

TABLE 1: INTERCEPTOR WELL FIELD DISCHARGE RATES

Nevada Environmental Response Trust Site

Henderson, Nevada

Well ID	July 2013-June 2014 (gpm)	July 2014-June 2015 (gpm)	July 2015-June 2016 (gpm)	July 2016-June 2017 (gpm)	July 2017-June 2018 (gpm)	Well Screened In
I-AA ¹	0.1	1.0	1.0	0.8	1.1	Qal/UMCf
I-AB ¹	0.0	0.0	0.0	0.0	0.0	Qal/UMCf
I-AC ¹	0.0	0.0	0.0	0.0	0.0	Qal/UMCf
I-AD ¹	0.0	0.0	0.0	0.0	0.0	Qal/UMCf
I-AR	1.1	0.8	0.5	0.3	0.2	Qal/UMCf
I-B	1.5	1.1	0.8	0.7	0.5	Qal/UMCf
I-C	5.5	5.6	2.8	3.4	3.6	Qal/UMCf
I-D	2.0	1.9	2.3	2.4	1.8	Qal/UMCf
I-E	2.7	1.2	1.0	1.6	1.3	Qal/UMCf
I-F	4.7	4.2	3.9	4.2	4.3	Qal/UMCf
I-G	0.9	0.2	0.2	0.1	0.1	Qal/UMCf
I-H	0.8	1.2	0.9	1.3	1.1	Qal/UMCf
I-I	4.8	4.7	4.8	4.9	5.0	Qal/UMCf
I-J	6.6	4.8	7.3	6.9	6.6	Qal/UMCf
I-K	4.0	4.6	3.2	3.2	3.1	Qal/UMCf
I-L	1.5	2.8	1.8	1.8	1.4	Qal/UMCf
I-M	2.2	2.5	2.1	1.4	1.8	Qal/UMCf
I-N	1.7	2.6	2.9	4.0	3.7	Qal/UMCf
I-O	1.5	2.1	0.9	0.4	0.8	Qal/UMCf
I-P	5.1	2.8	2.0	2.1	1.8	Qal/UMCf
I-Q	0.7	0.5	0.5	0.6	0.2	Qal/UMCf
I-R	3.3	2.5	2.1	1.1	1.4	Qal/UMCf
I-S	4.0	4.9	4.4	4.5	2.8	Qal/UMCf
I-T	0.4	0.4	0.4	0.5	0.4	Qal/UMCf
I-U	1.0	0.9	0.8	0.8	0.8	Qal/UMCf
I-V	5.7	5.1	4.2	4.2	4.3	Qal/UMCf
I-W ¹	0.1	0.8	0.7	0.9	0.7	Qal/UMCf
I-X ¹	0.5	3.0	1.8	1.9	3.6	Qal/UMCf
I-Y ¹	0.1	1.5	0.9	1.3	1.3	Qal/UMCf
I-Z	7.5	5.2	6.9	7.3	7.7	Qal/UMCf
TOTAL	70.1	68.7	61.1	62.4	61.3	

Notes:

Pumping rates are presented as annual averages.

¹ I-AA, I-AB, I-AC, I-AD, I-W, I-X, and I-Y were activated as part of the 2013 GWETS Optimization project and began extracting between late April and early May 2014.

gpm = gallons per minute

Qal = Quaternary Alluvium

UMCf = Upper Muddy Creek Formation (first fine-grained unit)

TABLE 2: ATHENS ROAD WELL FIELD DISCHARGE RATES**Nevada Environmental Response Trust Site****Henderson, Nevada**

Well ID	July 2013-June 2014 (gpm)	July 2014-June 2015 (gpm)	July 2015-June 2016 (gpm)	July 2016-June 2017 (gpm)	July 2017-June 2018 (gpm)	Well Screened In
ART-1/1A	23.4	14.6	1.8	20.5	40.5	Qal
ART-2/2A	61.6	60.9	57.6	92.8	147.6	Qal
ART-3/3A	47.3	44.4	49.4	31.0	18.7	Qal
ART-4/4A	10.0	15.0	11.5	5.2	2.9	Qal
ART-7/7A/7B ¹	30.9	30.3	22.0	17.3	16.4	Qal
ART-8/8A	60.0	63.7	63.4	127.2	175.6	Qal
ART-9	46.4	53.9	60.7	59.9	59.8	Qal
PC-150 ¹	--	2.8	3.7	1.6	1.5	Qal
TOTAL	279.6	285.6	270.1	355.6	463.1	

Notes:

Pumping rates are presented as annual averages.

ART-1, 2, 3, 4, 7B, and 8 have adjacent recovery wells - "Buddy Wells" - designated by the letter "A".

¹ ART-7B and PC-150 were activated as part of the 2013 GWETS Optimization project; ART-7B began pumping in October 2014 and PC-150 began pumping in November 2014.

-- = Well not pumping

gpm = gallons per minute

Qal = Quaternary Alluvium

TABLE 3: SEEP WELL FIELD DISCHARGE RATES**Nevada Environmental Response Trust Site****Henderson, Nevada**

Well ID	July 2013-June 2014 (gpm)	July 2014-June 2015 (gpm)	July 2015-June 2016 (gpm)	July 2016-June 2017 (gpm)	July 2017-June 2018 (gpm)	Well Screened In
PC-115R	88.4	95.9	98.0	102.9	129.4	Qal
PC-116R	123.2	133.7	136.3	139.7	167.1	Qal
PC-117	96.8	99.7	101.3	109.1	113.4	Qal
PC-118	67.3	76.9	67.7	59.5	64.8	Qal
PC-119	63.5	59.0	58.7	52.9	99.0	Qal
PC-120	0.4	0.0	0.0	33.8	62.2	Qal
PC-121	0.0	0.0	0.0	14.8	24.3	Qal
PC-133	4.3	4.2	8.3	7.8	9.8	Qal
PC-99R2/R3 ¹	61.0	66.5	63.6	64.1	87.4	Qal
TOTAL	504.9	536.0	533.9	584.6	757.5	

Notes:

Pumping rates are presented as annual averages.

¹ Wells PC-99R2 and PC-99R3 are connected and operate as a single pumping well.

gpm = gallons per minute

Qal = Quaternary Alluvium

TABLE 4: AP AREA EXTRACTION WELL DISCHARGE RATES**Nevada Environmental Response Trust Site****Henderson, Nevada**

Well ID	July 2013-June 2014 (gpm)	July 2014-June 2015 (gpm)	July 2015-June 2016 (gpm)	July 2016-June 2017 (gpm)	July 2017-June 2018 (gpm)	Well Screened In
E1-1	--	--	--	1.8	1.9	Qal/UMCf
E1-2	--	--	--	0.6	1.2	Qal/UMCf
E1-3	--	--	--	0.5	0.8	Qal/UMCf
E2-1	--	--	--	--	1.1	Qal/UMCf
E2-2	--	--	--	--	1.5	Qal/UMCf
E2-3	--	--	--	--	1.5	Qal/UMCf
E2-4	--	--	--	--	1.5	Qal/UMCf
E2-5	--	--	--	--	0.6	Qal/UMCf
TOTAL	--	--	--	2.9	10.1	

Notes:

Pumping rates are presented as annual averages.

E1-1, E1-2, and E1-3 are located in Plot 1 of the former AP Area Soil Flushing Treatability Study. Initial soil flushing and extraction well testing in Plot 1 was conducted in October 2016, with continuous operation in Plot 1 beginning in November 2016. Flushing and extraction in Plot 2 (containing extraction wells E2-1, E2-2, E2-3, E2-4, and E2-5) began in July 2017. The treatability study was completed in early 2018, but the extraction wells have continued operating as part of the Groundwater Extraction and Treatment System (GWETS).

-- = Well not pumping

gpm = gallons per minute

Qal = Quaternary Alluvium

UMCf = Upper Muddy Creek Formation (first fine-grained unit)

TABLE 5: MONTHLY WELL FIELD DISCHARGE RATES, JULY 2017 - JUNE 2018

Nevada Environmental Response Trust Site

Henderson, Nevada

Well ID	July 2017 (gpm)	August 2017 (gpm)	September 2017 (gpm)	October 2017 (gpm)	November 2017 (gpm)	December 2017 (gpm)	January 2018 (gpm)	February 2018 (gpm)	March 2018 (gpm)	April 2018 (gpm)	May 2018 (gpm)	June 2018 (gpm)
Interceptor Well Field (IWF)												
I-AA	0.9	0.9	1.1	1.1	1.1	0.9	1.1	1.1	1.1	1.1	1.2	1.0
I-AB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I-AC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I-AD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I-AR	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
I-B	0.7	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.4
I-C	3.2	3.7	3.9	3.8	3.6	3.6	3.8	4.0	3.9	3.7	3.4	3.2
I-D	2.5	2.3	2.1	1.9	1.8	1.6	1.4	1.7	1.8	1.6	1.4	1.2
I-E	1.6	1.5	1.4	1.3	1.3	1.2	1.2	1.4	1.4	1.3	1.1	1.1
I-F	4.4	4.4	4.4	4.4	4.4	4.4	4.2	4.4	4.4	4.4	4.3	4.0
I-G	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
I-H	0.9	1.0	1.2	1.2	1.1	1.1	1.1	1.0	0.9	1.1	1.3	1.1
I-I	4.9	4.9	5.0	4.9	4.9	5.0	5.0	5.1	5.1	5.1	5.1	5.1
I-J	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.8	6.7	6.4
I-K	3.2	3.3	3.2	3.0	3.1	3.0	3.0	3.0	3.0	3.0	3.1	3.4
I-L	1.7	1.3	1.4	1.4	1.3	1.3	1.4	1.5	1.5	1.3	1.2	1.2
I-M	1.7	1.8	1.7	1.8	1.7	2.0	1.6	1.6	1.7	1.8	2.0	2.1
I-N	4.2	4.2	4.2	4.1	4.0	3.5	3.5	3.6	3.6	3.3	2.9	2.7
I-O	0.3	1.1	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.7	0.7	0.6
I-P	1.5	1.6	1.8	1.8	1.8	1.8	1.9	1.9	1.7	1.8	2.2	2.1
I-Q	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
I-R	1.4	1.5	1.4	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.1	1.0
I-S	4.1	3.8	3.5	3.2	2.9	2.7	2.5	2.7	2.4	2.2	2.1	1.9
I-T	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.5	0.4
I-U	0.8	0.7	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
I-V	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.3	4.3	4.3
I-W	0.9	0.7	0.7	0.6	0.7	0.7	0.3	0.4	0.4	0.8	0.8	0.8
I-X	3.3	3.8	3.7	3.2	3.1	3.4	3.7	4.1	4.1	4.0	3.6	3.3
I-Y	1.4	1.3	1.3	1.2	1.2	1.3	1.4	1.4	1.4	1.3	1.4	1.3
I-Z	7.5	7.6	7.6	7.7	7.7	7.7	7.7	8.1	8.2	8.0	7.7	7.2
Total for IWF	63.1	63.7	63.1	61.8	61.0	60.2	59.9	62.7	62.3	61.2	59.8	57.3

