Appendix 8B-1a: Non-ECP Water Quality Sampling Sites, Monitoring Schedule and Flow Volumes

Table 1. Water quality monitoring schedule for non-ECP discharge structures and additional upstream monitoring locations

AREA	Non-ECP PERMIT	WATER QUALITY		WATER QUALITY	WATER QUALITY COMMENTS						
7111271	STRUCTURE	SAMPLING SITE	Physical	Nutrients	Major Ions	Trace Metals	Pesticides Water	Pesticides Sediment	WATER QUALITY OUNIMENTO		
	ACME1DS	ACME1DS	BWF/M	BWF/M	QTR	SA	QTR	SA			
	ACME1 + (Upstream of ACME1DS)	VOW1		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.		
	G-94D	G94D	BWF/M	BWF/M	QTR	SA	QTR	SA			
	ACME2 + (Upstream of G94D)	VOW2		Weekly Flowing (autosampler)					Sampling conducted by Village of Wellington. TP collected by autosampler.		
	G-123	G123	BWF/M	BWF/M	QTR	SA	QTR	SA			
	S-9	S9	BWF/M	Weekly Flowing (autosampler)	QTR	SA	QTR	SA	TP collected by autosampler.		
INTO	S-9A	S-9A	BWF/M	BWF/M except TP-WF/M Grab	QTR				New Station, no data available yet		
	S-14	S14	BWF	BWF	QTRF	SAF					
	S-18C	S18C	BWF/M	BWF/M	QTR	SA	QTR	SA			
	S-140	S140	BWF/M	BWF/M	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by Grab		
	S-175	S175	BWF/M	BWF/M	QTR	SA					
	S-190	S190	BWF/M	BWF/M	QTR	SA	QTR	SA	TP collected by autosampler, nitrogen species collected by Grab		
	S-332	S332	BWF/M	BWF/M	QTR	SA	QTR	SA			
	NSID (S38B)	NSIDSP01	BWF	BWF	QTRF	SAF	QTRF	SAF			
	NSID (S38B)	S38B	BWF	BWF	QTRF	SAF	QTRF	SAF			
	G-64	G64	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *		
	G-69	G69	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *		
	G-71, S-346, S 347	S12D	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-10E	S10E	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-141	S34	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *		
	S-142	S142	BWF/M	BWF/M	QTR *		QTRF	SAF	Monitoring Fe, Mg, Ca phased out *		
WITHIN	S-143	S11A	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *		
	S-144	S144							Discontinued sampling in favor of surrogate location at S-145 *		
	S-145	S145	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *		
	S-146	S146							Discontinued sampling in favor of surrogate location at S-145 *		
	S-151	S151	BWF/M	BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out *		
	S-339, S-340 G-94A, G-94B, G- 94C	C123SR84 G94B	BWF/M BWF/M	BWF/M BWF/M	QTR *				Monitoring Fe, Mg, Ca phased out * Monitoring Fe, Mg, Ca phased out *		
	S-31	S31	BWF/M	BWF/M	QTR *		QTR	SA	Monitoring Fe, Mg, Ca phased out *		
	S-34	S34	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-38	S38	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-39	S39	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
FROM	S-197	S197	BWF	BWF	QTRF *				Monitoring Fe, Mg, Ca phased out *		
	S-333	S333	BWF/M	BWF/M	QTR	SA			g . 1,g, ou pridou out		
	S-334	S334	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-337	S31	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-343A, S-343B	US41-25	BWF/M	BWF/M	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-344	S344	QTR	QTR	QTR*				Monitoring Fe, Mg, Ca phased out *		
	S-174 +	S176	BWF/M	BWF/M	QTR	SA	QTR	SA	mornioning i e, mg, Ca phased odl		
	S-174 +	S177	BWF/M	BWF/M	QTR	SA	QTR	SA			
	S-177 +	S177	BWF/M	BWF/M	QTR	SA	QTR	SA			
C-111 BASIN	U-110 T						Q IT	JA			
NICAG	S-331 +, S-173 +	S331-173 S331	BWF/M	BWF/M	QTR	SA	QTR	SA	S173 is not listed in Permit, but is adjacent to and flows in same direction as S331		
	S-332D	S332D		Weekly (autosampler & Grab) and only TP					S-332D is not listed in Permit, but it needs to provide information		

