## Exhibit A.1 Facility Cost and Burden Estimates for NPDES Permit Application Activities

Exhibit A.1a Start-up Activities

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							Facility	Junior	CAD	Contracted			Biological			Totals Per Fac	cility for the ICF	Annroval Pe	riod		
						M	lanager	Technical	Operator	Manager	Biologist	Statistician	Technician	Clerical		i otalo i ci i a	omity 101 the 101	, Applotui i c		Total	
		Facili	ties (	Respo	ndent	s)			As	ssumed Loade	d Hourly Ra	ite \$								Burden	Total Initial Cost
															Burden	Lahor Cost	Capital Costs	O&M Costs	Total Costs**		Total Illitial Cost
															(hrs)	Luboi Oost	Oupital Oosts	Odin Oosts	Total Costs	(1113.)	
		Year 1	Year	2 Year	3 To	al	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23							
Α	ctivity			Α						Level of Ef	fort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
	Read and Understand Rule	7		7	4 1	3	12	12	0	0	0	0	0	1	25	\$1,706	\$0	\$0		450	\$30,703
	Mobilization/Planning	7		7	4 1	3	4	8	0	0	0	0	0	1	13	\$750	\$0	\$0		234	\$13,495
	Training	7		7	4 1	3	2	2	0	0	0	0	0	1	5	\$304	\$0	\$0		90	\$5,467
L	Other Direct Costs	7		7	4 1	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55		-	\$990
	Totals	7		7	4 1	3									43	\$2,759	\$0	\$55	\$2,814	774	\$50,654

Exhibit A.1b

**Permit Application Activities** 

						Facility Manager	Junior Technical				Statistician	Biological Technician			Totals Per Fa	cility for the ICF	R Approval Pe	riod	Total	
	Faci	lities (	Respo	ond	ents)			As	sumed Loaded	l Hourly Ra	te \$			Burden					Burden	<b>Total Initial Cost</b>
	Year	1 Year	2 Yea	r 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α						Level of Ef	fort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Detailed Source Water Body Characterization		7	7	4	18	2	16	40	0	0	0	) (	0	58	\$2,400	\$0	\$0		1,044	\$43,200
Description of CWIS Configuration and Location		7	7	4	18	2	5	8	0	0	0	) (	0	15	\$713	\$0	\$0		270	\$12,827
Facility Water Balance Diagram		7	7	4	18	1	1	1	0	0	0	) (	0	3	\$179	\$0	\$0		54	\$3,217
Operational Characteristics Narrative		7	7	4	18	16	40	0	0	0	0	) (	0	56	\$3,237	\$0	\$0		1,008	\$58,262
Submit Materials for Review by State		7	7	4	18	0	0	0	0	0	0	) (	) 6	6	\$140	\$0	\$0		108	\$2,516
Recordkeeping		7	7	4	18	2	2	2	0	0	0	) (	) 2	8	\$404	\$0			144	\$7,272
Other Direct Costs		7	7	4	18	0	0	0	0	0	0	) (	0	0	\$0	\$0	\$540		-	\$9,720
Totals		7	7	4	18									146	\$7,072	\$0	\$540	\$7,612	2,628	\$137,014

Water balance diagram is assumed to be taken from the facility design report. The hours reported here are for incorporation of the diagram(s) in the permit.

Exhibit A.1c

**Source Waterbody Flow Information** 

						Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Techniciar			Totals Per Fa	cility for the ICF	R Approval Pe	riod	Total	
	Facili	ties (	Respo	ond	ents)			As	sumed Loade	d Hourly Ra	ite \$			Burden					Burden	<b>Total Initial Cost</b>
	Year 1	Year	2 Yea	ır 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α						Level of Et	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Gather Information Characterizing Flow	7		7	4	18	0	32	0	0	0	0	) (	0 0	32	\$1,325	\$0	\$0		576	\$23,846
Perform Engineering Calculations	7		7	4	18	8	32	0	0	0	0	) (	0 0	40	\$2,115	\$0	\$0		720	\$38,074
Submit Data and Analysis for Review	7		7	4	18	0	0	0	0	0	0	) (	) 16	16	\$373	\$0	\$0		288	\$6,710
Recordkeeping	7		7	4	18	0	8	0	0	0	0	) (	8 (	16	\$518	\$0	\$0		288	\$9,317
Other Direct Costs	7		7	4	18	0	0	0	0	0	0	) (	0 0	0	\$0	\$0	\$110		-	\$1,980
Totals	7		7	4	18				-					104	\$4,330	\$0	\$110	\$4,440	1,872	\$79,927

Exhibit A.1d

Source Water Baseline Biological Characterization Data

						Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Techniciar			Totals Per Fa	cility for the ICR	Approval Pe	riod	Total	
	Faci	lities (F	Resp	ond	ents)			As	sumed Loade	d Hourly Ra	ite \$			Burden					Burden	<b>Total Initial Cost</b>
	Year 1	1 Year 2	2 Yea	ar 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α						Level of Et	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Identify Available Data and Document Efforts	3	7	7	4	18	40	80	0	0	0	0	(	8 (	128	\$7,450	\$0	\$0		2,304	\$134,107
Compile and Analyze Existing Data	1	7	7	4	18	32	60	20	0	0	0	(	) 4	116	\$6,509	\$0	\$0		2,088	\$117,158
Submit Data for Review by State	,	7	7	4	18	0	0	0	0	0	0	(	8 (	8	\$186	\$0	\$0		144	\$3,355
Recordkeeping	1	7	7	4	18	2	4	1	0	0	0	(	) 6	13	\$542	\$0	\$0		234	\$9,747
Other Direct Costs	3	7	7	4	18	0	0	0	0	0	0	(	0	0	\$0	\$0	\$810		-	\$14,580
Totals	1	7	7	4	18									265	\$14,687	\$0	\$810	\$15,497	4,770	\$278,948