TABLE 5: MONTHLY WELL FIELD DISCHARGE RATES, JULY 2017 - JUNE 2018

Nevada Environmental Response Trust Site

Henderson, Nevada

Well ID	July 2017 (gpm)	August 2017 (gpm)	September 2017 (gpm)	October 2017 (gpm)	November 2017 (gpm)	December 2017 (gpm)	January 2018 (gpm)	February 2018 (gpm)	March 2018 (gpm)	April 2018 (gpm)	May 2018 (gpm)	June 2018 (gpm)
Athens Road Well Field (AWF)												
ART-1/1A	42.7	41.8	41.6	41.5	41.4	40.9	39.7	40.1	39.8	39.4	39.0	38.2
ART-2/2A	146.6	148.9	150.0	149.8	146.8	147.5	143.0	146.3	146.9	147.5	148.9	148.8
ART-3/3A	21.3	18.5	17.4	17.4	17.6	18.3	18.0	19.4	20.4	19.9	18.9	17.9
ART-4/4A	3.0	2.2	2.1	2.1	2.0	1.7	1.8	4.0	4.0	4.0	4.0	4.0
ART-7/7A/7B	18.5	16.1	15.7	16.3	16.2	16.2	15.7	17.1	16.2	15.9	16.4	17.0
ART-8/8A	174.7	175.3	174.6	175.6	176.7	175.0	173.9	177.1	176.0	176.3	176.6	175.1
ART-9	50.1	51.6	53.9	57.9	59.1	64.7	60.3	66.6	69.6	64.4	60.0	60.2
PC-150	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total for AWF	458.5	455.8	456.8	462.1	461.4	465.7	454.0	472.1	474.4	468.9	465.4	462.7
Seep Well Field (SWF)												
PC-115R	128.5	128.6	128.4	128.6	129.6	130.2	126.9	131.0	131.0	130.4	130.1	129.1
PC-116R	167.0	167.0	167.1	167.2	168.2	168.4	164.0	168.2	167.5	167.2	167.5	166.6
PC-117	112.6	113.5	94.1	115.2	115.7	116.1	113.5	116.7	116.4	116.1	115.9	115.2
PC-118	70.0	81.8	81.5	63.1	62.3	61.5	59.3	60.7	59.0	60.0	59.4	58.6
PC-119	70.5	77.0	116.9	113.8	101.5	101.9	99.2	102.1	101.9	101.7	101.3	100.7
PC-120	83.0	80.8	90.1	83.5	50.8	50.9	49.7	51.3	51.2	53.1	50.8	50.5
PC-121	33.8	33.9	33.9	31.6	20.4	20.5	19.8	19.9	19.7	19.5	19.3	19.2
PC-133	9.6	9.4	9.2	9.6	9.9	10.1	10.0	10.2	10.1	10.0	9.7	10.1
PC-99R2/R3	84.4	83.8	83.7	84.2	87.1	88.9	87.2	91.6	91.1	90.9	90.1	86.4
Total for SWF	759.4	775.9	804.8	796.9	745.4	748.4	729.5	751.7	747.8	748.9	744.2	736.4
AP Area Extraction Wells												
E1-1	2.9	1.0	1.1	1.0	1.5	1.9	1.7	2.0	2.0	2.5	2.5	2.4
E1-2	1.3	1.2	1.4	1.4	1.2	1.2	1.2	1.3	1.2	1.2	1.0	1.1
E1-3	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.5	0.5
E2-1	0.0	1.0	1.8	1.6	1.4	1.3	1.2	1.2	1.0	1.0	0.9	0.9
E2-2	0.7	0.8	2.0	1.9	1.9	1.8	1.7	1.7	1.4	1.3	1.3	1.1
E2-3	0.5	1.1	2.2	2.1	1.9	1.9	1.8	1.8	1.3	1.2	1.2	1.2
E2-4	0.5	0.7	1.5	2.1	2.0	2.1	1.8	1.9	1.5	1.3	1.4	1.3
E2-5	0.1	0.6	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.4
Total for AP Area	6.8	7.4	11.8	11.7	11.5	11.9	11.0	11.6	9.9	10.0	9.4	8.8

Notes:

Pumping rates are presented as monthly averages.

E1-1, E1-2, and E1-3 are located in Plot 1 of the former AP Area Soil Flushing Treatability Study. Initial soil flushing and extraction well testing in Plot 1 was conducted in October 2016, with continuous operation in Plot 1 beginning in November 2016. Flushing and extraction in Plot 2 (containing extraction wells E2-1, E2-2, E2-3, E2-4, and E2-5) began in July 2017. The treatability study was completed in early 2018, but the extraction wells have continued operating as part of the Groundwater Extraction and Treatment System (GWETS).

gpm = gallons per minute

TABLE 6: CHROMIUM REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Chromium Mass Removed						Extraction Rate					Average Chromium Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ¹ (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ¹ (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ¹ (mg/L)	Total (mg/L)
Jul 2004	331	14	0	--	346	0.2	59.5	245.4	704.3	--	1009.3	14.9	0.2	0.0	--	0.9
Aug 2004	328	15	0	--	343	0.2	57.3	241.6	684.8	--	983.8	15.4	0.2	0.0	--	0.9
Sep 2004	310	15	0	--	324	0.2	55.8	243.2	649.4	--	948.4	15.4	0.2	0.0	--	0.9
Oct 2004	333	15	0	--	348	0.2	58.7	239.3	690.4	--	988.3	15.2	0.2	0.0	--	0.9
Nov 2004	298	14	0	--	312	0.2	62.5	243.2	698.1	--	1003.9	13.2	0.2	0.0	--	0.9
Dec 2004	321	16	0	--	336	0.2	65.1	257.6	681.0	--	1003.8	13.2	0.2	0.0	--	0.9
Jan 2005	342	14	0	--	357	0.2	67.5	254.0	665.6	--	987.0	13.6	0.1	0.0	--	1.0
Feb 2005	310	13	0	--	323	0.2	65.9	254.1	713.6	--	1033.7	14.0	0.1	0.0	--	0.9
Mar 2005	341	14	0	--	356	0.2	63.5	251.2	725.2	--	1039.9	14.4	0.2	0.0	--	0.9
Apr 2005	347	13	0	--	360	0.2	65.3	244.2	711.9	--	1021.4	14.7	0.2	0.0	--	1.0
May 2005	302	18	0	--	320	0.2	64.0	234.7	701.8	--	1000.5	12.7	0.2	0.0	--	0.9
Jun 2005	291	18	0	--	310	0.2	64.5	237.5	703.4	--	1005.5	12.5	0.2	0.0	--	0.9
Jul 2005	318	18	0	--	336	0.2	65.5	234.7	686.6	--	986.9	13.0	0.2	0.0	--	0.9
Aug 2005	317	20	7	--	344	0.2	66.6	239.2	680.6	--	986.4	12.8	0.2	0.0	--	0.9
Sep 2005	292	20	7	--	319	0.2	65.4	254.9	634.3	--	954.6	12.4	0.2	0.0	--	0.9
Oct 2005	300	20	6	--	327	0.2	64.4	251.6	621.5	--	937.5	12.5	0.2	0.0	--	0.9
Nov 2005	306	16	0	--	322	0.2	66.1	244.9	619.6	--	930.6	12.8	0.2	0.0	--	1.0
Dec 2005	321	16	0	--	337	0.2	63.8	236.5	621.1	--	921.4	13.5	0.2	0.0	--	1.0
Jan 2006	330	15	0	--	345	0.2	62.9	237.8	657.0	--	957.7	14.1	0.2	0.0	--	1.0
Feb 2006	305	16	0	--	321	0.2	63.8	239.1	664.1	--	967.0	14.2	0.2	0.0	--	1.0
Mar 2006	342	15	0	--	357	0.2	63.5	235.1	661.6	--	960.2	14.4	0.2	0.0	--	1.0
Apr 2006	329	14	0	--	343	0.2	63.7	224.1	660.6	--	948.5	14.3	0.2	0.0	--	1.0
May 2006	331	16	0	--	347	0.2	65.3	239.2	669.5	--	974.1	13.6	0.2	0.0	--	1.0
Jun 2006	301	17	0	--	318	0.2	61.9	244.1	669.8	--	975.9	13.5	0.2	0.0	--	0.9
Jul 2006	311	17	0	--	327	0.2	65.4	239.5	670.6	--	975.5	12.7	0.2	0.0	--	0.9
Aug 2006	326	28	0	--	355	0.2	63.6	240.9	664.4	--	969.0	13.8	0.3	0.0	--	1.0
Sep 2006	313	30	0	--	344	0.2	66.2	251.5	656.4	--	974.0	13.1	0.3	0.0	--	1.0
Oct 2006	313	33	0	--	346	0.2	66.4	254.7	649.0	--	970.0	12.7	0.3	0.0	--	1.0
Nov 2006	300	31	0	--	331	0.2	63.9	258.0	524.0	--	845.8	13.0	0.3	0.0	--	1.1
Dec 2006	308	34	0	--	341	0.2	64.6	253.4	629.2	--	947.1	12.8	0.4	0.0	--	1.0
Jan 2007	305	33	0	--	339	0.2	66.1	256.2	638.2	--	960.4	12.4	0.4	0.0	--	0.9
Feb 2007	287	29	0	--	316	0.2	68.5	265.6	657.5	--	991.6	12.4	0.3	0.0	--	0.9
Mar 2007	321	33	0	--	355	0.2	68.4	259.0	601.3	--	928.6	12.6	0.3	0.0	--	1.0
Apr 2007	306	31	0	--	337	0.2	68.1	257.2	631.5	--	956.8	12.5	0.3	0.0	--	1.0
May 2007	306	32	0	--	337	0.2	66.2	259.1	660.5	--	985.8	12.4	0.3	0.0	--	0.9
Jun 2007	294	30	0	--	325	0.2	64.3	258.5	673.7	--	996.5	12.7	0.3	0.0	--	0.9
Jul 2007	295	31	0	--	326	0.2	63.7	257.8	656.7	--	978.3	12.4	0.3	0.0	--	0.9
Aug 2007	274	31	0	--	305	0.2	61.2	258.5	611.0	--	930.7	12.0	0.3	0.0	--	0.9
Sep 2007	245	29	0	--	275	0.1	59.2	251.1	605.2	--	915.5	11.5	0.3	0.0	--	0.8
Oct 2007	269	35	0	--	304	0.2	59.4	264.5	617.0	--	940.9	12.1	0.4	0.0	--	0.9
Nov 2007	267	32	0	--	300	0.1	57.3	264.1	622.9	--	944.3	12.9	0.3	0.0	--	0.9
Dec 2007	260	33	0	--	293	0.1	55.4	264.1	627.6	--	947.1	12.6	0.3	0.0	--	0.8
Jan 2008	262	34	0	--	295	0.1	56.5	262.9	631.2	--	950.7	12.4	0.3	0.0	--	0.8
Feb 2008	268	34	0	--	302	0.2	59.1	262.2	608.9	--	930.3	13.0	0.4	0.0	--	0.9
Mar 2008	298	37	0	--	335	0.2	61.6	265.0	614.0	--	940.6	13.0	0.4	0.0	--	1.0
Apr 2008	286	35	0	--	322	0.2	61.9	268.1	623.1	--	953.1	12.8	0.4	0.0	--	0.9
May 2008	282	39	0	--	321	0.2	60.6	266.5	618.8	--	945.9	12.5	0.4	0.0	--	0.9

TABLE 6: CHROMIUM REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Chromium Mass Removed						Extraction Rate					Average Chromium Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ¹ (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ¹ (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ¹ (mg/L)	Total (mg/L)
Jun 2008	277	38	0	--	315	0.2	61.0	271.5	630.3	--	962.8	12.6	0.4	0.0	--	0.9
Jul 2008	297	40	0	--	337	0.2	63.4	273.5	618.5	--	955.4	12.6	0.4	0.0	--	0.9
Aug 2008	312	41	0	--	353	0.2	65.7	276.5	585.1	--	927.3	12.7	0.4	0.0	--	1.0
Sep 2008	309	40	0	--	349	0.2	65.4	275.7	589.9	--	931.0	13.1	0.4	0.0	--	1.0
Oct 2008	319	41	0	--	360	0.2	65.5	275.3	597.2	--	938.0	13.1	0.4	0.0	--	1.0
Nov 2008	298	43	0	--	340	0.2	65.4	279.0	560.4	--	904.8	12.6	0.4	0.0	--	1.0
Dec 2008	308	45	0	--	353	0.2	65.4	285.8	562.7	--	914.0	12.6	0.4	0.0	--	1.0
Jan 2009	314	44	0	--	358	0.2	66.8	276.4	586.0	--	929.3	12.6	0.4	0.0	--	1.0
Feb 2009	283	44	0	--	327	0.2	66.7	267.5	584.2	--	918.4	12.6	0.5	0.0	--	1.1
Mar 2009	319	48	0	--	366	0.2	67.6	258.9	606.0	--	932.4	12.6	0.5	0.0	--	1.1
Apr 2009	310	46	0	--	356	0.2	67.5	260.0	595.9	--	923.3	12.7	0.5	0.0	--	1.1
May 2009	296	46	0	--	342	0.2	66.6	256.8	598.6	--	922.0	11.9	0.5	0.0	--	1.0
Jun 2009	298	45	0	--	343	0.2	69.3	258.2	579.9	--	907.4	11.9	0.5	0.0	--	1.0
Jul 2009	307	45	0	--	353	0.2	68.6	282.6	572.2	--	923.4	12.0	0.4	0.0	--	1.0
Aug 2009	311	43	0	--	354	0.2	69.3	226.7	561.8	--	857.7	12.0	0.5	0.0	--	1.1
Sep 2009	315	44	0	--	359	0.2	71.2	230.7	559.4	--	861.4	12.3	0.5	0.0	--	1.2
Oct 2009	341	46	0	--	387	0.2	74.9	238.1	562.2	--	875.2	12.2	0.5	0.0	--	1.2
Nov 2009	296	40	0	--	335	0.2	74.5	234.7	564.6	--	873.8	11.0	0.5	0.0	--	1.1
Dec 2009	301	42	0	--	343	0.2	73.3	248.1	582.4	--	903.8	11.0	0.5	0.0	--	1.0
Jan 2010	283	42	0	--	325	0.2	71.8	240.2	571.0	--	883.0	10.6	0.5	0.0	--	1.0
Feb 2010	274	39	0	--	312	0.2	75.3	246.6	573.5	--	895.3	10.8	0.5	0.0	--	1.0
Mar 2010	306	43	0	--	349	0.2	73.2	255.4	562.2	--	890.8	11.2	0.5	0.0	--	1.1
Apr 2010	285	39	0	--	324	0.2	73.2	244.1	540.8	--	858.1	10.8	0.4	0.0	--	1.0
May 2010	299	46	0	--	346	0.2	75.1	266.2	548.5	--	889.8	10.7	0.5	0.0	--	1.0
Jun 2010	278	45	0	--	324	0.2	73.8	267.3	527.4	--	868.5	10.4	0.5	0.0	--	1.0
Jul 2010	277	48	0	--	324	0.2	73.0	269.4	533.7	--	876.1	10.2	0.5	0.0	--	1.0
Aug 2010	280	47	0	--	326	0.2	71.1	269.4	518.7	--	859.2	10.5	0.5	0.0	--	1.0
Sep 2010	277	45	0	--	322	0.2	73.8	264.6	510.3	--	848.7	10.4	0.5	0.0	--	1.1
Oct 2010	286	47	0	--	332	0.2	70.9	268.4	529.6	--	868.9	10.8	0.5	0.0	--	1.0
Nov 2010	273	43	0	--	316	0.2	69.8	268.9	521.6	--	860.2	10.8	0.4	0.0	--	1.0
Dec 2010	272	44	0	--	316	0.2	67.7	267.7	530.8	--	866.2	10.8	0.4	0.0	--	1.0
Jan 2011	275	44	0	--	319	0.2	69.3	266.9	529.7	--	865.9	10.6	0.4	0.0	--	1.0
Feb 2011	222	39	0	--	261	0.1	67.3	263.0	545.1	--	875.5	9.8	0.4	0.0	--	0.9
Mar 2011	241	44	0	--	286	0.1	65.0	283.3	526.1	--	874.5	10.0	0.4	0.0	--	0.9
Apr 2011	234	42	0	--	277	0.1	67.1	285.1	505.0	--	857.2	9.7	0.4	0.0	--	0.9
May 2011	239	46	0	--	285	0.1	65.4	285.8	500.7	--	851.9	9.8	0.4	0.0	--	0.9
Jun 2011	237	45	0	--	282	0.1	66.2	284.6	499.9	--	850.7	9.9	0.4	0.0	--	0.9
Jul 2011	248	46	0	--	294	0.1	67.8	285.5	535.8	--	889.1	9.8	0.4	0.0	--	0.9
Aug 2011	235	45	0	--	280	0.1	67.3	273.9	507.0	--	848.3	9.4	0.4	0.0	--	0.9
Sep 2011	220	43	0	--	263	0.1	65.8	270.6	461.3	--	797.7	9.3	0.4	0.0	--	0.9
Oct 2011	228	45	0	--	273	0.1	67.5	270.7	467.7	--	805.8	9.1	0.4	0.0	--	0.9
Nov 2011	226	43	0	--	270	0.1	67.9	268.2	494.3	--	830.3	9.2	0.4	0.0	--	0.9
Dec 2011	227	45	0	--	273	0.1	65.0	267.3	475.2	--	807.5	9.4	0.5	0.0	--	0.9
Jan 2012	228	43	0	--	272	0.1	64.4	268.7	470.2	--	803.3	9.5	0.4	0.0	--	0.9
Feb 2012	221	44	0	--	265	0.1	64.5	269.1	469.4	--	803.1	9.8	0.5	0.0	--	0.9
Mar 2012	234	47	0	--	281	0.1	64.2	270.9	566.0	--	901.1	9.8	0.5	0.0	--	0.8
Apr 2012	223	45	0	--	268	0.1	63.7	273.1	567.9	--	904.7	9.7	0.5	0.0	--	0.8

TABLE 6: CHROMIUM REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Chromium Mass Removed						Extraction Rate					Average Chromium Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ¹ (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ¹ (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ¹ (mg/L)	Total (mg/L)
May 2012	205	43	0	--	248	0.1	61.8	278.2	571.7	--	911.7	8.9	0.4	0.0	--	0.7
Jun 2012	195	41	0	--	237	0.1	61.6	272.8	590.8	--	925.2	8.8	0.4	0.0	--	0.7
Jul 2012	201	42	0	--	243	0.1	61.8	271.5	590.4	--	923.8	8.7	0.4	0.0	--	0.7
Aug 2012	228	43	1	--	272	0.1	62.4	272.2	578.8	--	913.4	9.8	0.4	0.0	--	0.8
Sep 2012	254	42	1	--	297	0.1	73.7	280.7	602.4	--	956.9	9.6	0.4	0.0	--	0.9
Oct 2012	289	44	1	--	334	0.2	74.4	278.7	602.8	--	955.9	10.4	0.4	0.0	--	0.9
Nov 2012	245	47	0	--	292	0.1	68.6	290.9	597.2	--	956.6	9.9	0.4	0.0	--	0.8
Dec 2012	262	48	0	--	310	0.2	72.8	290.3	590.5	--	953.6	9.6	0.4	0.0	--	0.9
Jan 2013	263	48	0	--	311	0.2	70.6	288.1	589.6	--	948.3	10.0	0.4	0.0	--	0.9
Feb 2013	232	41	0	--	273	0.1	70.7	282.8	587.1	--	940.5	9.7	0.4	0.0	--	0.9
Mar 2013	252	45	0	--	298	0.1	68.1	280.8	578.8	--	927.7	9.9	0.4	0.0	--	0.9
Apr 2013	250	44	0	--	294	0.1	68.4	281.2	570.9	--	920.5	10.1	0.4	0.0	--	0.9
May 2013	281	31	0	--	313	0.2	65.4	270.2	568.8	--	904.4	11.5	0.3	0.0	--	0.9
Jun 2013	269	31	0	--	300	0.2	66.6	280.6	558.3	--	905.5	11.2	0.3	0.0	--	0.9
Jul 2013	276	31	0	--	308	0.2	66.2	274.8	570.2	--	911.2	11.2	0.3	0.0	--	0.9
Aug 2013	261	44	0	--	305	0.2	65.6	277.1	545.1	--	887.8	10.7	0.4	0.0	--	0.9
Sep 2013	249	45	0	--	293	0.1	66.7	274.0	508.9	--	849.6	10.3	0.5	0.0	--	1.0
Oct 2013	258	45	0	--	303	0.2	66.7	283.8	507.4	--	857.9	10.4	0.4	0.0	--	0.9
Nov 2013	237	36	0	--	273	0.1	66.2	274.2	476.6	--	817.0	9.9	0.4	0.0	--	0.9
Dec 2013	259	39	0	--	298	0.1	71.3	285.3	477.6	--	834.2	9.7	0.4	0.0	--	1.0
Jan 2014	262	38	0	--	300	0.2	71.7	283.0	503.2	--	857.8	9.8	0.4	0.0	--	0.9
Feb 2014	222	30	0	--	252	0.1	71.8	282.8	510.9	--	865.5	9.2	0.3	0.0	--	0.9
Mar 2014	244	32	0	--	276	0.1	73.1	272.9	492.5	--	838.4	9.0	0.3	0.0	--	0.9
Apr 2014	230	32	0	--	262	0.1	71.1	276.8	488.6	--	836.5	9.0	0.3	0.0	--	0.9
May 2014	250	38	2	--	290	0.1	73.3	284.6	496.0	--	853.9	9.1	0.4	0.0	--	0.9
Jun 2014	259	37	2	--	298	0.1	78.1	285.4	481.0	--	844.5	9.2	0.4	0.0	--	1.0
Jul 2014	252	37	2	--	291	0.1	71.9	281.5	506.4	--	859.9	9.4	0.4	0.0	--	0.9
Aug 2014	212	42	3	--	257	0.1	69.0	288.1	519.1	--	876.1	8.2	0.4	0.0	--	0.8
Sep 2014	204	42	3	--	248	0.1	68.5	292.8	524.2	--	885.5	8.2	0.4	0.0	--	0.8
Oct 2014	209	43	3	--	254	0.1	68.3	289.2	517.0	--	874.5	8.2	0.4	0.0	--	0.8
Nov 2014	203	39	0	--	242	0.1	67.9	277.5	525.1	--	870.5	8.3	0.4	0.0	--	0.8
Dec 2014	209	45	0	--	254	0.1	71.5	283.7	521.1	--	876.3	7.8	0.4	0.0	--	0.8
Jan 2015	200	42	0	--	243	0.1	71.4	283.6	519.6	--	874.7	7.5	0.4	0.0	--	0.7
Feb 2015	180	37	0	--	218	0.1	70.1	284.0	595.8	--	949.9	7.6	0.4	0.0	--	0.7
Mar 2015	193	42	0	--	235	0.1	68.4	287.5	590.3	--	946.1	7.5	0.4	0.0	--	0.7
Apr 2015	177	40	0	--	218	0.1	66.1	287.2	559.0	--	912.3	7.4	0.4	0.0	--	0.7
May 2015	181	41	0	--	222	0.1	67.1	285.7	525.9	--	878.7	7.2	0.4	0.0	--	0.7
Jun 2015	170	40	0	--	210	0.1	64.7	287.0	533.3	--	885.0	7.3	0.4	0.0	--	0.7
Jul 2015	174	39	0	--	214	0.1	63.9	280.1	546.1	--	890.2	7.3	0.4	0.0	--	0.6
Aug 2015	193	36	0	--	228	0.1	62.5	275.1	547.8	--	885.4	8.3	0.3	0.0	--	0.7
Sep 2015	188	39	0	--	226	0.1	62.9	294.5	568.7	--	926.1	8.3	0.4	0.0	--	0.7
Oct 2015	199	35	0	--	234	0.1	62.0	241.2	531.9	--	835.1	8.6	0.4	0.0	--	0.7
Nov 2015	162	37	0	--	199	0.1	54.8	296.7	457.7	--	809.2	8.2	0.3	0.0	--	0.7
Dec 2015	163	37	0	--	201	0.1	57.8	269.7	522.6	--	850.1	7.6	0.4	0.0	--	0.6
Jan 2016	199	31	0	--	231	0.1	59.1	254.4	528.6	--	842.1	9.0	0.3	0.0	--	0.7
Feb 2016	149	28	0	--	178	0.1	54.2	250.9	535.8	--	840.8	7.9	0.3	0.0	--	0.6
Mar 2016	177	35	0	--	212	0.1	53.2	258.5	537.7	--	849.3	8.9	0.4	0.0	--	0.7

TABLE 6: CHROMIUM REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Chromium Mass Removed					Extraction Rate					Average Chromium Concentration					
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ¹ (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ¹ (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ¹ (mg/L)	Total (mg/L)
Apr 2016	185	33	0	--	218	0.1	63.8	264.4	534.3	--	862.6	8.0	0.3	0.0	--	0.7
May 2016	211	34	0	--	245	0.1	67.8	275.2	539.2	--	882.1	8.4	0.3	0.0	--	0.7
Jun 2016	212	31	0	--	243	0.1	71.3	280.9	555.9	--	908.1	8.2	0.3	0.0	--	0.7
Jul 2016	179	31	0	--	210	0.1	53.8	292.8	547.7	--	894.3	8.9	0.3	0.0	--	0.6
Aug 2016	198	37	0	--	236	0.1	65.1	358.8	550.5	--	974.3	8.2	0.3	0.0	--	0.6
Sep 2016	173	29	0	--	202	0.1	59.1	356.0	565.3	--	980.4	8.1	0.2	0.0	--	0.6
Oct 2016	175	12	0	0	188	0.1	60.5	99.7	426.0	0.2	586.3	7.8	0.3	0.0	0.0	0.9
Nov 2016	168	41	0	0	209	0.1	58.6	377.3	548.8	1.5	986.0	7.9	0.3	0.0	0.0	0.6
Dec 2016	186	40	0	0	226	0.1	62.2	416.9	465.3	1.9	946.3	8.0	0.3	0.0	0.0	0.6
Jan 2017	159	32	3	0	195	0.1	65.8	410.0	571.4	4.4	1051.6	6.5	0.2	0.0	0.0	0.5
Feb 2017	152	25	1	0	178	0.1	64.7	405.1	633.8	5.2	1108.8	7.0	0.2	0.0	0.0	0.5
Mar 2017	187	27	0	0	214	0.1	65.1	387.7	674.0	5.4	1132.1	7.7	0.2	0.0	0.0	0.5
Apr 2017	193	29	0	0	222	0.1	65.7	362.7	679.7	5.4	1113.5	8.1	0.2	0.0	0.0	0.6
May 2017	196	27	0	0	223	0.1	64.4	376.4	674.1	5.3	1120.2	8.2	0.2	0.0	0.0	0.5
Jun 2017	172	26	0	0	198	0.1	64.6	431.6	688.0	6.0	1190.2	7.4	0.2	0.0	0.0	0.5
Jul 2017	179	28	0	0	207	0.1	63.1	458.5	759.4	6.8	1287.9	7.6	0.2	0.0	0.0	0.4
Aug 2017	187	30	0	0	217	0.1	63.7	455.8	775.9	7.4	1302.7	7.9	0.2	0.0	0.0	0.4
Sep 2017	182	29	0	0	211	0.1	63.1	456.8	804.8	11.8	1336.6	8.0	0.2	0.0	0.0	0.4
Oct 2017	180	31	0	0	211	0.1	61.8	462.1	796.9	11.7	1332.5	7.8	0.2	0.0	0.0	0.4
Nov 2017	183	28	0	0	211	0.1	61.0	461.4	745.4	11.5	1279.4	8.3	0.2	0.0	0.0	0.5
Dec 2017	180	27	0	0	208	0.1	60.2	465.7	748.4	11.9	1286.2	8.0	0.2	0.0	0.0	0.4
Jan 2018	179	32	0	0	211	0.1	59.9	454.0	729.5	11.0	1254.3	8.0	0.2	0.0	0.0	0.5
Feb 2018	180	29	0	0	209	0.1	62.7	472.1	751.7	11.6	1298.0	8.5	0.2	0.0	0.0	0.5
Mar 2018	184	28	1	0	213	0.1	62.3	474.4	747.8	9.9	1294.4	7.9	0.2	0.0	0.0	0.4
Apr 2018	184	28	0	0	213	0.1	61.2	468.9	748.9	10.0	1289.1	8.3	0.2	0.0	0.1	0.5
May 2018	192	28	0	0	220	0.1	59.8	465.4	744.2	9.4	1278.8	8.6	0.2	0.0	0.1	0.5
Jun 2018	171	26	1	0	197	0.1	57.3	462.7	736.4	8.8	1265.2	8.2	0.2	0.0	0.1	0.4

Notes:

¹AP Area extraction wells were tested in October 2016 and began operating continuously in November 2016. Mass removal numbers presented were originally reported in the GWETS operation monthly reports submitted to NDEP by Envirogen. Concentrations and mass removals shown for AP Area extraction wells are for hexavalent chromium from October 2016 through March 2018 and for total chromium beginning in April 2018. Concentrations and mass removals shown for well fields are for total chromium.

- Mass removal rates presented in this spreadsheet were determined using a methodology which has been approved by NDEP (Tetra Tech 2015).

- Though chromium treatment has occurred at the Site since the mid-1980s, complete chromium concentration and/or pumping data sets for reporting years prior to July 2004 are not available.

-- = no data available

gpm = gallons per minute

lbs = pounds

mg/L = milligrams per liter

TABLE 7: WEEKLY CHROMIUM IN EFFLUENT DISCHARGE, JULY 2017 - JUNE 2018**Nevada Environmental Response Trust Site****Henderson, Nevada**

Sample Date	Effluent Location	Total Chromium (mg/L)	Total Chromium SQL (mg/L)	Hexavalent Chromium (mg/L)	Hexavalent Chromium SQL (mg/L)
07/03/2017	OUTFALL 001 EFFLUENT	0.0026 J	0.0025	<0.00025	0.00025
07/10/2017	OUTFALL 001 EFFLUENT	0.0072	0.0025	<0.00025	0.00025
07/17/2017	OUTFALL 001 EFFLUENT	0.0041 J	0.0025	<0.00025	0.00025
07/24/2017	OUTFALL 001 EFFLUENT	0.0029 J	0.0025	<0.00025	0.00025
07/31/2017	OUTFALL 001 EFFLUENT	0.0026 J	0.0025	<0.00025	0.00025
08/01/2017	OUTFALL 001 EFFLUENT	<0.0025	0.0025	NA	NA
08/07/2017	OUTFALL 001 EFFLUENT	<0.0025	0.0025	<0.00025	0.00025
08/14/2017	OUTFALL 001 EFFLUENT	0.013	0.0025	<0.00025	0.00025
08/21/2017	OUTFALL 001 EFFLUENT	0.014	0.0025	<0.00025	0.00025
08/28/2017	OUTFALL 001 EFFLUENT	0.0077	0.0025	<0.00025	0.00025
09/05/2017	OUTFALL 001 EFFLUENT	0.0066	0.0025	<0.00025	0.00025
09/11/2017	OUTFALL 001 EFFLUENT	0.0035 J	0.0025	<0.00025	0.00025
09/18/2017	OUTFALL 001 EFFLUENT	0.0051	0.0025	<0.00025	0.00025
09/25/2017	OUTFALL 001 EFFLUENT	0.0044 J	0.0025	<0.00025	0.00025
10/02/2017	OUTFALL 001 EFFLUENT	0.0083	0.0025	<0.00025	0.00025
10/09/2017	OUTFALL 001 EFFLUENT	0.0065	0.0025	<0.00025	0.00025
10/16/2017	OUTFALL 001 EFFLUENT	0.0036 J	0.0025	<0.00025	0.00025
10/23/2017	OUTFALL 001 EFFLUENT	0.0085	0.0025	<0.00025	0.00025
10/30/2017	OUTFALL 001 EFFLUENT	0.0037 J	0.0025	<0.00025	0.00025
11/01/2017	OUTFALL 001 EFFLUENT	<0.0025	0.0025	NA	NA
11/06/2017	OUTFALL 001 EFFLUENT	<0.0025	0.0025	0.00029 J	0.00025
11/13/2017	OUTFALL 001 EFFLUENT	0.0060	0.0025	<0.00025	0.00025
11/20/2017	OUTFALL 001 EFFLUENT	0.0054	0.0025	<0.00025	0.00025
11/27/2017	OUTFALL 001 EFFLUENT	0.0050	0.0025	<0.00025	0.00025
12/04/2017	OUTFALL 001 EFFLUENT	0.0077	0.0025	<0.00025	0.00025
12/11/2017	OUTFALL 001 EFFLUENT	0.0066	0.0025	<0.00025	0.00025
12/18/2017	OUTFALL 001 EFFLUENT	0.0053	0.0025	<0.00025	0.00025
12/27/2017	OUTFALL 001 EFFLUENT	0.012	0.0025	<0.00025	0.00025
01/02/2018	OUTFALL 001 EFFLUENT	0.0056	0.0025	<0.00025	0.00025
01/08/2018	OUTFALL 001 EFFLUENT	0.0048 J	0.0025	<0.00025	0.00025
01/15/2018	OUTFALL 001 EFFLUENT	0.0057	0.0025	0.00025 J	0.00025
01/22/2018	OUTFALL 001 EFFLUENT	0.018	0.0025	0.00049 J	0.00025
01/29/2018	OUTFALL 001 EFFLUENT	0.011	0.0025	<0.00025	0.00025
02/05/2018	OUTFALL 001 EFFLUENT	0.0054	0.0025	<0.00025	0.00025
	OUTFALL 001 EFFLUENT	0.0071	0.0025	NA	NA
02/12/2018	OUTFALL 001 EFFLUENT	0.0068	0.0025	<0.00025	0.00025
02/19/2018	OUTFALL 001 EFFLUENT	0.0070 B	0.0025	<0.00025	0.00025
02/26/2018	OUTFALL 001 EFFLUENT	0.0082	0.0025	<0.00025	0.00025

TABLE 7: WEEKLY CHROMIUM IN EFFLUENT DISCHARGE, JULY 2017 - JUNE 2018**Nevada Environmental Response Trust Site****Henderson, Nevada**

Sample Date	Effluent Location	Total Chromium (mg/L)	Total Chromium SQL (mg/L)	Hexavalent Chromium (mg/L)	Hexavalent Chromium SQL (mg/L)
03/05/2018	OUTFALL 001 EFFLUENT	0.011	0.0025	<0.00025	0.00025
03/12/2018	OUTFALL 001 EFFLUENT	0.0071	0.0025	<0.00025	0.00025
03/19/2018	OUTFALL 001 EFFLUENT	0.015	0.0025	<0.00025	0.00025
03/26/2018	OUTFALL 001 EFFLUENT	0.0036 J	0.0025	<0.00025	0.00025
04/02/2018	OUTFALL 001 EFFLUENT	0.0052 J	0.0050	<0.00025	0.00025
04/09/2018	OUTFALL 001 EFFLUENT	0.0041 J	0.0025	<0.00025	0.00025
04/16/2018	OUTFALL 001 EFFLUENT	0.0087	0.0025	<0.00025	0.00025
04/23/2018	OUTFALL 001 EFFLUENT	0.0053	0.0025	<0.00025	0.00025
04/30/2018	OUTFALL 001 EFFLUENT	0.0051	0.0025	<0.00025	0.00025
05/01/2018	OUTFALL 001 EFFLUENT	0.010	0.0025	NA	NA
05/07/2018	OUTFALL 001 EFFLUENT	0.0080	0.0025	<0.00025	0.00025
05/14/2018	OUTFALL 001 EFFLUENT	0.0076 J	0.0050	<0.00025	0.00025
05/21/2018	OUTFALL 001 EFFLUENT	0.0094 J	0.0050	<0.00025	0.00025
05/29/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025	<0.00025	0.00025
06/04/2018	OUTFALL 001 EFFLUENT	0.0046 J	0.0025	<0.00025	0.00025
06/11/2018	OUTFALL 001 EFFLUENT	0.0054	0.0025	<0.00025	0.00025
06/18/2018	OUTFALL 001 EFFLUENT	0.0090	0.0025	<0.00025	0.00025
06/25/2018	OUTFALL 001 EFFLUENT	0.0044 J	0.0025	<0.00025	0.00025

Notes:

mg/L = milligrams per liter

NA = not analyzed; quarterly sample collected for compliance with NPDES permit does not require hexavalent chromium analysis

SQL = Sample Quantitation Limit

B = Compound was found in the blank and sample

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

TABLE 8: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Perchlorate Mass Removed						Extraction Rate					Average Perchlorate Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ² (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ² (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ² (mg/L)	Total (mg/L)
Pre-Oct 2002 (since inception) ¹	735,790	22,527	369,255	--	1,127,572	563.8	--	--	--	--	--	--	--	--	--	--
Oct 2002	43,462	10,261	15,345	--	69,068	34.5	--	--	--	--	--	--	--	--	--	--
Nov 2002	34,380	30,030	12,660	--	77,070	38.5	--	--	--	--	--	--	--	--	--	--
Dec 2002	40,052	36,084	6,448	--	82,584	41.3	--	--	--	--	--	--	--	--	--	--
Jan 2003	45,477	33,372	12,651	--	91,500	45.7	--	--	--	--	--	--	--	--	--	--
Feb 2003	29,680	21,984	13,491	--	65,155	32.6	--	--	--	--	--	--	--	--	--	--
Mar 2003	33,077	24,988	17,858	--	75,923	38.0	--	--	--	--	--	--	--	--	--	--
Apr 2003	30,990	21,232	19,925	--	72,146	36.1	--	--	--	--	--	--	--	--	--	--
May 2003	35,588	22,573	19,855	--	78,016	39.0	--	--	--	--	--	--	--	--	--	--
Jun 2003	32,940	27,261	18,834	--	79,035	39.5	--	--	--	--	--	--	--	--	--	--
Jul 2003	32,054	23,675	17,065	--	72,795	36.4	--	--	--	--	--	--	--	--	--	--
Aug 2003	30,969	22,997	13,361	--	67,327	33.7	--	--	--	--	--	--	--	--	--	--
Sep 2003	28,120	23,060	12,464	--	63,644	31.8	--	--	--	--	--	--	--	--	--	--
Oct 2003	31,080	23,782	11,482	--	66,344	33.2	--	--	--	--	--	--	--	--	--	--
Nov 2003	28,460	21,413	10,118	--	59,991	30.0	--	--	--	--	--	--	--	--	--	--
Dec 2003	28,905	22,763	9,850	--	61,518	30.8	--	--	--	--	--	--	--	--	--	--
Jan 2004	29,075	21,402	9,473	--	59,950	30.0	--	--	--	--	--	--	--	--	--	--
Feb 2004	25,558	18,910	9,347	--	53,816	26.9	--	--	--	--	--	--	--	--	--	--
Mar 2004	28,412	22,991	6,853	--	58,256	29.1	--	--	--	--	--	--	--	--	--	--
Apr 2004	25,624	22,046	4,528	--	52,197	26.1	--	--	--	--	--	--	--	--	--	--
May 2004	27,575	22,968	3,797	--	54,340	27.2	--	--	--	--	--	--	--	--	--	--
Jun 2004	29,340	22,603	4,698	--	56,641	28.3	--	--	--	--	--	--	--	--	--	--
Jul 2004	30,536	23,568	6,059	--	60,163	30.1	59.5	245.4	704.3	--	1009.3	1,380	258	23.1	--	160
Aug 2004	29,186	24,900	6,222	--	60,308	30.2	57.3	241.6	684.8	--	983.8	1,370	277	24.4	--	165
Sep 2004	29,090	25,037	5,074	--	59,201	29.6	55.8	243.2	649.4	--	948.4	1,450	286	21.7	--	174
Oct 2004	32,169	24,779	5,550	--	62,498	31.2	58.7	239.3	690.4	--	988.3	1,475	279	21.6	--	170
Nov 2004	30,474	24,423	5,030	--	59,928	30.0	62.5	243.2	698.1	--	1003.9	1,355	279	20.0	--	166
Dec 2004	28,805	25,135	3,785	--	57,725	28.9	65.1	257.6	681.0	--	1003.8	1,190	262	15.0	--	155
Jan 2005	30,769	24,047	4,399	--	59,215	29.6	67.5	254.0	665.6	--	987.0	1,227	255	17.8	--	161
Feb 2005	27,315	22,110	4,042	--	53,467	26.7	65.9	254.1	713.6	--	1033.7	1,234	259	16.9	--	154
Mar 2005	29,873	24,214	4,887	--	58,975	29.5	63.5	251.2	725.2	--	1039.9	1,265	259	18.1	--	153
Apr 2005	29,132	23,613	4,362	--	57,107	28.6	65.3	244.2	711.9	--	1021.4	1,240	269	17.0	--	155
May 2005	29,952	25,973	4,720	--	60,646	30.3	64.0	234.7	701.8	--	1000.5	1,258	298	18.1	--	163
Jun 2005	29,100	23,779	4,521	--	57,400	28.7	64.5	237.5	703.4	--	1005.5	1,253	278	17.9	--	159
Jul 2005	32,859	23,853	4,773	--	61,485	30.7	65.5	234.7	686.6	--	986.9	1,350	273	18.7	--	168
Aug 2005	33,856	24,803	4,200	--	62,858	31.4	66.6	239.2	680.6	--	986.4	1,369	279	16.6	--	171
Sep 2005	33,662	24,185	2,536	--	60,384	30.2	65.4	254.9	634.3	--	954.6	1,431	264	11.1	--	176
Oct 2005	32,869	24,709	3,075	--	60,653	30.3	64.4	251.6	621.5	--	937.5	1,374	264	13.3	--	174
Nov 2005	32,152	23,194	3,326	--	58,672	29.3	66.1	244.9	619.6	--	930.6	1,353	263	14.9	--	175
Dec 2005	34,828	22,494	3,766	--	61,088	30.5	63.8	236.5	621.1	--	921.4	1,469	256	16.3	--	178