Note: 1

4) Table Legend:

BWF/M = Biweekly if Flowing/Otherwise Monthly
BWF = Biweekly if Flowing

QTR = Quarterly
QTRF = Quarterly if Flowing

SA = Semiannually
SAF = Semiannually if Flowing

1 WS - 1 DS = 1 Wet Season and 1 Dry Season

¹⁾ Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different representative sampling location

²⁾ Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations

³⁾ * indicates monitoring requirement eliminated in the November, 1999 Non-ECP Permit Modification

Table 2. Flow volume and annual flow-weighted mean TP concentrations for non-ECP structures during WY02 (May 1, 2001 through April 30, 2002)

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY	FLOW	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 2001 - April 30, 2002													
		SAMPLING SITE	STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Volume (acre-ft)	Mean TP (ppb)	
	ACME1DS	ACME1DS	n/a	n/a					See f	ow data	from A	CME	1				n/a	95	
	ACME1 + (Upstream of ACME1DS)	VOW1	ACME1	15022	3	2,188	5,086	2,575	5,075	2,575	1,168	479	109	1,094	140	0	20,492	86	
	G-94D	G94D	n/a	n/a					See f	ow data	from A	CME 2	2				n/a	118	
	ACME2 + (Upstream of G94D)	VOW2	ACME2	15023	5	2,661	4,998	3,116	5,474	2,728	1,195	566	107	1,221	151	0	22,222	152	
	G-123	G123	G123_P	K5481	12,712	17,990	13,563	4,844	2,701	238	0	0	0	0	0	0	52,047	16	
0	S-9	S9	S9_P	K5483	24,122	24,676	34,086	43,728	40,030	36,675	20,665	14,348	15,232	15,101	10,850	4,104	283,618	19	
OTNI	S-9A	S-9A	S-9A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	S-14	S14	S14_C	K5485	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	S-18C	S18C	S18C_S	15760	1,089	4,010	19,681	30,142	29,359	39,720	21,084	15,019	9,683	2,345	495	209	172,835	7	
	S-140	S140	S140_TOT	06754	0	6,398	14,749	15,068	21,385	23,298	11,232	4,606	4,130	4,970	4,159	0	109,994	48	
	S-175	S175	S175_C	15752	0	0	0	0	2	3	0	0	0	0	0	0	6	5	
	S-190	S190	S190_S	K5501	0	1,631	8,875	6,732	29,781	27,469	6,149	473	453	2,840	571	9	84,982	89	
	S-332	S332	S332_P	15753	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NPF	
	NSID (S38B)	NSIDSP01	NSPRNG_C2A	15121	0	0	0	755	1,307	294	138	0	0	0	0	0	2,494	26	
	NSID (S38B)	S38B	NSPRNG_C2A	15121	0	0	0	755	1,307	294	138	0	0	0	0	0	2,494	16	
	G-64	G64	G64_C	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-69	G69	G69_C	K5480	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	G-71, S-346, S-347	S12D	S12D_S	FE774	0	666	736	21,585	31,816	55,689	58,811	29,310	10,635	4,735	6,061	5,288	225,330	12	
	S-10E	S10E	S10E_C	K5484	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	S-141	S34	S141_W	K5493	0	0	0	-1,457	-1,457	-2,418	213	113	0	0	0	0	-5,007	21	
NIHIM	S-142	S142	S142_C	K5494	-6,917	-7,695	-7,840	-1,972	-1,057	1,355	5,002	6,286	0	0	0	0	-12,838	18	
	S-143	S11A	S143_C	K5495	0	0	0	0	0	4,424	21,226	0	0	3,135	16,056	1,829	46,670	21	
	S-144	S144	S144_C	K5497	0	0	2,680	6,869	0	6,102	940	5,258	2,734	2,110	3,329	0	30,022	9	
	S-145	S145	S145_C	K5498	0	0	3,201	8,043	0	6,833	1,066	6,319	4,074	3,142	5,053	0	37,731	10	
	S-146	S146	S146_C	K5499	0	0	2,317	6,751	0	5,728	816	3,879	30	1,207	2,039	0	22,766	8	
	S-151	S151	S151_C	K5500	5,338	0	0	16,269	15,447	12,545	12,926	35,993	0	26,391	52,154	12,240	189,305	25	
	S-333	S333	S333_S	15042	0	1,135	270	73,013	14,089	0	0	37,841	15,082	29,585	62,106	16,880	250,001	19	
	S-339	C123SR84	S339_S	K5506	31,288	338	735	446	1,096	1,364	726	560	937	1,266	1,125	494	40,375	68	
	S-340	C123SR84	S340_S	K5507	22,268	1,076	1,053	558	591	493	450	577	568	615	972	1,185	30,404	65	

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location 2) n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.

