Table 2x. Summary of load calculations for total mercury, Cache Creek Settling Basin, California, water years 2010-17

[THg, total mercury; pTHg, particulate total mercury; fTHg, filtered total mercury; p+fTHg, particulate plus filtered total mercury; wwTHg, whole-water total mercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pTHg-L, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-L; pTHg-G, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-G; conc., concentration; light gray and orange shading indicates particulate total mercury load; dark gray and orange shading indicates whole-water total mercury load]

	Total flow volume	pTHg load	fTHg load	p+fTHg load	wwTHg load	pTHg conc.		SS-L load	pTHg-L load	SS-G load	pTHg-G load	pTHg-L + fTHg load	pTHg-G + fTHg load	Total Mercury Average wwTHg load	Total Mercury Average wwTHg load	Suspended Sediment Average SS-L load	Suspended Sediment Average SS-G Load	Suspended Sediment Average SS-L and SS-G loads	
	10^9 L	kg	kg	kg	kg	(geometric mean) ng/g		10^6 kg	kg	10^6 kg	kg	kg	kg	kg/8 yrs	kg/yr	10^6 kg/yr	10^6 kg/yr	10^6 kg/yr	
Inflow 11452600																			
WY 2010	205	16	0.66	17	18	251		129	32	181	45	33	46					155	
WY 2011	485	100	2.0	102	107	177		475	84	377	67	86	69					426	
WY 2012	37	1.0	0.12	1.1	1.2	259		3.2	0.8	4.7	1.2	1.0	1.3					4	
WY 2013	117	21	1.1	22	22	255		119	30	82	21	31	22					100	
WY 2014	3	0.05	0.01	0.07	0.07	242		0.1	0.02	0.12	0.03	0.04	0.04					0	min
WY 2015	86	41	1.2	42	40	318		131	42	101	32	43	33					116	
WY 2016	141	34	0.88	34	35	175		180	32	151	26	32	27					166	
WY 2017	1044	305	6.9	312	312	265		1222	324	971	257	331	264					1097	max
WY 2010-2017 sum	2118	517	12.7	530	535		sum	2259	545	1867	450	557	463					2063	
WY 2010-2017 sum						219	8-yr	2259	495	1867	409	507	422	(n=6)	8-yr average			8-yr average	
Outflow Weir (Spilllway) 11452800														502	63	282	233	258	(n=2)
WY 2010	86	1.9	0.31	2.2	4.2	318		33	10.4	36	12								
WY 2011	360	30	1.14	31	29	217		106	23	67	15								
WY 2012	0	0	0	0	0	na		0	na	0	na								
WY 2013	63	5.3	0.60	5.9	7.3	243		27	6.6	34	8.2								
WY 2014	0	0	0	0	0	na		0	0	0	0								
WY 2015	66	11	0.88	12	14	356		31	11.1	23	8.3								
WY 2016	61	3.8	0.46	4.3	4.2	203		16	3.2	14	2.7								
WY 2017	1026	111	4.19	116	116	237		287	68	278	66								
WY 2010-2017 sum	1664	163	7.6	171	176		sum	500	122	451	111								
WY 2010-2017 sum						277	8-yr	500	139	451	125								
Outflow Gate 11452900																			
WY 2010	85	2.0	0.33	2.4	2.3	318		8.6	2.7	6.1	1.9								
WY 2011	96	2.6	0.39	3.0	2.9	266		11	2.9	20	5.4								
WY 2012	22	0.39	0.066	0.46	0.44	348		1.5	0.52	1.3	0.5								
WY 2013	39	1.4	0.26	1.6	1.7	286		6.9	2.0	9.1	2.6								
WY 2014	0.65	0.01	0.001	0.01	0.01	na		0.008	0	0.01	0								
WY 2015	17	0.50	0.16	0.66	0.60	304		2.0	0.6	3.8	1.2								
WY 2016	52	3.5	0.35	3.9	3.8	217		15.6	3.4	8.8	1.9								
WY 2017	32	0.46	0.17	0.63	0.57	366		1.7	0.6	1.3	0.5								
WY 2010-2017 sum	344	11	1.7	13	12		sum	47	12.8	51	14								
WY 2010-2017 sum						295	8-yr	47	13.9	51	15								
Total Outflow 11452901 - sum of 11452800 and 11452900																			
WY 2010	171	3.9	0.64	4.5	6.5			41	13	42	13	14	14					42	
WY 2011	456	32.2	1.5	34	32			117	26	87	20	28	21					102	
WY 2012	22	0.39	0.066	0.46	0.44			1.5	0.5	1.3	0.5	0.6	0.5					1	
WY 2013	102	6.7	0.87	7.6	9.0			34	8.5	43	11	9	12					38	
WY 2014	0.7	0.01	0.001	0.01	0.01			0.008	0	0.01	0	0.0	0.0					0	
WY 2015	83	11.9	1.0	13	15			33	12	27	9.4	13	10					30	
WY 2016	113	7.3	0.8	8.1	8			32	7	22	4.7	7	5					27	
WY 2017	1058	112	4.4	116	117			289	69	279	66.3	73	71					284	
WY 2010-2017 sum	2007	174	9.3	184	188		sum	547	135	502	125	144	134					525	
WY 2010-2017 sum							8-yr	547	152	502	140	162	149	(n=6)	8-yr average			8-yr average	
Combined Outflow (11452901) - weighted average of 11452800 and 11452900														160	20	68	63	66	(n=2)
WY 2010	171	7.6	0.66	8.3	11	318		38	12	42	13	13	14					40	
WY 2011	456	39	2.3	41	42	228		171	39	87	20	41	22					129	
WY 2012	22	0.44	0.073	0.51	0.43	348		1.7	0.6	1.3	0.5	1	1					2	
WY 2013	102	11	1.2	12	12	259		64	17	43	11	18	12					53	
WY 2014	0.7	0.01	0.002	0.01	0.01	na		0.011	0	0.01	0	0	0					0	min
WY 2015	83	24	1.5	25	25	346		74	26	27	9.3	27	11					51	
WY 2016	113	7.8	0.8	8.6	11	209		45	9.4	22	4.7	10	5					34	
WY 2017	1058	134	4.4	138	108	238		407	97	279	66	101	71					343	max
WY 2010-2017 sum	2007	223	10.9	234	209		sum	800	200	502	125	211	136					651	
WY 2010-2017 sum						264	8-yr	800	211	502	132	222	143	(n=6)	8-yr average			8-yr average	
														193	24	100	63	81	(n=2)
														(n=12)	Overall 8-yr average			Overall 8-yr average	
														176	22	84	63	73	(n=4)