TABLE 8: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Perchlorate Mass Removed					Extraction Rate					Average Perchlorate Concentration					
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ² (lbs)	Total Pounds Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ² (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ² (mg/L)	Total (mg/L)	
Jan 2006	30,490	23,448	4,386	--	58,325	29.2	62.9	237.8	657.0	--	957.7	1,303	265	18.0	--	164
Feb 2006	27,291	20,550	3,357	--	51,197	25.6	63.8	239.1	664.1	--	967.0	1,273	256	15.1	--	158
Mar 2006	29,986	22,829	3,382	--	56,198	28.1	63.5	235.1	661.6	--	960.2	1,270	261	13.8	--	157
Apr 2006	30,337	22,464	3,797	--	56,598	28.3	63.7	224.1	660.6	--	948.5	1,325	279	16.0	--	166
May 2006	29,304	22,089	4,073	--	55,466	27.7	65.3	239.2	669.5	--	974.1	1,207	248	16.4	--	153
Jun 2006	26,205	22,594	4,054	--	52,854	26.4	61.9	244.1	669.8	--	975.9	1,176	257	16.8	--	151
Jul 2006	28,521	20,043	3,813	--	52,377	26.2	65.4	239.5	670.6	--	975.5	1,173	225	15.3	--	144
Aug 2006	28,687	20,327	4,312	--	53,325	26.7	63.6	240.9	664.4	--	969.0	1,214	227	17.5	--	148
Sep 2006	31,916	23,035	4,722	--	59,674	29.8	66.2	251.5	656.4	--	974.0	1,341	255	20.0	--	170
Oct 2006	31,553	24,110	4,161	--	59,824	29.9	66.4	254.7	649.0	--	970.0	1,279	255	17.3	--	166
Nov 2006	26,024	21,711	3,073	--	50,809	25.4	63.9	258.0	524.0	--	845.8	1,133	234	16.3	--	167
Dec 2006	26,971	23,108	3,739	--	53,818	26.9	64.6	253.4	629.2	--	947.1	1,124	245	16.0	--	153
Jan 2007	29,386	24,364	3,025	--	56,775	28.4	66.1	256.2	638.2	--	960.4	1,197	256	12.8	--	159
Feb 2007	24,375	20,603	2,542	--	47,520	23.8	68.5	265.6	657.5	--	991.6	1,060	231	11.5	--	143
Mar 2007	28,380	21,358	2,715	--	52,454	26.2	68.4	259.0	601.3	--	928.6	1,116	222	12.2	--	152
Apr 2007	26,893	20,765	2,693	--	50,351	25.2	68.1	257.2	631.5	--	956.8	1,098	225	11.9	--	146
May 2007	27,577	21,052	3,106	--	51,734	25.9	66.2	259.1	660.5	--	985.8	1,120	219	12.6	--	141
Jun 2007	24,969	19,264	2,727	--	46,959	23.5	64.3	258.5	673.7	--	996.5	1,079	207	11.3	--	131
Jul 2007	28,271	20,425	2,088	--	50,785	25.4	63.7	257.8	656.7	--	978.3	1,193	213	8.6	--	140
Aug 2007	26,034	19,581	1,714	--	47,329	23.7	61.2	258.5	611.0	--	930.7	1,145	204	7.5	--	137
Sep 2007	25,266	18,926	1,602	--	45,794	22.9	59.2	251.1	605.2	--	915.5	1,187	210	7.4	--	139
Oct 2007	26,065	21,264	1,644	--	48,973	24.5	59.4	264.5	617.0	--	940.9	1,181	216	7.2	--	140
Nov 2007	22,872	20,247	1,663	--	44,782	22.4	57.3	264.1	622.9	--	944.3	1,110	213	7.4	--	132
Dec 2007	22,995	20,294	1,845	--	45,134	22.6	55.4	264.1	627.6	--	947.1	1,117	207	7.9	--	128
Jan 2008	27,076	19,543	1,791	--	48,410	24.2	56.5	262.9	631.2	--	950.7	1,289	200	7.6	--	137
Feb 2008	23,735	18,381	1,762	--	43,878	21.9	59.1	262.2	608.9	--	930.3	1,154	202	8.3	--	136
Mar 2008	26,965	20,640	1,854	--	49,460	24.7	61.6	265.0	614.0	--	940.6	1,178	210	8.1	--	141
Apr 2008	24,895	19,674	1,628	--	46,196	23.1	61.9	268.1	623.1	--	953.1	1,118	204	7.3	--	135
May 2008	22,360	19,429	1,433	--	43,222	21.6	60.6	266.5	618.8	--	945.9	993	196	6.2	--	123
Jun 2008	21,965	19,116	1,311	--	42,393	21.2	61.0	271.5	630.3	--	962.8	1,001	196	5.8	--	122
Jul 2008	25,338	20,858	1,676	--	47,872	23.9	63.4	273.5	618.5	--	955.4	1,076	205	7.3	--	135
Aug 2008	29,309	21,022	1,822	--	52,153	26.1	65.7	276.5	585.1	--	927.3	1,201	205	8.4	--	151
Sep 2008	23,943	19,048	1,679	--	44,670	22.3	65.4	275.7	589.9	--	931.0	1,018	192	7.9	--	133
Oct 2008	24,824	19,393	1,574	--	45,791	22.9	65.5	275.3	597.2	--	938.0	1,020	190	7.1	--	131
Nov 2008	24,199	19,286	1,436	--	44,921	22.5	65.4	279.0	560.4	--	904.8	1,029	192	7.1	--	138
Dec 2008	25,071	21,007	1,793	--	47,871	23.9	65.4	285.8	562.7	--	914.0	1,031	198	8.6	--	141
Jan 2009	26,792	20,422	1,352	--	48,567	24.3	66.8	276.4	586.0	--	929.3	1,078	199	6.2	--	141
Feb 2009	23,092	18,143	935	--	42,170	21.1	66.7	267.5	584.2	--	918.4	1,031	202	4.8	--	137
Mar 2009	26,800	22,333	1,108	--	50,242	25.1	67.6	258.9	606.0	--	932.4	1,067	232	4.9	--	145
Apr 2009	24,995	20,556	1,011	--	46,562	23.3	67.5	260.0	595.9	--	923.3	1,029	220	4.7	--	140
May 2009	25,528	20,293	1,099	--	46,920	23.5	66.6	256.8	598.6	--	922.0	1,031	213	4.9	--	137
Jun 2009	25,967	18,530	1,060	--	45,557	22.8	69.3	258.2	579.9	--	907.4	1,042	199	5.1	--	140

TABLE 8: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Perchlorate Mass Removed					Extraction Rate					Average Perchlorate Concentration					
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ² (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ² (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ² (mg/L)	Total (mg/L)
Jul 2009	25,818	20,901	1,235	--	47,953	24.0	68.6	282.6	572.2	--	923.4	1,012	199	5.8	--	140
Aug 2009	26,627	20,201	1,340	--	48,168	24.1	69.3	226.7	561.8	--	857.7	1,034	240	6.4	--	151
Sep 2009	28,150	20,125	1,433	--	49,708	24.9	71.2	230.7	559.4	--	861.4	1,099	242	7.1	--	160
Oct 2009	26,266	19,271	1,378	--	46,914	23.5	74.9	238.1	562.2	--	875.2	944	218	6.6	--	144
Nov 2009	26,816	18,379	1,415	--	46,611	23.3	74.5	234.7	564.6	--	873.8	1,001	218	7.0	--	148
Dec 2009	27,628	19,679	1,532	--	48,839	24.4	73.3	248.1	582.4	--	903.8	1,015	213	7.1	--	145
Jan 2010	28,320	20,504	1,709	--	50,533	25.3	71.8	240.2	571.0	--	883.0	1,062	230	8.1	--	154
Feb 2010	23,883	18,894	1,493	--	44,270	22.1	75.3	246.6	573.5	--	895.3	945	228	7.8	--	147
Mar 2010	29,416	19,490	1,507	--	50,413	25.2	73.2	255.4	562.2	--	890.8	1,081	205	7.2	--	152
Apr 2010	27,792	19,108	1,507	--	48,408	24.2	73.2	244.1	540.8	--	858.1	1,055	218	7.7	--	157
May 2010	30,488	23,485	1,637	--	55,610	27.8	75.1	266.2	548.5	--	889.8	1,092	237	8.0	--	168
Jun 2010	28,252	21,992	1,602	--	51,846	25.9	73.8	267.3	527.4	--	868.5	1,064	229	8.4	--	166
Jul 2010	26,014	20,209	1,415	--	47,638	23.8	73.0	269.4	533.7	--	876.1	959	202	7.1	--	146
Aug 2010	26,223	20,722	1,349	--	48,294	24.1	71.1	269.4	518.7	--	859.2	992	207	7.0	--	151
Sep 2010	24,977	21,219	1,368	--	47,564	23.8	73.8	264.6	510.3	--	848.7	941	223	7.5	--	156
Oct 2010	24,609	19,578	1,575	--	45,762	22.9	70.9	268.4	529.6	--	868.9	934	196	8.0	--	142
Nov 2010	22,829	19,060	1,513	--	43,401	21.7	69.8	268.9	521.6	--	860.2	910	197	8.1	--	140
Dec 2010	21,292	19,729	1,306	--	42,327	21.2	67.7	267.7	530.8	--	866.2	846	198	6.6	--	131
Jan 2011	22,791	18,539	742	--	42,073	21.0	69.3	266.9	529.7	--	865.9	885	187	3.8	--	131
Feb 2011	19,850	16,457	1,054	--	37,362	18.7	67.3	263.0	545.1	--	875.5	878	186	5.8	--	127
Mar 2011	22,724	19,639	1,332	--	43,695	21.8	65.0	283.3	526.1	--	874.5	941	187	6.8	--	134
Apr 2011	23,716	18,472	1,453	--	43,641	21.8	67.1	285.1	505.0	--	857.2	983	180	8.0	--	142
May 2011	22,699	19,591	1,762	--	44,053	22.0	65.4	285.8	500.7	--	851.9	934	184	9.5	--	139
Jun 2011	22,707	19,162	1,376	--	43,246	21.6	66.2	284.6	499.9	--	850.7	953	187	7.7	--	141
Jul 2011	23,445	20,015	1,265	--	44,726	22.4	67.8	285.5	535.8	--	889.1	931	189	6.4	--	135
Aug 2011	23,817	19,541	1,220	--	44,578	22.3	67.3	273.9	507.0	--	848.3	952	192	6.5	--	141
Sep 2011	22,519	18,563	1,229	--	42,312	21.2	65.8	270.6	461.3	--	797.7	951	191	7.4	--	147
Oct 2011	23,145	18,122	1,269	--	42,537	21.3	67.5	270.7	467.7	--	805.8	923	180	7.3	--	142
Nov 2011	20,878	17,112	1,223	--	39,212	19.6	67.9	268.2	494.3	--	830.3	855	177	6.9	--	131
Dec 2011	20,432	17,564	1,171	--	39,168	19.6	65.0	267.3	475.2	--	807.5	846	177	6.2	--	130
Jan 2012	21,517	18,946	1,278	--	41,741	20.9	64.4	268.7	470.2	--	803.3	899	190	7.8	--	140
Feb 2012	20,332	19,070	1,241	--	40,643	20.3	64.5	269.1	469.4	--	803.1	906	204	7.6	--	146
Mar 2012	22,330	19,388	1,415	--	43,134	21.6	64.2	270.9	566.0	--	901.1	936	193	6.7	--	129
Apr 2012	20,566	18,198	1,331	--	40,095	20.0	63.7	273.1	567.9	--	904.7	897	185	6.5	--	123
May 2012	21,283	20,624	1,468	--	43,375	21.7	61.8	278.2	571.7	--	911.7	926	199	6.9	--	128
Jun 2012	16,233	19,216	1,430	--	36,879	18.4	61.6	272.8	590.8	--	925.2	732	196	6.7	--	111
Jul 2012	20,501	19,243	1,512	--	41,256	20.6	61.8	271.5	590.4	--	923.8	892	191	6.9	--	120
Aug 2012	20,287	18,545	1,483	--	40,316	20.2	62.4	272.2	578.8	--	913.4	874	183	6.9	--	119
Sep 2012	31,253	18,766	1,825	--	51,844	25.9	73.7	280.7	602.4	--	956.9	1,178	186	8.4	--	151
Oct 2012	40,108	18,722	2,007	--	60,837	30.4	74.4	278.7	602.8	--	955.9	1,450	181	9.0	--	171
Nov 2012	34,347	18,181	1,496	--	54,024	27.0	68.6	290.9	597.2	--	956.6	1,392	174	7.0	--	157
Dec 2012	40,336	19,186	1,745	--	61,268	30.6	72.8	290.3	590.5	--	953.6	1,491	178	8.0	--	173