³⁾ Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations

⁴⁾ ACME1DS and G-94D are not instrumented for flow calculation. Flow-weighted mean TP concentration was determined by considering the TP data from these sites with the flow data from the upstream pump stations (ACME 1 and ACME 2, respectively)

⁵⁾ G-123 structure is not monitored for flow (reported volume is an estimate), Arithmetic Mean TP was calculated by considering all samples collected.

⁶⁾ S-14 is not instrumented for flow calculation, However operational records indicate no operation during the water year.

⁷⁾ NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated

Table 2. (Cont'd.) Flow volume and annual flow-weighted mean TP concentrations for non-ECP structures during WY02 (May 1, 2001 through April 30, 2002)

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY - SAMPLING SITE	FLOW			Monthly Flow Volumes (acre-ft) (May 1, 2000 - April 30, 2001													
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Flow Volume (acre-ft)		
	G-94A	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-94B	G94B	n/a	n∕a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-94C	G94B	G94C_C	MW385	0	0	0	0	0	0	8,336	12,841	44	18	25	1	21,267	23	
	S-31	S31	S31_C	K5486	0	0	0	0	0	0	2,473	6,726	0	559	12,863	4,106	26,728	14	
	S-34	S34	S34_C	K5487	0	0	0	0	0	4,300	26,876	8,481	93	12,372	16,353	1,211	69,686	18	
>	S-38	S38	S38_C	K5488	1	0	0	0	0	0	142	0	0	0	0	0	144	7	
FROM	S-39	S39	S39_S	K5489	21	204	0	360	0	9,416	30,761	3,476	7,264	19,704	19,912	12,015	103,132	27	
	S-197	S197	S197_C	15763	0	0	0	4,934	2,409	13,476	0	0	0	0	0	0	20,818	10	
	S-334	S334	S334_S	FB752	0	0	0	0	849	0	0	10,211	1,787	246	17,294	2,549	32,937	14	
	S-337	S31	S337_C	K5505	12,349	0	0	0	0	0	0	0	0	0	0	0	12,349	23	
	S-343A	US41-25	S343A_C	K5508	1	0	0	2,838	3,943	5,044	74	0	0	0	0	0	11,899	11	
	S-343B	US41-25	S343B_C	K5509	104	0	0	3095	4221	5375	89	0	0	0	0	0	12884	12	
	S-344	S344	S344_C	K5511	0	0	0	1,632	3,314	4,187	342	0	0	0	0	0	9,475	12	
	S-174+	S176	S174_S	12289	-78	0	214	0	0	0	-8	0	258	3,427	4,906	5,157	13,876	8	
C-111 BASIN	S-177+	S177	S177_S	13156	449	1,970	10,476	20,618	20,782	28,740	16,565	12,920	5,139	0	0	0	117,658	13	
	S-178+	S178	S178_C	03952	0	0	0	0	2,652	1,746	1	0	0	0	0	0	4,398	93	
	S-331+	S331-173	S331_P	15722	5	560	4,059	8,362	17,826	30,027	43,802	45,896	14,311	566	14	7	165,437	6	
	S-173+	S331-173	S173_C	15830	1,989	68	3,470	1,144	901	228	9	0	3,234	5,497	7,489	7,095	31,124	10	
	S-332D+	S-332D	S-332D	MS947	0	740	13,430	16,963	25,074	32,227	26,326	19,332	10,008	22	2	0	144,124	5	

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location

²⁾ n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.

³⁾ Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations

⁴⁾ G-94A, G-94B, G-94C are not instrumented for flow calculations. Estimate provided for March 2001 when G-94C backflowed into WCA-1.

⁵⁾ S-331 and S-173 flow records were combined to determine the annual flow weighted mean TP $\,$

⁶⁾ NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated