN	PENTACHLOROPHENOL	PHENANTHRENE	PICLORAM	PROPACHLOR	PYRENE	SIMAZINE	TERBACIL	TERBUTHYLAZINE	THIOBENCARB	TRIFLURALIN	TOXAPHENE	2,4,5-T	2,4,5-TP (SILVEX)	DIBROMOCHLOROPROPANE (DBCP)	ETHELYNE DIBROMIDE (EDB)	CYANIDE	2,3,7,8-TCDD (DIOXIN)	N-NITROSODIMETHYLAMINE (NDMA)	N-NITROSO-n-PROPYLAMINE (NDPA)	N-NITROSODIBUTYLAMINE (NDBA)	N-NITROSODIETHYLAMINE (NDEA)	N-NITROSOMETHYLETHYLAMINE (NMEA)	N-NITROSOPYRROLIDINE (NPYR)	N-NITROSOMORPHOLINE	N-NITROSOPIPERIDINE (NPIP)
EPA MCL*	0.2							40					200					1		500			4					3		50	200	50	0.2	30								
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppt	ppt	ppm	ppq	ppt	ppt	ppt	ppt	ppt	ppt	ppt	ppt
Dalecarlia Water Treatment Plant Finished Water																																									
Jan	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
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May	---	ND	ND	ND	ND	---	---	ND	0.14	ND	ND	ND	---	---	ND	ND	ND	---	ND	---	ND	ND	0.11	ND	ND	ND	ND	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
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McMillan Water Treatment Plant Finished Water																																									
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EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters ppm = Parts Per Million (mg/L) ppb = Parts Per Billion (µg/L) ppt = Parts Per Trillion (ng/L) ppq = Parts Per Quadrillion (pg/L) ND = Not Detected --- = No Analysis Required