TABLE 8: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Perchlorate Mass Removed						Extraction Rate					Average Perchlorate Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ² (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ² (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ² (mg/L)	Total (mg/L)
Jan 2013	40,061	19,889	1,793	--	61,742	30.9	70.6	288.1	589.6	--	948.3	1,527	186	8.2	--	175
Feb 2013	33,437	17,234	1,466	--	52,137	26.1	70.7	282.8	587.1	--	940.5	1,408	182	7.4	--	165
Mar 2013	33,163	18,919	1,596	--	53,679	26.8	68.1	280.8	578.8	--	927.7	1,311	181	7.4	--	156
Apr 2013	34,229	18,864	1,887	--	54,980	27.5	68.4	281.2	570.9	--	920.5	1,391	187	9.2	--	166
May 2013	33,665	17,498	1,933	--	53,095	26.5	65.4	270.2	568.8	--	904.4	1,384	174	9.1	--	158
Jun 2013	26,563	16,135	1,419	--	44,118	22.1	66.6	280.6	558.3	--	905.5	1,109	160	7.1	--	135
Jul 2013	29,359	16,206	1,658	--	47,223	23.6	66.2	274.8	570.2	--	911.2	1,193	159	7.8	--	139
Aug 2013	28,931	17,642	1,844	--	48,417	24.2	65.6	277.1	545.1	--	887.8	1,187	171	9.1	--	147
Sep 2013	28,676	17,273	1,332	--	47,281	23.6	66.7	274.0	508.9	--	849.6	1,194	175	7.3	--	155
Oct 2013	29,062	18,386	1,710	--	49,158	24.6	66.7	283.8	507.4	--	857.9	1,173	174	9.1	--	154
Nov 2013	23,861	15,422	1,614	--	40,898	20.4	66.2	274.2	476.6	--	817.0	1,001	156	9.4	--	139
Dec 2013	24,769	13,886	1,408	--	40,063	20.0	71.3	285.3	477.6	--	834.2	934	131	7.9	--	129
Jan 2014	29,261	14,864	1,753	--	45,879	22.9	71.7	283.0	503.2	--	857.8	1,095	141	9.4	--	144
Feb 2014	23,451	14,342	1,385	--	39,178	19.6	71.8	282.8	510.9	--	865.5	971	151	8.1	--	135
Mar 2014	28,390	15,402	1,501	--	45,294	22.6	73.1	272.9	492.5	--	838.4	1,043	152	8.2	--	145
Apr 2014	24,233	14,081	1,345	--	39,659	19.8	71.1	276.8	488.6	--	836.5	945	141	7.7	--	132
May 2014	22,791	13,880	1,473	--	38,144	19.1	73.3	284.6	496.0	--	853.9	834	131	8.0	--	120
Jun 2014	29,239	12,679	1,424	--	43,341	21.7	78.1	285.4	481.0	--	844.5	1,038	123	8.2	--	142
Jul 2014	27,832	15,691	1,851	--	45,374	22.7	71.9	281.5	506.4	--	859.9	1,039	150	9.8	--	142
Aug 2014	26,040	15,795	1,831	--	43,666	21.8	69.0	288.1	519.1	--	876.1	1,014	147	9.5	--	134
Sep 2014	24,905	16,224	2,089	--	43,219	21.6	68.5	292.8	524.2	--	885.5	1,008	154	11.1	--	135
Oct 2014	24,912	16,698	2,157	--	43,767	21.9	68.3	289.2	517.0	--	874.5	979	155	11.2	--	134
Nov 2014	22,764	14,480	1,842	--	39,087	19.5	67.9	277.5	525.1	--	870.5	935	145	9.7	--	125
Dec 2014	22,836	15,743	1,932	--	40,512	20.3	71.5	283.7	521.1	--	876.3	858	149	10.0	--	124
Jan 2015	22,885	16,689	2,155	--	41,729	20.9	71.4	283.6	519.6	--	874.7	859	158	11.1	--	128
Feb 2015	22,790	14,018	2,222	--	39,030	19.5	70.1	284.0	595.8	--	949.9	965	147	11.1	--	122
Mar 2015	24,597	17,768	2,561	--	44,926	22.5	68.4	287.5	590.3	--	946.1	964	166	11.6	--	127
Apr 2015	22,852	18,086	2,287	--	43,226	21.6	66.1	287.2	559.0	--	912.3	958	174	11.3	--	131
May 2015	22,593	16,182	2,112	--	40,887	20.4	67.1	285.7	525.9	--	878.7	903	152	10.8	--	125
Jun 2015	21,383	16,809	2,121	--	40,313	20.2	64.7	287.0	533.3	--	885.0	915	162	11.0	--	126
Jul 2015	21,508	14,589	2,201	--	38,298	19.1	63.9	280.1	546.1	--	890.2	902	140	10.8	--	115
Aug 2015	18,680	15,934	2,240	--	36,854	18.4	62.5	275.1	547.8	--	885.4	801	155	11.0	--	112
Sep 2015	18,150	16,742	2,297	--	37,189	18.6	62.9	294.5	568.7	--	926.1	800	157	11.2	--	111
Oct 2015	18,634	14,904	2,177	--	35,716	17.9	62.0	241.2	531.9	--	835.1	806	166	11.0	--	115
Nov 2015	17,526	19,032	2,001	--	38,559	19.3	54.8	296.7	457.7	--	809.2	886	178	12.1	--	132
Dec 2015	18,860	15,907	2,380	--	37,146	18.6	57.8	269.7	522.6	--	850.1	875	158	12.2	--	117
Jan 2016	17,222	11,778	2,633	--	31,634	15.8	59.1	254.4	528.6	--	842.1	782	124	13.4	--	101
Feb 2016	12,008	12,152	2,052	--	26,213	13.1	54.2	250.9	535.8	--	840.8	635	139	11.0	--	89
Mar 2016	13,748	12,484	1,546	--	27,778	13.9	53.2	258.5	537.7	--	849.3	693	129	7.7	--	88
Apr 2016	16,032	14,146	1,734	--	31,912	16.0	63.8	264.4	534.3	--	862.6	696	148	9.0	--	102
May 2016	17,577	12,695	2,052	--	32,324	16.2	67.8	275.2	539.2	--	882.1	695	124	10.2	--	98
Jun 2016	18,529	13,458	2,283	--	34,270	17.1	71.3	280.9	555.9	--	908.1	720	133	11.4	--	105

TABLE 8: PERCHLORATE REMOVED FROM THE ENVIRONMENT

Nevada Environmental Response Trust Site

Henderson, Nevada

Month	Perchlorate Mass Removed						Extraction Rate					Average Perchlorate Concentration				
	Interceptor Well Field (lbs)	Athens Road Well Field (lbs)	Seep Well Field (lbs)	AP Area ² (lbs)	Total Pounds Removed	Total Tons Removed	Interceptor Well Field (gpm)	Athens Road Well Field (gpm)	Seep Well Field (gpm)	AP Area ² (gpm)	Total (gpm)	Interceptor Well Field (mg/L)	Athens Road Well Field (mg/L)	Seep Well Field (mg/L)	AP Area ² (mg/L)	Total (mg/L)
Jul 2016	14,879	13,351	2,064	--	30,294	15.1	53.8	292.8	547.7	--	894.3	742	122	10.1	--	91
Aug 2016	15,573	14,486	2,231	--	32,290	16.1	65.1	358.8	550.5	--	974.3	642	108	10.9	--	89
Sep 2016	13,852	11,256	1,979	--	27,087	13.5	59.1	356.0	565.3	--	980.4	650	88	9.7	--	77
Oct 2016	14,021	4,751	1,752	79	20,603	10.3	60.5	99.7	426.0	0.2	586.3	622	128	11.0	1,454	94
Nov 2016	16,156	15,583	2,008	1,141	34,888	17.4	58.6	377.3	548.8	1.5	986.0	764	114	10.1	2,173	98
Dec 2016	18,429	17,320	1,956	1,309	39,014	19.5	62.2	416.9	465.3	1.9	946.3	795	111	11.3	1,824	111
Jan 2017	19,490	16,221	2,632	2,895	41,238	20.6	65.8	410.0	571.4	4.4	1051.6	794	106	12.3	1,760	105
Feb 2017	17,838	13,540	1,607	2,481	35,466	17.7	64.7	405.1	633.8	5.2	1108.8	818	99	7.5	1,415	95
Mar 2017	14,848	14,890	1,535	2,405	33,678	16.8	65.1	387.7	674.0	5.4	1132.1	612	103	6.1	1,205	80
Apr 2017	15,181	11,703	1,765	1,966	30,615	15.3	65.7	362.7	679.7	5.4	1113.5	640	89	7.2	1,017	76
May 2017	15,310	10,292	2,062	1,570	29,234	14.6	64.4	376.4	674.1	5.3	1120.2	637	73	8.2	794	70
Jun 2017	16,486	14,756	2,524	1,749	35,515	17.8	64.6	431.6	688.0	6.0	1190.2	707	95	10.2	810	83
Jul 2017	15,743	14,149	2,787	1,932	34,611	17.3	63.1	458.5	759.4	6.8	1287.9	669	83	9.8	757	72
Aug 2017	16,040	13,811	2,650	2,109	34,610	17.3	63.7	455.8	775.9	7.4	1302.7	675	81	9.2	769	71
Sep 2017	13,940	13,418	2,477	3,519	33,354	16.7	63.1	456.8	804.8	11.8	1336.6	612	81	8.5	825	69
Oct 2017	14,090	14,073	2,338	3,360	33,860	16.9	61.8	462.1	796.9	11.7	1332.5	612	82	7.9	769	68
Nov 2017	16,832	15,529	2,635	3,425	38,420	19.2	61.0	461.4	745.4	11.5	1279.4	764	93	9.8	822	83
Dec 2017	14,987	13,720	3,041	3,581	35,328	17.7	60.2	465.7	748.4	11.9	1286.2	667	79	10.9	808	74
Jan 2018	13,788	12,025	2,161	2,907	30,881	15.4	59.9	454.0	729.5	11.0	1254.3	617	71	7.9	711	66
Feb 2018	12,678	12,199	1,190	3,411	29,478	14.7	62.7	472.1	751.7	11.6	1298.0	601	77	4.7	875	67
Mar 2018	14,696	14,340	2,131	2,947	34,114	17.1	62.3	474.4	747.8	9.9	1294.4	632	81	7.6	799	71
Apr 2018	12,582	15,270	1,881	3,332	33,065	16.5	61.2	468.9	748.9	10.0	1289.1	569	90	7.0	919	71
May 2018	14,014	11,684	1,095	3,513	30,306	15.2	59.8	465.4	744.2	9.4	1278.8	628	67	3.9	997	64
Jun 2018	15,159	16,146	1,717	3,047	36,068	18.0	57.3	462.7	736.4	8.8	1265.2	733	97	6.5	954	79

Notes:

¹Monthly mass removal information is not available prior to October 2002. The data as shown represent the estimated total mass removed from system start-up through September 2002, presented as total pounds. These numbers were estimated based on total mass removal information available in the former Perchlorate Removed from the Environment Submittal, which was previously submitted to NDEP quarterly through fourth quarter 2014.

²AP Area extraction wells were tested in October 2016 and began operating continuously in November 2016. Mass removal numbers presented were originally reported in the GWETS operation monthly reports submitted to NDEP by Envirogen.

- Mass removal information presented in this spreadsheet from months prior to January 2015 was calculated using the historic mass removal calculation methodology. Beginning in January 2015, perchlorate removal was determined using a revised methodology which has been approved by NDEP (Tetra Tech 2015).

- Complete perchlorate concentration and/or pumping data sets for reporting years prior to July 2004 are not available. Perchlorate removal values presented in this table for October 2002 - June 2004 were taken from prior reports.

- Mass removal information for October 2017 may differ slightly from data previously presented in GWETS Operation Monthly Reports due to the inclusion of additional analytical data available for the Interceptor Well Field.

-- = no data available

gpm = gallons per minute

lbs = pounds

mg/L = milligrams per liter

TABLE 9: WEEKLY PERCHLORATE IN EFFLUENT DISCHARGE, JULY 2017 - JUNE 2018**Nevada Environmental Response Trust Site****Henderson, Nevada**

Sample Date	Effluent Location	Perchlorate (mg/L)	Perchlorate SQL (mg/L)
07/01/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
07/08/2017	OUTFALL 001 EFF-COMP	0.016	0.0010
	OUTFALL 001 EFF-COMP	<0.0010	0.0010
07/15/2017	OUTFALL 001 EFF-COMP	0.015	0.0010
	OUTFALL 001 EFF-COMP	<0.00050 F1F2	0.00050
07/22/2017	OUTFALL 001 EFF-COMP	0.0088	0.0010
	OUTFALL 001 EFF-COMP	<0.00050	0.00050
07/29/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
08/05/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
08/12/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
08/19/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
08/26/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
09/02/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
09/09/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
09/16/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
09/23/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
09/30/2017	OUTFALL 001 EFF-COMP	0.0037	0.0010
10/07/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
10/14/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
10/21/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
10/28/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
11/04/2017	OUTFALL 001 EFF-COMP	<0.0010 U^	0.0010
11/11/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
11/18/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
11/25/2017	OUTFALL 001 EFF-COMP	0.0021	0.0010
12/02/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
12/09/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
12/16/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
12/23/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
12/30/2017	OUTFALL 001 EFF-COMP	<0.0010	0.0010
01/06/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
01/13/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
01/20/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
01/27/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
02/03/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
02/10/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
02/17/2018	OUTFALL 001 EFF-COMP	0.0031	0.0010
02/24/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
03/03/2018	OUTFALL 001 EFF-COMP	0.0017 J	0.0010
03/10/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010

TABLE 9: WEEKLY PERCHLORATE IN EFFLUENT DISCHARGE, JULY 2017 - JUNE 2018**Nevada Environmental Response Trust Site****Henderson, Nevada**

Sample Date	Effluent Location	Perchlorate (mg/L)	Perchlorate SQL (mg/L)
03/17/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
03/24/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
03/31/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
04/07/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
04/14/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
04/21/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
04/28/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
05/05/2018	OUTFALL 001 EFF-COMP	0.0020	0.0010
05/12/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
05/19/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
05/26/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
06/02/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
06/03/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/04/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/05/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/06/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/07/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/08/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
06/09/2018	OUTFALL 001 EFFLUENT	<0.0025	0.0025
	OUTFALL 001 EFF-COMP	0.027	0.0010
	OUTFALL 001 EFF-COMP	<0.0025	0.0025
06/16/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
06/23/2018	OUTFALL 001 EFF-COMP	<0.0010	0.0010
06/30/2018	OUTFALL 001 EFFLUENT	<0.0010	0.0010

Notes:

The detected results on 7/8/17, 7/15/17, and 7/22/17 are believed to be from cross-contamination during compositing of the 7-day composite sample. Following receipt of these results, new 7-day composite samples were submitted for perchlorate analysis. All re-analyzed effluent samples were non-detect for perchlorate.

The 0.027 mg/L result on 6/9/2018 is believed to be from cross-contamination during compositing of the 7-day composite sample. Following receipt of this result, the individual daily effluent samples collected between 6/3/2018 and 6/9/2018, as well as a new 7-day composite sample, were submitted for perchlorate analysis. All re-analyzed effluent samples were non-detect for perchlorate.

FBR = Fluidized Bed Reactor

mg/L = milligrams per liter

SQL = Sample Quantitation Limit

F1 = Matrix spike (MS) and/or matrix spike duplicate (MSD) recovery is outside acceptance limits

F2 = Matrix spike/matrix spike duplicate (MS/MSD) relative percent difference (RPD) exceeds control limits

J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value

U^ = Instrument related QC is outside acceptance limits.

TABLE 10: LAS VEGAS WASH PERCHLORATE MASS LOADING

Nevada Environmental Response Trust Site

Henderson, Nevada

Reporting Year	Average Perchlorate Mass Loading (pounds per day)								
	LVW 8.85 Las Vegas Wasteway	LVW 7.2 Duck Creek	LVW 6.6 Sunrise Mountain	LVW 6.05 Pabco Road	LVW 5.3 Historic Lateral	LVW 4.75 Calico Ridge	LVW 4.2 Homestead	LVW 3.5 Rainbow Gardens	LVW 0.55 Northshore Road
2007/2008 ¹	2.0	--	--	23.3	--	--	--	--	68.7
2008/2009 ²	1.7	--	--	16.7	--	--	--	--	70.6
2009/2010	1.6	--	--	30.2	--	--	--	--	62.0
2010/2011	1.5	--	--	17.3	--	--	--	--	71.1
2011/2012	1.3	--	--	9.7	--	--	--	--	76.3
2012/2013	1.4	--	--	27.9	--	--	--	--	68.6
2013/2014	1.4	--	--	24.2	--	--	--	--	67.3
2014/2015	1.4	--	--	20.1	--	--	--	--	64.6
2015/2016 ³	1.5	--	--	20.8	--	--	--	--	59.4
2016/2017 ³	1.0	--	--	19.7	--	--	--	--	58.7
2017/2018 ^{4,5}	1.2	1.7	5.1	10.6	14.7	39.6	46.1	64.3	56.5
Average	1.4	1.7	5.1	20.0	14.7	39.6	46.1	64.3	65.8

Notes:

Reporting year is July through June.

¹ 2007 third quarter mass loading estimate missing for Las Vegas Wasteway and Pabco Road.² 2009 first quarter mass loading estimate missing for Northshore Road.³ January 2016 through February 2017 discharge data were not available for LVW 8.85. 2015 discharge rates were used to estimate loading during this timeframe.⁴ Beginning in July 2017, analytical data collected by Tetra Tech and Envirogen are used in the loading calculations with the exception of calculations for Las Vegas Wasteway, for which analytical data collected by Southern Nevada Water Authority (SNWA) are used.⁵ To calculate average perchlorate loading at each location, the following assumptions were made:

- Mass loading estimates associated with field duplicate results were averaged with the mass loading estimate associated with the corresponding parent sample before determining an average loading for a given location.
- For analytical results below the detection limit, perchlorate mass loading was calculated by substituting the detection limit for the concentration. The Kaplan-Meier method was then used on the resulting perchlorate mass loading data set to address nondetects and calculate an average perchlorate mass loading estimate.
- Discharge data are not measured by the United States Geological Survey (USGS) at LVW 6.6 (Sunrise Mountain) or LVW 4.75 (Calico Ridge). Flow rates were estimated based on measured flow rates at nearby locations.

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location	Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)
LVW 8.85 Las Vegas Wasteway	07/24/2017 08:30	149	1.36	1.1
	08/29/2017 10:12	250	0.88	1.2
	09/19/2017 09:25	205	1.03	1.1
	10/23/2017 10:25	258	0.77	1.1
	11/22/2017 09:05	158	0.78	0.66
	12/19/2017 08:45	131	1.37	0.97
	01/22/2018 10:15	241	1.08	1.4
	02/13/2018 09:45	241	1.15	1.5
	03/20/2018 09:18	211	1.23	1.4
	04/23/2018 08:50	180	1.09	1.1
	05/08/2018 09:05	212	1.49	1.7
	06/18/2018 08:50	144	1.03	0.80
	07/25/2017 08:15	198	6.1 J	6.5
	07/25/2017 08:15	198	4.4 J	4.7
	08/23/2017 08:45	175	<0.95	<0.90
LVW 7.2 Duck Creek	08/23/2017 08:45	175	<0.95	<0.90
	09/25/2017 08:20	160	<0.95	<0.82
	10/17/2017 08:15	192	1.8 J	1.9
	11/14/2017 08:30	175	2.1 J	2.0
	12/05/2017 08:30	171	1.6 J	1.5
	01/16/2018 11:45	300	1.6 J	2.6
	02/12/2018 09:30	172	2.2 J	2.0
	03/08/2018 09:00	153	<0.95	<0.78
	03/08/2018 09:00	153	<0.95	<0.78
	04/05/2018 11:20	237	<0.95	<1.2
	04/05/2018 11:22	239	<0.95	<1.2
	05/10/2018 13:15	295	<0.95	<1.5
	05/10/2018 13:15	295	<0.95	<1.5
	06/07/2018 14:15	295	<0.95	<1.5
	06/07/2018 14:15	295	<0.95	<1.5
LVW 6.6 Sunrise Mountain	07/25/2017 09:30	194	3.3 J	3.5
	08/23/2017 09:15	174	<0.95	<0.89
	09/25/2017 09:15	160	<0.95	<0.82
	10/17/2017 08:45	192	2.6 J	2.7
	11/14/2017 08:45	175	13	12
	11/14/2017 08:45	175	15	14
	12/05/2017 12:30	281	7.5	11
	01/16/2018 12:15	300	9.8	16
	02/12/2018 10:00	172	<0.95	<0.88
	03/08/2018 08:15	150	<0.95	<0.77
	04/05/2018 10:40	184	1.9 J	1.9
	05/10/2018 13:00	289	1.2 J	1.9
	06/07/2018 13:30	278	5.4	8.1
	07/25/2017 09:45	194	3.0 J	3.1
	08/23/2017 09:30	175	<0.95	<0.90
LVW 6.6-2	09/25/2017 09:30	153	<0.95	<0.79
	10/17/2017 09:00	189	<0.95	<0.97
	11/14/2017 09:00	175	<0.95	<0.90
	12/05/2017 12:45	288	<0.95	<1.5
	01/16/2018 12:30	311	2.4 J	4.0
	02/12/2018 10:15	176	3.9 J	3.7
	03/08/2018 08:30	149	2.8 J	2.3
	04/05/2018 10:45	186	<0.95	<0.95

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location		Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)	
LVW 6.6 Sunrise Mountain	LVW 6.6-2	05/10/2018 12:45	282	<0.95	<1.4	
		06/07/2018 13:30	278	<0.95	<1.4	
	LVW 6.6-3	07/25/2017 10:00	194	1.5 J	1.6	
		08/23/2017 09:45	178	<0.95	<0.91	
		09/25/2017 09:45	156	<0.95	<0.80	
		10/17/2017 09:15	185	<0.95	<0.95	
		11/14/2017 09:15	171	<0.95	<0.88	
		12/05/2017 13:00	293	53	84	
		12/05/2017 13:00	293	52	82	
		01/16/2018 12:45	318	<0.95	<1.6	
		02/12/2018 10:30	184	10	9.9	
		03/08/2018 08:45	149	1.1 J	0.88	
		04/05/2018 10:50	187	<0.95	<0.96	
		05/10/2018 12:30	272	<0.95	<1.4	
		06/07/2018 13:30	278	<0.95	<1.4	
LVW 6.05 Pabco Road		07/24/2017 11:00	200	14	15	
		08/30/2017 12:14	292	12	19	
		09/26/2017 08:15	191	15	15	
		10/16/2017 09:30	186	22	22	
		11/13/2017 09:15	236	1.6 J	2.0	
		12/04/2017 09:15	240	22	28	
		01/15/2018 10:45	230	4.5	5.6	
		02/12/2018 11:00	266	5.7	8.2	
		03/08/2018 08:00	254	2.8 J	3.8	
		03/08/2018 08:00	254	3.7 J	5.1	
		04/05/2018 10:15	212	2.8 J+	3.2	
		04/05/2018 10:17	212	1.2 J	1.4	
		05/10/2018 12:15	275	1.3 J	1.9	
		05/10/2018 12:15	275	1.4 J	2.1	
		06/07/2018 13:00	295	2.0 J	3.2	
		06/07/2018 13:00	295	1.5 J	2.4	
LVW 5.3 Historic Lateral	LVW 5.3-1	07/25/2017 10:30	247	13	17	
		08/23/2017 13:15	268	15	22	
		09/25/2017 10:30	196	22	23	
		10/17/2017 09:45	176	25	24	
		11/14/2017 09:45	192	28	29	
		12/05/2017 09:00	201	19	21	
		01/15/2018 11:30	265	23	33	
		02/12/2018 12:15	255	6.5	8.9	
		03/07/2018 13:25	287	5.1	7.9	
		04/05/2018 09:10	205	4.4 J+	4.9	
		05/10/2018 11:00	199	2.1 J	2.3	
		06/07/2018 12:00	266	7.1	10	
	LVW 5.3-2	07/25/2017 10:30	247	12	16	
		08/23/2017 13:15	268	8.0	12	
		09/25/2017 10:45	184	13	13	
		10/17/2017 10:00	183	15	15	
		11/14/2017 10:00	200	21	23	
		12/05/2017 09:15	209	24	27	
		01/15/2018 11:45	265	23	33	
		02/12/2018 12:30	267	6.4	9.2	
		03/07/2018 13:26	288	5.0	7.8	
		04/05/2018 09:15	206	3.9 J+	4.3	

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location		Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)
LVW 5.3 Historic Lateral	LVW 5.3-2	05/10/2018 11:15	206	3.0 J	3.3
		06/07/2018 12:00	266	3.7 J	5.3
	LVW 5.3-3	07/25/2017 10:45	243	12	16
		08/23/2017 13:30	273	7.6	11
		09/25/2017 11:00	184	12	12
		09/25/2017 11:00	184	14	14
		10/17/2017 10:15	187	16	16
		10/17/2017 10:15	187	14	14
		11/14/2017 10:15	204	18	20
		12/05/2017 09:30	217	18	21
		01/15/2018 12:00	265	24	34
		02/12/2018 12:45	280	6.2	9.4
		03/07/2018 13:27	288	5.9	9.2
		04/05/2018 09:20	207	3.8 J+	4.2
		05/10/2018 11:30	217	2.1 J	2.5
		06/07/2018 12:00	266	3.1 J	4.4
LVW 4.75 Calico Ridge	LVW 4.75-1	05/10/2018 10:00	197	44	47
		06/07/2018 10:30	211	50	57
	LVW 4.75-2	05/10/2018 10:00	197	44	47
		06/07/2018 10:30	211	55	63
	LVW 4.75-3	05/10/2018 10:15	201	45	49
		06/07/2018 10:30	211	55	63
	LVW 4.75-4	05/10/2018 10:15	201	15	16
		06/07/2018 10:30	211	18	20
	LVW 4.75-5	05/10/2018 10:30	205	14	15
		05/10/2018 10:30	205	15	17
		06/07/2018 10:30	211	17	19
LVW 4.2 Homestead	LVW 4.2-1	07/25/2017 11:00	294	45	71
		08/23/2017 10:45	178	41	39
		09/25/2017 12:10	211	66	75
		10/17/2017 10:45	195	64	67
		11/14/2017 10:45	182	79	78
		12/05/2017 10:00	217	73	85
		01/16/2018 10:30	223	78	94
		02/13/2018 08:45	234	61	77
		03/08/2018 11:45	224	56	68
		04/04/2018 12:15	238	48	62
		05/10/2018 09:00	188	57	58
		06/07/2018 09:45	216	51	59
	LVW 4.2-2	07/25/2017 11:00	294	35	56
		08/23/2017 10:45	178	37	36
		09/25/2017 12:27	229	50	62
		10/17/2017 11:00	195	54	57
		11/14/2017 11:00	189	64	65
		12/05/2017 10:15	217	27	32
		01/16/2018 10:45	223	72	87
		02/13/2018 09:00	234	48	61
		03/08/2018 11:45	224	45	54
		04/04/2018 12:20	243	37	48
LVW 4.2-3	LVW 4.2-3	05/10/2018 09:00	188	42	43
		06/07/2018 09:45	216	45	52
	LVW 4.2-3	07/25/2017 11:15	287	18	28
		08/23/2017 11:00	186	29	29

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location		Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)
LVW 4.2 Homestead	LVW 4.2-3	09/25/2017 12:42	239	43	55
		10/17/2017 11:15	180	26	25
		11/14/2017 11:15	189	38	39
		12/05/2017 10:30	225	57	69
		01/16/2018 11:00	228	37	46
		02/13/2018 09:15	234	19	24
		03/08/2018 12:00	234	19 J+	24
		04/04/2018 12:25	247	23	31
		05/10/2018 09:15	180	15	15
		06/07/2018 09:45	216	21	24
	LVW 4.2-4	07/25/2017 11:15	287	21	33
		07/25/2017 11:15	287	21	33
		08/23/2017 11:00	186	22	22
		09/25/2017 12:58	265	27	39
		10/17/2017 11:30	195	22	23
		11/14/2017 11:30	189	25	25
		12/05/2017 10:45	225	70	85
		01/16/2018 11:15	228	26	32
LVW 3.5 Rainbow Gardens	LVW 3.5-1	02/13/2018 09:30	234	11 J+	14
		02/13/2018 09:30	234	12 J+	15
		03/08/2018 12:15	238	14 J+	18
		04/04/2018 12:30	252	<0.95	<1.3
		05/10/2018 09:15	180	12	12
		06/07/2018 09:45	216	12	14
		07/24/2017 10:00	220	59	70
		08/30/2017 11:32	209	55	62
		09/26/2017 09:00	226	57	69
		10/16/2017 10:15	203	74	81
		11/13/2017 10:00	220	89	110
		12/04/2017 10:15	229	78	96
	LVW 3.5-2	01/15/2018 12:15	237	85	110
		02/13/2018 12:15	243	51 J+	67
		03/07/2018 12:20	229	52	64
		04/04/2018 10:35	203	44	48
		05/10/2018 07:00	254	40	55
		06/07/2018 08:30	224	47	57
		07/24/2017 09:45	220	57	68
		08/30/2017 11:16	203	54	59
		09/26/2017 09:00	226	53	65
		10/16/2017 10:30	203	74	81
		11/13/2017 10:15	215	78	90
LVW 3.5-3		12/04/2017 10:30	223	80	96
LVW 3.5-3	01/15/2018 12:30	237	82	100	
	02/13/2018 12:30	250	53	71	
	03/07/2018 12:21	229	52	64	
	04/04/2018 10:40	203	43	47	
	05/10/2018 07:00	254	38	52	
	06/07/2018 08:30	224	37	45	
LVW 3.5-3	07/24/2017 09:45	220	51	61	
	08/30/2017 11:02	208	51	57	
	09/26/2017 09:00	226	51	62	
	10/16/2017 10:45	197	69	73	
	11/13/2017 10:30	215	81	94	

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location		Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)	
LVW 3.5 Rainbow Gardens	LVW 3.5-3	12/04/2017 10:45	223	78	94	
		01/15/2018 12:45	243	72	94	
		02/13/2018 12:45	256	50	69	
		03/07/2018 12:22	229	52	64	
		04/04/2018 10:45	203	41	45	
		05/10/2018 07:15	248	35	47	
		06/07/2018 08:30	224	43	52	
	LVW 3.5-4	07/24/2017 09:30	226	52	63	
		08/30/2017 10:48	209	49	55	
		09/26/2017 09:15	220	48	57	
		10/16/2017 11:00	197	67	71	
		11/13/2017 10:45	209	52 J+	59	
		12/04/2017 11:00	217	74	87	
		01/15/2018 13:00	250	81	110	
		02/13/2018 13:00	270	50	73	
		03/07/2018 12:23	229	49	61	
		04/04/2018 10:50	201	37	40	
		05/10/2018 07:30	241	35	45	
		06/07/2018 08:30	224	38	46	
		07/24/2017 09:30	226	44	54	
		08/30/2017 10:14	215	42	49	
LVW 3.5 Rainbow Gardens	LVW 3.5-5	09/26/2017 09:15	220	47	56	
		10/16/2017 11:15	192	58	60	
		11/13/2017 11:00	209	46	52	
		12/04/2017 11:15	217	66	77	
		01/15/2018 13:15	256	75	100	
		02/13/2018 13:15	284	37	57	
		03/07/2018 12:24	229	45	56	
		04/04/2018 10:55	199	34	36	
		05/10/2018 07:30	241	32	42	
		06/07/2018 08:30	224	43	52	
		07/24/2017 09:15	232	44	55	
		08/30/2017 10:32	209	44	50	
		09/26/2017 09:15	220	40	47	
		10/16/2017 11:30	186	55	55	
LVW 3.5 Rainbow Gardens	LVW 3.5-6	10/16/2017 11:30	186	56	56	
		11/13/2017 11:15	209	51	57	
		11/13/2017 11:15	209	47	53	
		12/04/2017 11:30	217	55	64	
		12/04/2017 11:30	217	56	66	
		01/15/2018 13:30	263	65	92	
		01/15/2018 13:30	263	67	95	
		02/13/2018 13:30	306	31	51	
		03/07/2018 12:25	229	35	43	
		04/04/2018 11:00	197	33	35	
		05/10/2018 07:45	235	28	35	
		06/07/2018 08:30	224	34	41	
LVW 0.55 Northshore Road		07/03/2017 10:15	193	42	44	
		07/24/2017 08:45	240	41	53	
		08/01/2017 10:00	231	44	55	
		08/30/2017 09:45	222	36	43	
		08/30/2017 09:45	222	37	44	
		09/05/2017 09:30	240	40	52	

TABLE 11: LAS VEGAS WASH PERCHLORATE MASS LOADING, JULY 2017 - JUNE 2018
Nevada Environmental Response Trust Site
Henderson, Nevada

Location	Sample Date and Time	Flow Rate (cfs)	Perchlorate Concentration ($\mu\text{g/L}$)	Perchlorate Loading (lbs/day)
LVW 0.55 Northshore Road	09/26/2017 10:15	209	46	52
	09/26/2017 10:15	209	46	52
	10/02/2017 10:15	218	46	54
	10/16/2017 12:00	201	63	68
	11/06/2017 10:45	227	52	64
	11/13/2017 11:45	218	57	67
	12/04/2017 10:30	236	59	75
	12/04/2017 12:45	213	64	74
	01/02/2018 10:45	227	55	67
	01/15/2018 14:00	266	72	100
	02/05/2018 09:30	235	37	47
	02/13/2018 11:15	234	41	52
	02/13/2018 11:15	234	44	56
	03/05/2018 09:30	249	32	43
	03/07/2018 09:00	240	32	41
	04/02/2018 11:15	209	49	55
	04/04/2018 09:55	220	38 J+	45
	05/07/2018 10:30	228	40	49
	05/10/2018 06:30	307	31	51
	06/04/2018 11:15	228	39	48
	06/07/2018 07:30	292	33	52
	06/07/2018 07:30	292	32	50

Notes:

To calculate perchlorate loading at each location for each sample, the following assumptions were made:

- For analytical results below the detection limit, perchlorate mass loading was calculated by substituting the detection limit for the concentration in the calculation.
- Discharge data are not measured by the United States Geological Survey (USGS) at LVW 6.6 (Sunrise Mountain) or LVW 4.75 (Calico Ridge). The flow rates shown were calculated based on measured flow rates at upstream location LVW 7.2 (Duck Creek) to estimate flow at LVW 6.6 and downstream location LVW 4.2 (Homestead) to estimate flow at LVW 4.75. The estimated travel time between locations was used to determine the approximate instantaneous flow rates at LVW 6.6 and LVW 4.75 at the time of sampling assuming a travel time of 31 minutes between LVW 7.2 and LVW 6.6 and a travel time of 14 minutes between LVW 4.75 and LVW 4.2.

cfs = cubic feet per second

lbs/d = pounds per day

$\mu\text{g/L}$ = micrograms per liter

J = estimated concentration

J+ = estimated concentration, potential positive bias