Table 3x. Trap efficiency calculations for total mercury, Cache Creek Settling Basin, California, water years 2010-17

[THg, total mercury; pTHg, particulate total mercury; fTHg, filtered total mercury; p+fTHg, particulate plus filtered total mercury; wwTHg, whole-water total mercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pTHg-L, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-L; pTHg-G, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-G; TE, Trap Efficiency; TE computed as (LoadIn-LoadOut)/(LoadIn) using load data in table 2, as indicated]

Inflow (11452600) vs. Total Outflow (11452901) - sum of 11452800 and 11452900

	Total flow	pTHg	fTHg	p+fTHg	wwTHg		SS-L	pTHg-L	SS-G	pTHg-G	pTHg-L + fTHg	pTHg-G + fTHg
	TE	TE	TE	TE	TE		TE	TE	TE	TE	TE	TE
WY 2010	16%	76%	3%	73%	65%		68%	60%	77%	70%	58%	69%
WY 2011	6%	68%	22%	67%	70%		75%	69%	77%	70%	68%	69%
WY 2012	40%	59%	45%	57%	63%		54%	38%	71%	62%	39%	60%
WY 2013	13%	68%	19%	66%	59%		71%	72%	47%	48%	70%	47%
WY 2014	nd	nd	nd	nd	nd		nd	nd	nd	nd	96%	97%
WY 2015	3%	71%	10%	69%	62%		75%	72%	73%	71%	70%	69%
WY 2016	20%	78%	8%	76%	77%		82%	79%	85%	82%	77%	80%
WY 2017	-1%	63%	37%	63%	63%		76%	79%	71%	74%	78%	73%
WY 2010-2017 sum	5%	66%	27%	65%	65%	sum	76%	75%	73%	72%	74%	71%
WY 2010-2017 sum						8-yr	76%	69%	73%	66%	68%	65%

Inflow (11452600) vs. Combined Outflow (11452901) - weighted average of 11452800 and 11452900

WY 2010	16%	52%	-1%	50%	42%		71%	63%	77%	70%	62%	69%
WY 2011	6%	61%	-17%	60%	61%		64%	54%	77%	70%	52%	68%
WY 2012	40%	54%	40%	52%	64%		46%	28%	71%	62%	29%	60%
WY 2013	13%	47%	-8%	45%	45%		46%	45%	47%	47%	43%	44%
WY 2014	nd	nd	nd	nd	nd		nd	nd	nd	nd	95%	95%
WY 2015	3%	42%	-29%	40%	37%		43%	38%	73%	71%	37%	67%
WY 2016	20%	77%	9%	75%	67%		75%	70%	85%	82%	68%	80%
WY 2017	-1%	56%	36%	56%	65%		67%	70%	71%	74%	69%	73%
WY 2010-2017 sum	5%	57%	15%	56%	61%	sum	65%	63%	73%	72%	62%	71%
WY 2010-2017 sum						8-yr	65%	57%	73%	68%	56%	66%

	n	avg.	s.d.
avg TE SS	8	72%	5%
avg TE p.THg	10	67%	6%
avg TE ww.THg	12	65%	6%
avg TE f.THg	2	21%	6%

Table 4x. Summary of load calculations for total mercury, standard error of the mean, Cache Creek Settling Basin, California, water years 2010-17

[THg, total mercury; pTHg, particulate total mercury; fTHg, filtered total mercury; p+fTHg, particulate plus filtered total mercury; wwTHg, whole-water total mercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pTHg-L, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-L; pTHg-G, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-G; conc., concentration; SE, standard error of the mean; light gray shading indicates particulate total mercury load; dark gray shading indicates whole-water total mercury load]

	Total flow volume	pTHg load (SE)	fTHg load (SE)	p+fTHg load (SE)	wwTHg load (SE)	pTHg conc.		SS-L load (SE)	pTHg-L load (SE)	SS-G load (SE)	pTHg-G load (SE)
	10^9 L	kg	kg	kg	kg	(geometric mean) ng/g		10^6 kg	kg	10^6 kg	kg
Inflow 11452600											
WY 2010	205	3.9	0.10	4.0	3.1	251		22.3	5.6	nd	nd
WY 2011	485	22	0.30	23	17	177		107	19	nd	nd
WY 2012	37	0.12	0.01	0.14	0.12	259		0.51	0.13	nd	nd
WY 2013	117	3.7	0.13	3.8	3.2	255		25.4	6.5	nd	nd
WY 2014	3	0.010	0.002	0	0.011	242		0	0	nd	nd
WY 2015	86	11	0.19	11	9	318		32	10.1	nd	nd
WY 2016	141	7.0	0.14	7	7	175		37	6.5	nd	nd
WY 2017	1044	60	1.21	61	61	265		237	62.8	nd	nd
WY 2010-2017 sum	2118	108	2.09	110	101		sum	461	111	nd	nd
WY 2010-2017 sum						219	8-yr	461	101	nd	nd
Outflow Weir (Spilllway) 11452800											
WY 2010	86	0.8	0.058	0.87	2.9	318		14.1	4.5	nd	nd
WY 2011	360	11	0.13	12	17	217		36.3	7.9	nd	nd
WY 2012	0	0	0	0	0	na		0	na	nd	nd
WY 2013	63	1.2	0.055	1.2	3.6	243		10.2	2.5	nd	nd
WY 2014	0	0	0	0	0	na		0	0	nd	nd
WY 2015	66	12	0.091	12	6.4	356		10	3.6	nd	nd
WY 2016	61	0.9	0.07	1.0	0.9	203		6.0	1.2	nd	nd
WY 2017	1026	29	0.45	29	28	237		72	17	nd	nd
WY 2010-2017 sum	1664	55	0.85	56	58		sum	149	37	nd	nd
WY 2010-2017 sum						277	8-yr	149	41	nd	nd
Outflow Gate 11452900											
WY 2010	85	0.49	0.062	0.55	0.45	318		1.8	0.58	nd	nd
WY 2011	96	0.57	0.043	0.61	0.54	266		2.1	0.6	nd	nd
WY 2012	22	0.10	0.009	0.11	0.094	348		0.35	0.12	nd	nd
WY 2013	39	0.39	0.038	0.42	0.46	286		2.3	0.64	nd	nd
WY 2014	0.65	0.004	0.0004	0.005	0.005	na		0.003	0.000	nd	nd
WY 2015	17	0.12	0.034	0.16	0.13	304		0.47	0.14	nd	nd
WY 2016	52	1.02	0.05	1.07	0.99	217		4.7	1.0	nd	nd
WY 2017	32	0.24	0.03	0.27	0.27	366		0.90	0.33	nd	nd
WY 2010-2017 sum	344	2.9	0.27	3.2	2.9		sum	13	3.4	nd	nd
WY 2010-2017 sum						295	8-yr	13	3.7	nd	nd
Total Outflow (11452901) - sum of 11452800 and 11452900											
WY 2010	171	1.3	0.12	1.4	3.3			16	5	nd	nd
WY 2011	456	12	0.17	12	17			38	8	nd	nd
WY 2012	22	0.10	0.009	0.11	0.09			0.35	0.12	nd	nd
WY 2013	102	1.6	0.09	1.7	4.1			12	3	nd	nd
WY 2014	0.7	0.004	0.0004	0.005	0.005			0.00	0.00	nd	nd
WY 2015	83	12	0.13	12	6.6			11	3.7	nd	nd
WY 2016	113	2	0.12	2	1.9			11	2.2	nd	nd
WY 2017	1058	29	0.48	29	27.8			73	17		
WY 2010-2017 sum	2007	58	1.12	59	61		sum	161	40	nd	nd
WY 2010-2017 sum							8-yr	161	40	nd	nd
Combined Outflow (11452901) - weighted average of 11452800 and 11452900											
WY 2010	171	4.0	0.11	4.1	2.9	318		10	3.3	nd	nd
WY 2011	456	14	0.32	15	12	228		50	11	nd	nd
WY 2012	22	0.17	0.0090	0.18	0.11	348		0.46	0.16	nd	nd
WY 2013	102	4.0	0.14	4.2	3.5	259		18	4.7	nd	nd
WY 2014	0.7	0.009	0.0005	0.010	0.0075	na		0.005	nd	nd	nd
WY 2015	83	8.9	0.23	9.1	7.7	346		26	9.2	nd	nd
WY 2016	113	1.7	0.18	1.9	3.1	209		14	2.9	nd	nd
WY 2017	1058	37	0.44	37.0	28	238		118	28.1	nd	nd
WY 2010-2017 sum	2007	70	1.42	32	57		sum	237	60	nd	nd
WY 2010-2017 sum						264	8-yr	237	63	nd	nd

Table 5x. Trap efficiency standard error calculations for total mercury, Cache Creek Settling Basin, California, water years 2010-17

[THg, total mercury; pTHg, particulate total mercury; fTHg, filtered total mercury; p+fTHg, particulate plus filtered total mercury; wwTHg, whole-water total mercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pTHg-L, particulate total mercury load from multiplying geomteric mean gravimetric pTHg concentration times SS-L; pTHg-G, particulate total mercury load from multiplying geometric mean gravimetric pTHg concentration times SS-G; TE, Trap Efficiency; SE, standard error; TE data in Table 3]

	pTHg	fTHg	p+fTHg	wwTHg		SS-L	pTHg-L	SS-G	pTHg-G	pTHg-L + fTHg	pTHg-G + fTHg
	TE (SE)	TE (SE)	TE (SE)	TE (SE)		TE (SE)	TE (SE)	TE (SE)	TE (SE)	TE (SE)	TE (SE)
Inflow (11452600) vs. Total Outflow (11452901) - sum of 11452800 and 11452900											
WY 2010	10%	23%	11%	19%		13%	17%	nd	nd	20%	nd
WY 2011	14%	15%	14%	17%		10%	12%	nd	nd	25%	nd
WY 2012	12%	10%	12%	9%		13%	18%	nd	nd	25%	nd
WY 2013	9%	13%	10%	19%		12%	12%	nd	nd	16%	nd
WY 2014	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd
WY 2015	31%	18%	31%	19%		10%	11%	nd	nd	38%	nd
WY 2016	7%	20%	8%	7%		7%	8%	nd	nd	0%	nd
WY 2017	12%	13%	12%	12%		8%	7%	nd	nd	0%	nd
WY 2010-2017 sum	13%	15%	13%	13%	sum	9%	9%	nd	nd	18%	nd
WY 2010-2017 sum					8-yr	9%	10%	nd	nd	10%	nd
Inflow (11452600) vs. Combined Outflow (11452901) - weighted average of 11452800 and 11452900											
WY 2010	28%	22%	27%	19%		9%	12%	nd	nd	7%	nd
WY 2011	17%	24%	17%	13%		13%	17%	nd	nd	11%	nd
WY 2012	19%	10%	18%	10%		16%	22%	nd	nd	11%	nd
WY 2013	21%	19%	21%	18%		19%	20%	nd	nd	12%	nd
WY 2014	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd
WY 2015	27%	29%	27%	24%		24%	27%	nd	nd	15%	nd
WY 2016	7%	25%	8%	11%		9%	11%	nd	nd	0%	nd
WY 2017	15%	13%	15%	11%		12%	10%	nd	nd	0%	nd
WY 2010-2017 sum	16%	18%	11%	13%		13%	13%	nd	nd	8%	nd
WY 2010-2017 sum					sum	13%	15%	nd	nd	9%	nd
					8-yr						

Table 6x. Summary of load calculations for methylmercury, Cache Creek Settling Basin, California, water years 2010-17

[MeHg, methylmercury; pMeHg, particulate methylmercury; fMeHg, filtered methylmercury; p+fMeHg, particulate plus filtered methylmercury; wwMeHg, whole-water methylmercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pMeHg-L, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-L; pMeHg-G, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-G; kg, kilogram; ng/g, nanogram per gram; conc., concentration; light gray and orange shading indicates particulate methylmercury load; dark gray and orange shading indicates whole-water methylmercury load]

	Total flow volume	pMeHg load	fMeHg load	p+fMeHg load	wwMeHg load	pMeHg conc.		SS-L load	pMeHg-L load	SS-G load	pMeHg-G load	pMeHg-L + fMeHg load	pMeHg-G + fMeHg load		Average wwMeHg load	Average wwMeHg load
	10^9 L	kg	kg	kg	kg	(geometric mean) ng/g		10^6 kg	kg	10^6 kg	kg	kg	kg		kg/6 yrs	kg/yr
Inflow 11452600																
WY 2010	205	0.18	0.022	0.20	0.10	3.7		129	0.48	181	0.68	0.50	0.70			
WY 2011	485	0.70	0.041	0.74	0.68	3.4		475	1.6	377	1.27	1.6	1.3			
WY 2012	37	0.013	0.0043	0.02	0.039	4.4		3.2	0.014	4.7	0.021	0.019	0.025			
WY 2013	117	0.12	0.011	0.13	0.16	4.0		119	0.47	82	0.32	0.48	0.33			
WY 2014	3	0.0007	0.0004	0.0011	0.0024	3.3		0.1	0.0003	0.12	0.0004	0.0007	0.0008	min		
WY 2015	86	0.12	0.0064	0.13	0.10	0.9		131	0.12	101	0.09	0.127	0.099			
WY 2016	141	0.15	0.0091	0.16	0.19	1.1		180	0.20	151	0.17	0.21	0.18			
WY 2017	1044	1.59	0.043	1.6	1.1	1.5		1222	1.83	971	1.46	1.9	1.5	max		
WY 2010-2017 sum	2118	2.9	0.138	3.0	2.4		sum	2259	4.7	1867	4.0	4.9	4.1			
WY 2010-2017 sum						3.4	8-yr	2259	7.6	1867	6.3	7.7	6.4		(n=6)	6-yr average
															4.8	0.79
Outflow Weir (Spilllway) 11452800																
WY 2010	86	0.047	0.0038	0.051	0.014	8.1		33	0.26	36	0.29					
WY 2011	360	0.23	0.032	0.26	0.35	3.5		106	0.37	67	0.23					
WY 2012	0	0	0	0	0	na		0	0	0	0					
WY 2013	63	0.042	0.015	0.057	0.067	2.2		27	0.060	34	0.075					
WY 2014	0	0	0	0	0	na		0	0	0	0					
WY 2015	66	0.033	0.0053	0.039	0.034	1.0		31	0.031	23	0.023					
WY 2016	61	0.018	0.0052	0.023	0.024	1.0		16	0.016	14	0.014					
WY 2017	1026	0.45	0.055	0.51	0.52	1.7		287	0.49	278	0.47					
WY 2010-2017 sum	1664	0.82	0.12	0.94	1.01		sum	500	1.23	451	1.11					
WY 2010-2017 sum						2.4	8-yr	500	1.20	451	1.08					
Outflow Gate 11452900																
WY 2010	85	0.051	0.021	0.073	0.045	8.1		8.6	0.070	6.1	0.049					
WY 2011	96	0.055	0.020	0.075	0.071	4.2		11	0.046	20	0.086					
WY 2012	22	0.0115	0.0046	0.016	0.022	5.9		1.5	0.0089	1.3	0.01					
WY 2013	39	0.019	0.0072	0.026	0.036	4.4		6.9	0.030	9.1	0.040					
WY 2014	0.65	0.00046	0.00012	0.00057	0.00080	na		0.008	nd	0.01	nd					
WY 2015	17	0.0074	0.0021	0.010	0.010	2.5		2.0	0.0050	3.8	0.0094					
WY 2016	52	0.019	0.0053	0.024	0.024	1.5		15.6	0.023	8.8	0.013					
WY 2017	32	0.0072	0.0033	0.011	0.011	2.6		1.7	0.0044	1.3	0.0034					
WY 2010-2017 sum	344	0.15	0.064	0.24	0.18		sum	47	0.19	51	0.21					
WY 2010-2017 sum						3.2	8-yr	47	0.15	51	0.16					
Total Outflow 11452901 - sum of 11452800 and 11452900																
WY 2010	171	0.10	0.025	0.12	0.059			41	0.33	42	0.34	0.36	0.37			
WY 2011	456	0.28	0.052	0.34	0.42			117	0.41	87	0.32	0.47	0.370			
WY 2012	22	0.012	0.0046	0.016	0.022			1.5	0.009	1.3	0.01	0.013	0.013			
WY 2013	102	0.061	0.022	0.083	0.10			34	0.090	43	0.11	0.11	0.14			
WY 2014	0.7	0.00046	0.00012	0.00057	0.00080			0.008	0	0.01	0	0.0001	0.0001			
WY 2015	83	0.041	0.0075	0.048	0.044			33	0.036	27	0.03	0.044	0.040			
WY 2016	113	0.037	0.0105	0.048	0.048			32	0.039	22	0.03	0.050	0.037			
WY 2017	1058	0.46	0.058	0.52	0.53			289	0.492	279	0.48	0.551	0.534			
WY 2010-2017 sum	2007	0.96	0.18	1.2	1.2		sum	547	1.4	502	1.3	1.6	1.5			
WY 2010-2017 sum							8-yr	547	1.4	502	1.2	1.5	1.4		(n=6)	6-yr average
															1.4	0.23
Combined Outflow (11452901) - weighted average of 11452800 and 11452900																
WY 2010	171	0.11	0.029	0.14	0.069	8.1		38	0.31	42	0.34	0.33	0.37			
WY 2011	456	0.38	0.058	0.44	0.37	3.6		171	0.62	87	0.31	0.676	0.37			
WY 2012	22	0.010	0.0048	0.01	0.029	5.9		1.7	0.010	1.3	0.0080	0.015	0.013			
WY 2013	102	0.086	0.018	0.10	0.11	3.0		64	0.19	43	0.13	0.21	0.15			
WY 2014	0.7	0.00043	0.00014	0.00057	0.0012	na		0.011	nd	0.01	nd	nd	nd	min		
WY 2015	83	0.070	0.014	0.084	0.098	1.3		74	0.097	27	0.04	0.11	0.049			
WY 2016	113	0.047	0.011	0.058	0.058	1.2		45	0.054	22	0.03	0.07	0.038			
WY 2017	1058	0.62	0.064	0.68	0.67	1.7		407	0.69	279	0.47	0.76	0.54	max		
WY 2010-2017 sum	2007	1.3	0.20	1.5	1.4		sum	800	2.0	502	1.3	2.2	1.5			
WY 2010-2017 sum						2.3	8-yr	800	1.8	502	1.2	2.0	1.4		(n=6)	6-yr average
															1.7	0.28
															(n=12)	Overall 6-yr average
															1.5	0.26

Table 7x. Trap efficiency calculations for methylmercury, Cache Creek Settling Basin, California, water years 2010-17

[MeHg, methylmercury; pMeHg, particulate methylmercury; fMeHg, filtered methylmercury; p+fMeHg, particulate plus filtered methylmercury; wwMeHg, whole-water methylmercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pMeHg-L, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-L; pMeHg-G, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-G; TE, Trap Efficiency; TE computed as (LoadIn-LoadOut)/(LoadIn) using load data in table 6, as indicated; nd, not determined]

	Total flow	pMeHg	fMeHg	p+fMeHg	wwMeHg			SS-L	pMeHg-L	SS-G	pMeHg-G	pMeHg-L + fMeHg	pMeHg-G + fMeHg
	TE	TE	TE	TE	TE			TE	TE	TE	TE	TE	TE
Inflow (11452600) vs. Total Outflow (11452901) - sum of 11452800 and 11452900													
WY 2010	16%	44%	-13%	38%	40%			68%	31%	77%	49%	29%	47%
WY 2011	6%	59%	-28%	54%	38%			75%	74%	77%	75%	72%	72%
WY 2012	40%	8%	-5%	5%	43%			54%	38%	71%	62%	28%	50%
WY 2013	13%	50%	-104%	37%	37%			71%	81%	47%	65%	77%	59%
WY 2014	nd	nd	nd	nd	nd			nd	nd	nd	nd	83%	84%
WY 2015	3%	67%	-18%	62%	57%			75%	70%	73%	65%	66%	60%
WY 2016	20%	75%	-15%	70%	74%			82%	80%	85%	84%	76%	79%
WY 2017	-1%	71%	-34%	69%	53%			76%	73%	71%	67%	71%	64%
WY 2010-2017 sum	5%	66%	-31%	61%	50%		sum	76%	70%	73%	67%	67%	64%
WY 2010-2017 sum							8-yr	76%	82%	73%	80%	80%	78%
Inflow (11452600) vs. Combined Outflow (11452901) - weighted average of 11452800 and 11452900													
WY 2010	16%	38%	-29%	30%	30%			71%	36%	77%	49%	33%	47%
WY 2011	6%	46%	-42%	41%	46%			64%	62%	77%	75%	59%	72%
WY 2012	40%	19%	-10%	12%	25%			46%	28%	71%	62%	19%	49%
WY 2013	13%	29%	-63%	21%	31%			46%	59%	47%	60%	56%	56%
WY 2014	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd
WY 2015	3%	43%	-120%	35%	6%			43%	20%	73%	62%	13%	51%
WY 2016	20%	68%	-20%	63%	69%			75%	73%	85%	84%	69%	78%
WY 2017	-1%	61%	-47%	58%	41%			67%	62%	71%	67%	60%	64%
WY 2010-2017 sum	5%	54%	-44%	50%	42%		sum	65%	58%	73%	67%	55%	63%
WY 2010-2017 sum							8-yr	65%	76%	73%	82%	74%	79%

		n	avg.	s.d.
avg TE SS		8	72%	5%
avg TE p.MeHg		10	70%	10%
avg TE ww.MeHg		12	64%	13%
avg TE f.MeHg		2	-38%	7%

Table 8x. Summary of load calculations for methylmercury, standard error of the mean, Cache Creek Settling Basin, California, water years 2010-17

[MeHg, methylmercury; pMeHg, particulate methylmercury; fMeHg, filtered methylmercury; p+fMeHg, particulate plus filtered methylmercury; wwMeHg, whole-water methylmercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pMeHg-L, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-L; pMeHg-G, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-G; SE, standard error of the mean; kg, kilogram; ng/g, nanogram per gram; conc., concentration; light gray and orange shading indicates particulate methylmercury load; dark gray and orange shading indicates whole-water methylmercury load]

	Total flow volume	pMeHg load (SE)	fMeHg load (SE)	p+fMeHg load (SE)	wwMeHg load (SE)	pMeHg conc.		SS-L load (SE)	pMeHg-L load (SE)	SS-G load (SE)	pMeHg-G load (SE)
	10^9 L	kg	kg	kg	kg	(geometric mean) ng/g		10^6 kg	kg	10^6 kg	kg
Inflow 11452600											
WY 2010	205	0.038	0.0030	0.041	0.029	3.7		22.3	0.08	nd	nd
WY 2011	485	0.14	0.0052	0.142	0.21	3.4		107	0.36	nd	nd
WY 2012	37	0.0014	0.00039	0.002	0.0097	4.4		0.51	0.0023	nd	nd
WY 2013	117	0.018	0.0009	0.019	0.048	4.0		25.4	0.101	nd	nd
WY 2014	3	0.00013	0.00005	0.00017	0.00068	3.3		0	na	nd	nd
WY 2015	86	0.029	0.00093	0.030	0.037	0.9		32	0.029	nd	nd
WY 2016	141	0.007	0.00130	0.008	0.16	1.1		37	0.041	nd	nd
WY 2017	1044	0.019	0.00810	0.027	0.26	1.5		237	0.356	nd	nd
WY 2010-2017 sum	2118	0.25	0.0199	0.27	0.75		sum	461	1.0	nd	nd
WY 2010-2017 sum						3.4	8-yr	461	1.5	nd	nd
Outflow Weir (Spilllway) 11452800											
WY 2010	86	0.047	0.0022	0.05	0.027	8.1		14.1	0.11	nd	nd
WY 2011	360	0.15	0.0054	0.16	0.10	3.5		36.3	0.13	nd	nd
WY 2012	0	0	0	0	0	na		0	0	nd	nd
WY 2013	63	0.042	0.0034	0.05	0.067	2.2		10.2	0.023	nd	nd
WY 2014	0	0	0	0	0	na		0	0	nd	nd
WY 2015	66	0.015	0.00091	0.016	0.014	1.0		10	0.0101	nd	nd
WY 2016	61	0.004	0.0006	0.005	0.004	1.0		6.0	0.006	nd	nd
WY 2017	1026	0.072	0.0047	0.077	0.070	1.7		72	0.123	nd	nd
WY 2010-2017 sum	1664	0.33	0.017	0.35	0.29		sum	149	0.40	nd	nd
WY 2010-2017 sum						2.4	8-yr	149	0.36	nd	nd
Outflow Gate 11452900											
WY 2010	85	0.013	0.0031	0.016	0.013	8.1		1.8	0.015	nd	nd
WY 2011	96	0.011	0.0022	0.013	0.0144	4.2		2.1	0.009	nd	nd
WY 2012	22	0.0021	0.00047	0.0026	0.0061	5.9		0.35	0.0021	nd	nd
WY 2013	39	0.0038	0.00082	0.0046	0.0099	4.4		2.3	0.0098	nd	nd
WY 2014	0.65	0.00028	0.000034	0.00031	0.00052	na		0.003	nd	nd	nd
WY 2015	17	0.0025	0.00040	0.0029	0.0045	2.5		0.47	0.0012	nd	nd
WY 2016	52	0.020	0.0039	0.0239	0.0210	1.5		4.7	0.0071	nd	nd
WY 2017	32	0.0040	0.0014	0.0054	0.0052	2.6		0.90	0.0023	nd	nd
WY 2010-2017 sum	344	0.053	0.012	0.069	0.075		sum	13	0.037	nd	nd
WY 2010-2017 sum						3.2	8-yr	13	0.040	nd	nd
Total Outflow (11452901) - sum of 11452800 and 11452900											
WY 2010	171	0.06	0.0053	0.07	0.040			16	0.13	nd	nd
WY 2011	456	0.16	0.0076	0.17	0.12			38	0.13	nd	nd
WY 2012	22	0.0021	0.00047	0.0026	0.0061			0.35	0.0021	nd	nd
WY 2013	102	0.05	0.0042	0.05	0.08			12	0.032	nd	nd
WY 2014	0.7	0.00028	0.00003	0.00031	0.00052			0.00	0.00	nd	nd
WY 2015	83	0.018	0.0013	0.019	0.019			11	0.011	nd	nd
WY 2016	113	0.024	0.0045	0.028	0.025			11	0.013	nd	nd
WY 2017	1058	0.076	0.0061	0.082	0.075			73	0.125	nd	nd
WY 2010-2017 sum	2007	0.39	0.029	0.42	0.36		sum	161	0.45	nd	nd
WY 2010-2017 sum							8-yr	161	0.45	nd	nd
Combined Outflow (11452901) - weighted average of 11452800 and 11452900											
WY 2010	171	0.019	0.0031	0.022	0.019	8.1		10	0.08	nd	nd
WY 2011	456	0.099	0.0084	0.108	0.10	3.6		50	0.18	nd	nd
WY 2012	22	0.0022	0.00068	0.0029	0.0086	5.9		0.46	0.0027	nd	nd
WY 2013	102	0.018	0.0022	0.020	0.032	3.0		18	0.055	nd	nd
WY 2014	0.7	0.00023	0.000043	0.00027	0.00079	na		0.005	0	nd	nd
WY 2015	83	0.015	0.0017	0.016	0.032	1.3		26	0.034	nd	nd
WY 2016	113	0.055	0.0072	0.062	0.051	1.2		14	0.017	nd	nd
WY 2017	1058	0.340	0.0190	0.36	0.29	1.7		118	0.20	nd	nd
WY 2010-2017 sum	2007	0.55	0.042	0.59	0.54		sum	237	0.57	nd	nd
WY 2010-2017 sum						2.3	8-yr	237	0.55	nd	nd

Table 9x. Trap efficiency standard error calculations for methylmercury, Cache Creek Settling Basin, California, water years 2010-17

[MeHg, methylmercury; pMeHg, particulate methylmercury; fMeHg, filtered methylmercury; p+fMeHg, particulate plus filtered methylmercury; wwMeHg, whole-water methylmercury; SS-L, suspended sediment load from LOADEST model; SS-G, suspended sediment load from GLCAS model; pMeHg-L, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-L; pMeHg-G, particulate methylmercury load from multiplying geometric mean gravimetric pMeHg concentration times SS-G;TE, Trap Efficiency; SE, standard error; TE data in Table 7]

	Total flow	pMeHg	fMeHg	p+fMeHg	wwMeHg		SS-L	pMeHg-L	SS-G	pMeHg-G	pMeHg-L + fMeHg	pMeHg-G + fMeHg
	TE (SE)	TE (SE)	TE (SE)	TE (SE)	TE (SE)		TE (SE)	TE (SE)	TE (SE)	TE (SE)	TE (SE)	TE (SE)
Inflow (11452600) vs. Total Outflow (11452901) - sum of 11452800 and 11452900												
WY 2010		36%	28%	35%	nd		13%	29%	nd	nd	39%	nd
WY 2011		25%	25%	25%	26%		10%	10%	nd	nd	19%	nd
WY 2012		20%	14%	19%	21%		13%	18%	nd	nd	25%	nd
WY 2013		39%	42%	39%	50%		12%	8%	nd	nd	17%	nd
WY 2014		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd
WY 2015		17%	27%	17%	24%		10%	12%	nd	nd	24%	nd
WY 2016		16%	52%	18%	25%		7%	8%	nd	nd	18%	nd
WY 2017		5%	29%	5%	13%		8%	9%	nd	nd	12%	nd
WY 2010-2017 sum		14%	29%	nd	nd	sum	9%	11%	nd	nd	18%	nd
WY 2010-2017 sum						8-yr	9%	7%	nd	nd	7%	nd
Inflow (11452600) vs. Combined Outflow (11452901) - weighted average of 11452800 and 11452900												
WY 2010		17%	22%	18%	28%		9%	21%	nd	nd	68%	nd
WY 2011		18%	27%	19%	22%		13%	14%	nd	nd	42%	nd
WY 2012		20%	18%	19%	29%		16%	22%	nd	nd	81%	nd
WY 2013		18%	25%	19%	28%		19%	15%	nd	nd	45%	nd
WY 2014		nd	nd	nd	nd		nd	nd	nd	nd		nd
WY 2015		18%	42%	20%	45%		24%	34%	nd	nd	89%	nd
WY 2016		37%	81%	39%	38%		9%	10%	nd	nd	32%	nd
WY 2017		21%	52%	22%	29%		12%	13%	nd	nd	41%	nd
WY 2010-2017 sum		19%	37%	20%	29%	sum	13%	15%	nd	nd	46%	nd
WY 2010-2017 sum						8-yr	13%	9%	nd	nd	24%	nd