#### Exhibit A.1e

**CWIS Flow Reduction Requirements (Track 1)** 

					Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	1	otals Per Fa	cility for the ICR	Approval Pe	riod	Total	
	Facil	ities (	Respo	ndents	)		As	sumed Loade	d Hourly Ra	ite \$			Burden					Burden	<b>Total Initial Cost</b>
	Year 1	Year	2 Year	3 Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α					Level of E	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Develop Narrative	5	5	5	3 13	8	16	0	0	0	0	0	0	24	\$1,453	\$0	\$0		312	\$18,886
Perform Engineering Calculations	5	5	5	3 13	4	12	0	0	0	0	0	0	16	\$892	\$0	\$0		208	\$11,596
Document Minimization of Blow Down and Flows Not	5	5	5	3 13	0	40	0	0	0	0	0	6	46	\$1,796	\$0	\$0		598	\$23,345
Submit Data and Analysis for Review	5	5	5	3 13	0	0	0	0	0	0	0	8	8	\$186	\$0	\$0		104	\$2,423
Recordkeeping	5	5	5	3 13	2	4	0	0	0	0	0	8	14	\$550	\$0	\$0		182	\$7,145
Other Direct Costs	5	5	5	3 13	0	0	0	0	0	0	0	0	0	\$0	\$0	\$435		-	\$5,655
Totals		5	5	3 13									108	\$4,877	\$0	\$435	\$5,312	1,404	\$69,051

#### Exhibit A.1f

**CWIS Velocity Requirements (Track 1)** 

						Facilit Manag		CAD operate	Contracted Manager		Statistician	Biological Techniciar			Totals Per Fa	cility for the ICF	R Approval Pe	riod	Total	
		Facili	ities (	Respo	nden	s)			Assumed Load	ded Hourly R	ate \$			Burden					Burden	<b>Total Initial Cost</b>
		Year 1	Year	2 Year	3 To	al \$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity				Α					Level of	Effort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Develop Na	rrative	5		5	3 1	3	16	32	0	0 (	) (	) (	) 0	48	\$2,906	\$0	\$0		624	\$37,773
Perform Engineering Calcu	ations	5		5	3 1	3	8	32	0	0	) (	) (	0	40	\$2,115	\$0	\$0		520	\$27,498
Submit Data and Analysis for I	leview	5		5	3 1	3	0	0	0	0 (	) (	) (	) 16	16	\$373	\$0	\$0		208	\$4,846
Revise Based on State	review	5		5	3 1	3	4	16	0	0 (	) (	) (	0	20	\$1,058	\$0	\$0		260	\$13,749
Recordk	eping	5		5	3 1	3	2	4	0	0 (	) (	) (	8 (	14	\$550	\$0	\$0		182	\$7,145
Other Direct	Costs	5		5	3 1	3	0	0	0	0 (	) (	) (	0	0	\$0	\$0	\$1,080		-	\$14,040
1	otals	5		5	3 1	3	•			·			·	138	\$7,001	\$0	\$1,080	\$8,081	1,794	\$105,050

#### Exhibit A.1g

Design and Construction Technology Plan (Track 1)

Design and Construction reclinicity in	-																			
						Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Techniciar			Totals Per Fa	cility for the ICR	Approval Pe	riod	Total	
	Facili	ities (l	Respo	onden	ts)			As	sumed Loade	d Hourly Ra	ite\$			Burden					Burden	<b>Total Initial Cost</b>
	Year 1	Year	2 Year	r 3 To	tal	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α						Level of Ef	fort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Delineate Hydraulic Zone of Influence	5	;	5	3 1	3	2	5	8	0	0	0	(	0 (	15	\$713	\$0	\$0		195	\$9,264
Develop Narrative Description	5	;	5	3 1	3	16	32	0	0	0	0	(	0	48	\$2,906	\$0	\$0		624	\$37,773
Perform Engineering Calculations	5	;	5	3 1	3	6	24	0	0	0	0	(	0	30	\$1,586	\$0	\$0		390	\$20,623
Submit Data and Analysis for Review	5	;	5	3 1	3	0	0	0	0	0	0	(	) 6	6	\$140	\$0	\$0		78	\$1,817
Recordkeeping	5	,	5	3 1	3	1	2	0	0	0	0	(	) 6	9	\$321	\$0	\$0		117	\$4,178
Other Direct Costs	5	,	5	3 1	3	0	0	0	0	0	0	(	0	0	\$0	\$0	\$55		-	\$715
Totals	5	i :	5	3 1	3									108	\$5,666	\$0	\$55	\$5,721	1,404	\$74,370

#### Exhibit A.1h

Comprehensive Demonstration Study Plan (Track 2)

						Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biologica Technicia			Totals Per Fa	cility for the ICR	R Approval Pe	eriod	Total	
	Facil	lities (	Resp	ond	ents)			As	sumed Loade	d Hourly Ra	te \$			Burden						<b>Total Initial Cost</b>
	Year 1	l Year	2 Ye	ar 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity			Α						Level of Ef	fort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Description of Historical Studies that will be Used	2	2	2	1	5	20	40	0	0	0	C	)	0 2	62	\$3,679	\$0	\$0	)	310	\$18,393
Description of Proposed and/or Implemented Technologies	2	2	2	1	5	8	20	0	0	0	C	)	0 0	28	\$1,618	\$0	\$0		140	\$8,092
Develop Baseline Biological Characterization Sampling Plan	2	2	2	1	5	40	60	8	8	0	C	)	0 4	120	\$7,840	\$0	\$0		600	\$39,202
Submit Data and Plans for Review	2	2	2	1	5	0	0	0	0	0	C	)	0 12	12	\$280	\$0	\$0	)	60	\$1,398
Revise Based on State Review	2	2	2	1	5	8	16	4	0	0	C	)	0 4	32	\$1,700	\$0	\$0	)	160	\$8,500
Recordkeeping	2	2	2	1	5	2	4	2	1	0	C	)	0 8	17	\$752	\$0	\$0	)	85	\$3,760
Other Direct Costs	2	2	2	1	5	0	0	0	0	0	C	)	0 0	0	\$0	\$0	\$810	)	-	\$4,050
Totals	- 2	2	2	1	5									271	\$15,869	\$0	\$810	\$16,679	1,355	\$83,395

#### Exhibit A.1i

Source Water Baseline Biological Characterization Study (Track 2)

					Facility	Junior	CAD	Contracted			Biological			Totale Der Ea	cility for the ICR	Annroval De	riod		
					Manager	Technical	Operator	Manager	Biologist	Statistician	Technician	Clerical		i Otais Fei Ta	cility for the for	Applovalire	iou	Total	
	Facil	ities (R	espor	dents)		•	As	sumed Loaded	Hourly Ra	te\$			Burden					Burden	<b>Total Initial Cost</b>
													(hrs)	<b>Labor Cost</b>	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(1113)						
Activity			Α					Level of Ef	fort (hrs)				В	C	D	E	C+D+E	A*B	A*(C+D+E)
Implement Freshwater Sampling	5	5 3	. 3	8	6	52	0	120	2080	67	2080	34	4439	\$249,183	\$0	0		24,415	\$1,370,507
Other Direct Costs for Implement Freshwater Sampling	5	5 3	. 3	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$5,600			\$30,800
Implement Estuary Sampling	1	1	•	1	10	101	0	160	4095	100	4095	50	8611	\$477,847	\$0	0		8,611	\$477,847
Other Direct Costs for Implement Estuary Sampling	1	1	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$14,100			\$14,100
Biological Study Laboratory Analysis (Freshwater)	5	5 3	. 3	8	0	0	0	0	0	0	0	0	0	\$0	0	\$84,400		-	\$464,200
Biological Study Laboratory Analysis (Estuary)	1	1	1	1	0	0	0	0	0	0	0	0	0	\$0	0	\$164,600		-	\$164,600
Profile of Source Water Biota	2	2 2	! 1	5	32	20	0	32	60	0	20	8	172	\$12,903	\$0	\$0		860	\$64,514
Identification of Critical Species	2	2 2	! 1	5	32	20	0	20	40	0	0	3	115	\$9,116	\$0	\$0		575	\$45,578
Description of Additional Stresses	2	2 2	: 1	5	16	10	0	16	30	0	10	4	86	\$6,451	\$0	\$0		430	\$32,257
Write Study based on Results and Submit for Review by	4	1	3	8	80	160	0	16	8	8	0	8	280	\$17,867	\$0	\$0		2,240	\$142,938
Recordkeeping	4	1	3	8	6	12	0	6	0	0	0	24	48	\$2,401	\$0	\$0		384	\$19,210
Finalize study based on State review	4	1	3	8	16	32	0	0	0	0	0	8	56	\$3,092	\$0	\$0		448	\$24,736
Freshwater Totals				8									5,196	\$301,013	\$0	\$90,000	\$391,013	28,595	\$2,142,908
Marine Totals			,	1							·		9,368	\$529,677	\$0	\$178,700	\$708,377	9,368	\$708,377

#### Exhibit A.1j

**Evaluation of Potential CWIS Effects (Track 2)** 

·						Facility	Junior	CAD	Contracted			Biological			Totale Der Ee	cility for the ICR	Annroyal Bo	riod		
						Manager	Technical	Operator	Manager	Biologist	Statistician	Technician	Clerical		TOTALS PET PA	Cility for the ICK	Apploval Fel	iou	Total	
	Facil	ities (	Respo	nder	nts)			As	sumed Loade	d Hourly Ra	te \$			Burden					Burden	<b>Total Initial Cost</b>
	Vaard	Vaar	2 Year	2 Т	a ta l	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
Activity	rear	rear	A Tear	3 1	otai	299	<b>341</b>	фээ	Level of Ef		φου	\$45	<b>\$23</b>	В	C	n		C+D+E	A*B	A*(C+D+E)
Calculate Reduction in Impingement Mortality and				1					Level of Li	ioit (iiis)				-	-		-	CIDIL	Αυ	A (CIDIL)
Entrainment		ı	1	3	8	80	80	8	0	0	0	0	12	180	\$11,804	\$0	\$0		1.440	\$94,429
Perform Engineering Calculations for Efficacy Projections		ļ	1	3	8	40	32	0	0	0	0	0	4	76	* ,		\$0		608	\$42,960
Perform Impingement Pilot Study (Freshwater)			1	2	7	16	25	0	80	240	40	240	20	661	\$42,290		\$0		4,627	\$296,029
Perform Entrainment Pilot Study (Freshwater)		ļ	1	2	7	16	25	0	80	180	40	250	20	611	\$38,914	\$0	\$0		4,277	\$272,397
Pilot Study Entrainment Laboratory Analysis (Freshwater)	4	ļ	1	2	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,500		-	\$45,500
Perform Impingement Pilot Study (Estuary)	(	)	0	1	1	16	33	0	80	312	52	312	26	831	\$51,493	\$0	\$0		831	\$51,493
Perform Entrainment Pilot Study (Estuary)	(	)	0	1	1	16	33	0	80	234	52	325	26	766	\$47,104	\$0	\$0		766	\$47,104
Pilot Study Entrainment Laboratory Analysis (Estuary)	(	)	0	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$8,400		-	\$8,400
Purchase & Installation of Pilot Study Technology	4	ļ	1	3	8	0	0	0	0	0	0	0	0	0	\$0	\$285,000	\$0		-	\$2,280,000
Operation & Maintenance of Pilot Technology	_	ļ	1	3	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$32,500		-	\$260,000
Submit Data and Analysis for Review		ļ	1	3	8	8	10	0	8	6	4	0	16	52	\$3,281	\$0	\$0		416	\$26,248
Recordkeeping	4	ļ	1	3	8	4	8	0	4	8	2	0	20	46	\$2,363				368	\$18,902
Other Direct Costs	4	ļ	1	3	8	0	0	0	0	0	0	0	0	0	\$0	\$0	. ,		-	\$8,800
Freshwater Totals			1	2	7						•			1626				. ,	11,382	\$3,003,847
Marine Totals	(		0	1	1									1,950	\$121,414	\$285,000	\$42,000	\$448,414	1,950	\$448,414

#### Exhibit A.1k

**Verification Monitoring Plan (Track 2)** 

Tormoution monitoring Flan (Track 2)						- 1112							_							
						Facility	Junior	CAD	Contracted			Biological			Totals Per Fa	cility for the ICR	Annroval Pe	riod		
						Manager	Technical	Operator	Manager	Biologist	Statistician	Technician	Clerical		iotais i ci i a	cinty for the for	Applovali	iiou	Total	
	Facili	ties (F	Resp	ond	ents)			As	sumed Loade	d Hourly Ra	ite \$			Burden					Burden	<b>Total Initial Cost</b>
															Labor Cost	Capital Costs	<b>O&amp;M Costs</b>	Total Costs**	(hrs.)	
	Year 1	Year 2	2 Yea	ar 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)					. ,	
Activity			Α						Level of Et	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Develop Verification Monitoring Plan	2		2	1	5	40	60	8	0	0	0	(	) 4	112	\$6,837	\$0	\$0		560	\$34,186
Submit Data and Analysis for Review	2	:	2	1	5	0	0	0	0	0	0	(	) 2	2	\$47	\$0	\$0		10	\$233
Revise Based on State Review	2	:	2	1	5	2	4	1	0	0	0	(	) 1	8	\$425	\$0	\$0		40	\$2,125
Recordkeeping	2		2	1	5	1	1	1	1	0	0	(	) 2	6	\$351	\$0	\$0		30	\$1,754
Other Direct Costs	2	;	2	1	5	0	0	0	0	0	0	(	0	0	\$0	\$0	\$435		-	\$2,175
Totals	2		2	1	5									128	\$7,660	\$0	\$435	\$8,095	640	\$40,473

### Exhibit A.1I

**Remote Monitoring** 

					Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician			Totals Per Fac	cility for the ICR	Approval Pe	riod	Total	
	Facili	ities (R	espon	dents)			As	ssumed Loade	d Hourly Ra	ite \$			Burden					Burden	<b>Total Initial Cost</b>
	., ,		., .		***	• • •	***	440=	•••			***	(hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	(hrs.)	
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	\ -7						
Activity			A					Level of E	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Purchase and Installation of Remote Monitoring Device	5	5	3	13	0	0	0	0	0	0	0	0	0	\$0	\$58,000	\$0		-	\$754,000
Other Direct Costs	5	5	3	13	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,100		•	\$14,300
				13										\$0	\$58,000	\$1,100	\$59,100	•	\$768,300

**Total Burden and Costs for All NPDES Application Activities** 

Total Barach and ocots for All IVI BEC Application Activities				
			Total Burden	Total Initial Cost
Totals			67,936	\$7,990,728

<sup>\*</sup> The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

#### Exhibit A.2

#### **Facility Cost and Burden Estimates for Annual Activities**

Exhibit A.2a

Freshwater Verification Study (Track 2)

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Technician		Totals F	er Facility for	the ICR Appro	oval Period		Facilities in the oval Period
	Facili	ities (R	espor	ndents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Coata	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year	3 Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	burden (nrs.)	Annual Cost
Activity		- 1	A				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Perform Statistical Analysis	2	1		1 4	20	20	10	10	20	0	1	81	\$6,310			324	\$25,241
Submit Monitoring Results & Study Analysis	2	1		1 4	0	0	0	0	0	0	4	4	\$93			16	\$373
Record Keeping	2	1		1 4	1	2	0	0	0	0	4	7	\$275			28	\$1,099
Totals	,	,		4	21	22	10	10	20	0	9	92	\$6,678	\$540	\$7,218	368	\$28,873

#### Exhibit A.2b

**Estuary Verification Study (Track 2)** 

Estuary verification olday (11)	uon 2	· <u>/</u>															
					Facility	Junior	Contracted			Biological		Totale E	er Facility for	the ICB Appr	wal Dariad	Total for AllF	acilities in the
					Manager	Technical	Manager	Biologist	Statistician	Technician	Clerical	i Olais F	er racility for	tile ick Appic	oval Periou	ICR Appr	oval Period
	Facil	ities (R	espon	dents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Buideli (IIIS.)	Allitual Cost
Activity			Α				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Perform Statistical Analysis	0	) 0	1	1	25	30	15	15	25	(	) 1	111	\$8,562			111	\$8,562
Submit Monitoring Results & Study Analysis	0	0	1	1	0	0	0	0	0	(	) 4	4	\$93			4	\$93
Record Keeping	0	0	1	1	1	2	0	0	0	(	) 4	7	\$275			7	\$275
Totals				1	26	32	15	15	25	(	) 9	122	\$8,930	\$540	\$9,470	122	\$9,470

#### Exhibit A.2c.1

**Initial Biological Monitoring for Impingement (Freshwater)** 

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Technician		Totals F	er Facility for	the ICR Appro	oval Period		acilities in the oval Period
	Facil	ities (Re	espond	dents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Coata	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	burden (nrs.)	Annual Cost
Activity		- 1	4				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Monthly Sample Collection	12	13	14	39	2	0	4	72	0	72	0	150	\$8,497			5,850	\$331,375
Onsite Analysis of Samples	12	13	14	39	4	0	12	72	0	72	0	160	\$9,698			6,240	\$378,206
Perform Statistical Analysis	12	13	14	39	8	4	0	0	32	0	0	44	\$3,503			1,716	\$136,625
Record Keeping	12	13	14	39	2	1	1	4	1	0	16	25	\$1,072			975	\$41,792
Totals				39	16	5	17	148	33	144	16	379	\$22,769	\$540	\$23,309	14,781	\$909,059

#### Exhibit A.2c.2

Reduced Biological Monitoring for Impingement (Freshwater)

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Technician		Totals F	er Facility for	the ICR Appro	oval Period		Facilities in the oval Period
	Facili	ities (Re	espond	lents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Burden (ms.)	Alliluai Cost
Activity		ŀ	4				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Reduced Sample Collection	42	49	54	145	1	0	2	36	0	36	0	75	\$4,248			10,875	\$616,018
Onsite Analysis of Samples	42	49	54	145	2	0	6	36	0	36	0	80	\$4,849			11,600	\$703,076
Perform Statistical Analysis	42	49	54	145	4	2	0	0	16	0	0	22	\$1,752			3,190	\$253,982
Record Keeping	42	49	54	145	1	1	1	2	1	0	8	14	\$659			2,030	\$95,555
Totals				145	8	3	9	74	17	72	8	191	\$11,508	\$270	\$11,778	27,695	\$1,707,781

#### Exhibit A.2d.1

Initial Biological Monitoring for Impingement (Estuary)

	ililiai biologicai mollitoring it	л ппр	migen	Hellt (	(LStuc	aiy <i>j</i>												
Г						Facility	Junior	Contracted			Biologica	l	Totala F	er Facility for	the ICB Annu	wal Dariad	Total for AllF	acilities in the
						Manager	Technical	Manager	Biologist	Statistician	Technicia	n Clerical	Totals P	er racility for	the ICK Appro	oval Periou	ICR Appr	oval Period
		Facili	ties (Re	espon	dents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
		Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	burden (nrs.)	Annual Cost		
4	ctivity		- 1	4				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Г	Monthly Sample Collection	1	2	1	4	2	0	5	94	. (	9	4 0	194	\$10,987			778	\$43,946
	Handling and Preparation of Samples	1	2	1	4	4	0	16	94	. (	9	4 0	207	\$12,488			827	\$49,953

Perform Statistical Analysis	1	2	1	4	8	4	0	0	42	0	0	54	\$4,267			214	\$17,069
Record Keeping	1	2	1	4	2	1	1	5	1	0	16	27	\$1,210			107	\$4,838
Totals				4	16	5	22	192	43	187	16	482	\$28,952	\$705	\$29,657	1,926	\$118,627

#### Exhibit A.2d.2

Reduced Biological Monitoring for Impingement (Estuary)

						Junior Technical	Contracted Manager		Statistician	Biological Technician	Clerical	Totals P	er Facility for	the ICR Appro	oval Period		acilities in the oval Period
	Facil	lities (F	Respor	idents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Conta	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year:	3 Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	burden (nrs.)	Annual Cost
Activity			Α				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Reduced Sample Collection	9	) (	9 1	28	1	0	3	47	. 0	47	0	98	\$5,565			2,744	\$155,823
Handling and Preparation of Samples	9	) 9	9 1	28	2	0	8	47	. 0	47	0	104	\$6,291			2,912	\$176,145
Perform Statistical Analysis	9	) 9	9 1	28	4	2	0	0	21	0	0	27	\$2,150			756	\$60,189
Record Keeping	9	9 9	9 1	<b>28</b>	1	1	1	3	1	0	8	15	\$723			420	\$20,236
Totals				28	8	3	12	97	22	94	8	244	\$14,728	\$353	\$15,081	6,832	\$422,262

#### Exhibit A.2e.1

Initial Biological Monitoring for Entrainment (Freshwater)

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Technician	Clerical	Totals P	er Facility for	the ICR Appro	oval Period		acilities in the oval Period
	Facili	ities (R	espond	lents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Coata	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	burden (nrs.)	Annual Cost
Activity			A				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Biweekly Sample Collection	12	13	14	39	4	0	12	156	0	156	0	328	\$18,795			12,792	\$732,997
Handling and Preparation of Samples	12	13	14	39	4	0	12	78	0	78	0	172	\$10,347			6,708	\$403,549
Perform Statistical Analysis	12	13	14	39	16	4	0	0	64	0	0	84	\$6,841			3,276	\$266,791
Recordkeeping	12	13	14	39	2	1	1	8	2	0	16	30	\$1,406			1,170	\$54,834
Totals				39	26	5	25	242	66	234	16	614	\$37,389	\$1,080	\$38,469	23,946	\$1,500,291

#### Exhibit A.2e.2

Reduced Biological Monitoring for Entrainment (Freshwater)

					Facility Manager	Junior Technical	Contracted Manager	1	Statistician	Biological Technician	Clerical	Totals F	er Facility for	the ICR Appro	oval Period		acilities in the oval Period
	Facili	ities (Re	espond	ents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Burden (ilis.)	Allitual Cost
Activity		, ,	4				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Reduced Sample Collection	42	49	54	145	2	0	6	78	0	78	0	164	\$9,397			23,780	\$1,362,623
Handling and Preparation of Samples	42	49	54	145	2	0	6	39	0	39	0	86	\$5,174			12,470	\$750,187
Perform Statistical Analysis	42	49	54	145	8	2	0	0	32	0	0	42	\$3,420			6,090	\$495,958
Recordkeeping	42	49	54	145	1	1	1	4	1	0	8	16	\$786			2,320	\$114,028
Totals				145	13	3	13	121	33	117	8	308	\$18,778	\$540	\$19,318	44,660	\$2,801,096

Exhibit A.2f.1

Initial Biological Monitoring for Entrainment (Estuary)

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Technician	Clerical	Totals F	er Facility for	the ICR Appro	oval Period		Facilities in the oval Period
	Facil	lities (Re	espon	dents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Burden (ms.)	Allitual Cost
Activity		- 1	4				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Biweekly Sample Collection	1	1 2	1	4	4	0	12	203	0	203	0	422	\$23,885			1,688	\$95,540
Handling and Preparation of Samples	1	1 2	1	4	4	0	12	101	0	101	0	218	\$12,838			872	\$51,353
Perform Statistical Analysis	1	1 2	1	4	16	4	0	0	83	0	0	103	\$8,353			412	\$33,413
Recordkeeping	1	1 2	1	4	2	1	1	10	3	0	16	33	\$1,613			132	\$6,452
Totals				4	26	5	25	314	86	304	16	776	\$46,689	\$1,245	\$47,934	3,104	\$191,738

#### Exhibit A.2f.2

Reduced Biological Monitoring for Entrainment (Estuary)

Reduced biological Monitorii	19 .0.	Littiu		(=0	.uu.y												
					Facility	Junior	Contracted			Biological		Totala F	er Facility for	the ICD Annu	aval Dariad	Total for AllF	acilities in the
					Manager	Technical	Manager	Biologist	Statistician	Technician	Clerical	Totals P	er racility for	trie iCK Appro	oval Periou	ICR Appr	oval Period
	Facil	ities (R	espon	dents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Burden (ms.)	Ailliuai Cost
Activity		- 1	A				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Reduced Sample Collection	9	9	10	28	2	0	6	102	2 0	102	0	212	\$11,997			5,936	\$335,905
Handling and Preparation of Samples	9	9	10	28	2	0	6	51	0	51	0	110	\$6,473			3,080	\$181,252
Perform Statistical Analysis	9	9	10	28	8	2	0	0	42	0	0	52	\$4,216			1,456	\$118,059
Recordkeeping	9	9	10	28	1	1	1	5	. 2	0	8	18	\$930			504	\$26,032
Totals				28	13	3	13	158	44	153	8	392	\$23,616	\$623	\$24,239	10,976	\$678,678

Exhibit A.2g Velocity Monitoring

velocity Monitoring																	
					Facility	Junior	Contracted			Biological		Totala F	er Facility for	the ICD Annu	usal Davied	Total for AllF	acilities in the
					Manager	Technical	Manager	Biologist	Statistician	Technician	Clerical	Totals	er racility for	tile ick Appro	ovai Periou	ICR Appr	oval Period
	Facili	ities (F	Respond	lents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Buideli (IIIS.)	Allitual Cost
Activity			Α				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Monitor Average Through Technology	64	. 73	3 79	216	2	100	0	0	0	0	0	102	\$4,338			22,032	\$936,922
Analyze Data	64	. 73	3 79	216	4	40	0	0	0	0	0	44	\$2,051			9,504	\$443,059
Recordkeeping	64	. 73	3 79	216	1	8	0	0	0	0	8	17	\$616			3,672	\$133,142
Totals				216	7	148	0	0	0	0	8	163	\$7,005	\$110	\$7,115	35,208	\$1,536,883

#### Exhibit A.2h

Inspection of Installed Technologies

					Facility Manager	Junior Technical	Contracted Manager		Statistician	Biological Techniciar		Totals F	er Facility for	the ICR Appro	oval Period		acilities in the oval Period
	Facili	ities (Re	spond	lents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	Burden (ms.)	Allitual Cost
Activity		Α					Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Visually Inspect All InstalledTechnologies	23	27	28	78	24	208	0	0	0		0 0	232	\$10,982			18,096	\$856,627
Recordkeeping	23	27	28	78	3	16	0	0	0		0 2	21	\$1,005			1,638	\$78,421
Totals		·		78	27	224	0	0	0		0 2	253	\$11,988	\$110	\$12,098	19,734	\$943,628

#### Exhibit A.2i Yearly Status Report Activities

Touris Guardo Hoport Motivitio																	
					Facility	Junior	Contracted			Biological		Totala F	er Facility for	the ICD Annu	wal Dariad	Total for All I	Facilities in the
					Manager	Technical	Manager	Biologist	Statistician	Technician	Clerical	Totals	er racility for	tile ick Appro	oval Periou	ICR Appr	oval Period
	Facili	ities (R	espond	lents)			Assumed	Loaded Ho	urly Rate \$			Burden	Labor Cost	ODCs lump	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	sum*	Total Costs	burden (nrs.)	Annual Cost
Activity			A				Lev	el of Effort	(hrs)			В	С	D	C+D	A*B	A*(C+D)
Report on Inspection and Maintenance	64	73	79	216	16	16	0	0	0	0	0	32	\$2,243			6,912	\$484,531
Detail Velocity Monitoring Results	64	73	79	216	8	16	0	0	0	0	0	24	\$1,453			5,184	\$313,805
Detail Biological Monitoring Results	64	73	79	216	24	32	4	4	24	0	0	88	\$6,363			19,008	\$1,374,365
Compile and Submit Report	64	73	79	216	80	80	0	0	0	0	16	176	\$11,589			38,016	\$2,503,181
Recordkeeping	64	73	79	216	8	12	0	0	0	0	8	28	\$1,474			6,048	\$318,298
Totals				216	136	156	4	4	24	٥	24	348	\$23 121	\$810	\$23 031	75 168	\$5 16Q 13Q

#### **Total Burden and Cost for All Annual Activities**

Total Bardell and Cost for All	7	•		1	1			
			len Per cility	Cost per Facility	ODCs lump sum*	Total Cost per Facility	Total Burden (hrs.)	Total Annual Cost
Track 1 Freshwater			1,757	102,272	2,650	104,922		
Track 1 Freshwater - Reduced			1,263	72,400	1,840	74,240		
Track 1 Estuary			2,022	117,755	2,980	120,735		
Track 1 Estuary - Reduced			1,400	80,459	2,005	82,464		
Track 2 Freshwater			1,849	108,951	3,190	112,141		
Track 2 Freshwater - Reduced			1,355	79,078	2,380	81,458		
Track 2 Estuary			2,144	126,685	3,520	130,205		
Track 2 Estuary - Reduced			1,522	89,388	2,545	91,933		
Totals							264,520	16,017,525

#### Exhibit A.2j Facility Annual O&M Costs

Activity	Facil	lities (Re	sponse	es)	Contracted Laboratory Operation and Analysis Cost Maintenance Costs	ODCs lump sum*	Cost (\$)
Operation of Remote Sensing Device	41	46	51	138	\$215	\$55	\$37,260
ntify & Enumerate Entrained Freshwater Biota	54	62	68	184	\$8,400		\$1,545,600
Identify & Enumerate Entrained Estuary Biota	10	11	11	32	\$11,000		\$352,000
						\$55	\$1,934,860

#### **Total Cost for All NPDES Application Activities**

	Total Cost (\$)
Totals	\$17,952,385

## Exhibit A.3 Director Burden and Cost Estimates for Activities

Exhibit A.3a Director Permit Issuance Activities

	Dimentons	Senior	Junior	01	Burden	Labor	ODCs	Total	Total	Total
	Directors	Technical	Technical		Per	Cost per	lump	Cost Per	Burden	Initial
	(Responses)				Permit	Permit	sum*	Permit	(hrs.)	Cost*
		73	40	28					` ,	
Activity	Α		of Effort (hi	rs)	В	С	D	C+D	A*B	A*(C+D)
Reviewing CWIS location and design data		6	18	0	24	\$1,147			432	\$20,650
Determine Compliance with Source Waterbody Flow Information	18	2	6	0	8	\$382			144	\$6,883
Review Source Water Baseline Biological Characterization Data	18	20	20	0	40	\$2,244			720	\$40,392
Review Design and Construction Technology Plan (Track 1)	13	24	8	0	32	\$2,061			416	\$26,790
Determine Compliance with CWIS Velocity Requirements (Track										
1)	13	2	6	0	8	\$382			104	\$4,971
Determine Compliance with CWIS Flow Reduction Requirements										. ,
(Track 1)	13	8	8	0	16	\$898			208	\$11,669
Review Comprehensive Demonstration Study Plan (Track 2)		16	16	0	32	\$1,795			160	\$8,976
Review Source Water Baseline Biological Characterization Study						, ,				* - , -
(Track 2)	8	400	50	0	450	\$31,055			3,600	\$248,440
Review Evaluation of Potential CWIS Effects (Track 2)	-	16	16	0	32	\$1,795			256	\$14,362
Determine Monitoring Frequency		2	6	0	8	\$382			168	\$8,030
Determine Record keeping and Reporting Frequency		2	6	0	8	\$382			168	\$8,030
Considering Public Comments		16	16	0	32	\$1,795			672	\$37,699
Issuing Permit		10	10	1	8	\$338			168	\$7,099
Permit Record Keeping			1	1	4	\$336 \$168			84	\$7,090
Totals		516	183	3	702	\$44,825		\$45,150		\$454,335
Track 1 Totals		310	103	<u> </u>	188			. ,		φ <del>4</del> 54,333
Track 1 Totals					188	\$10,18U	<b> \$32</b> 3	<b>Φ10,505</b>		

1 rack 2 lotals 646   \$41,485   \$325   \$41,810	Track 2 Totals	646	\$41,485	\$325	\$41,810	
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Exhibit A.3b

**Verification Study Review** 

	Directors (Responses)	Senior Technical Assumed L	Junior Technical oaded Hour		Per	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost
		73	40	28			<b>-</b>		(	
Activity	Α	Level	of Effort (h	rs)	В	С	D	C+D	A*B	A*(C+D)
Review of Verification Studies	5	2	4	0	6	\$303			30	\$1,517
Permit Modification due to Unfavorable Results	5	4	. 10	0	14	\$686			70	\$3,429
Record Keeping	5	0	0	1	1	\$28			5	\$140
Totals	5	6	14	1	21	\$1,017	\$55	\$1,072	105	\$5,000

#### Exhibit A.3c

**Annual Director Activities** 

	Directors (Responses)	Senior Technical Assumed L 73	Junior Technical oaded Hour 40		Per	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Annual Cost
Activity	Α	Level	of Effort (hi	s)	В	C	D	C+D	A*B	A*(C+D)
Review of Yearly Report	216	6	12	0	18	\$910			3,888	\$196,603
Compliance Tracking	216	4	12	0	16	\$765			3,456	\$165,197
Determination on Monitoring Scope Reduction	216	4	8	0	12	\$607			2,592	\$131,069
Record Keeping	216	1	2	1	4	\$180			864	\$38,794
Totals	216	15	34	1	50	\$2,461	\$55	\$2,516	10,800	\$544,000

#### **Total Burden and Cost for All Director Activities**

		ı	Total Burden (hrs.)	Total Initial Cost
Totals			18,100	\$1,003,335

## Exhibit A.4 Federal Burden and Cost Estimates for Activities

Exhibit A.4a Federal Permit Program Oversight Activities

	Federal	Senior Technical	Junior Technical	Clerical	Burden per	Labor Cost per	ODCs lump	Total Cost per Permit	Total Burden	Total Initial
	(Responses)		oaded Hourly		permit	Permit	sum*	Review	(hrs.)	Cost *
		73	40	28	Review	Review	Juin		` ′	
Activity	Α	Leve	el of Effort (hrs	)	В	С	D	C+D	A*B	A*(C+D)
Reviewing CWIS location and design data	18	1	2	0	3	\$152			54	\$2,731
Determine Compliance with Source Waterbody Flow Information	18	1	3	0	4	\$191			72	\$3,442
Review Source Water Baseline Biological Characterization Data	18	1	2	0	3	\$152			54	\$2,731
Review Design and Construction Technology Plan (Track 1)	13	1	3	0	4	\$191			52	\$2,486
Determine Compliance with CWIS Velocity Requirements (Track 1)	13	1	2	0	3	\$152			39	\$1,972
Determine Compliance with CWIS Flow Reduction Requirements (Track										
1)	13	1	2	0	3	\$152			39	\$1,972
Review Comprehensive Demonstration Study Plan (Track 2)	5	1	2	0	3	\$152			15	\$759
Review Source Water Baseline Biological Characterization Study (Track										
2)	8	6	12	0	18	\$910			144	\$7,282
Review Evaluation of Potential CWIS Effects (Track 2)	8	1	2	0	3	\$152			24	\$1,214
Determine Monitoring Frequency	21	1	3	0	4	\$191			84	\$4,015
Permit Record Keeping	21	1	1	2	4	\$168			84	\$3,528
Totals	21	16	34	2	31	1,245	\$55	\$1,300	661	\$33,285
Track 1 Totals					28	\$1,348	\$55	\$1,403		
Track 2 Totals					42	\$2,067	\$55	\$2,122		

Exhibit A.5
Respondents for the ICR Approval Period Year by Year by Activity

Facilities [1]

racilities [1]				
	Year 1	Year 2	Year 3	
	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Initial NPDES Permit Application Activities				
Start-up Activities	7	7	4	6
Permit Application Activities	7	7	4	6
Source Waterbody Flow Information	7	7	4	6
Use Existing Data- Source Water Baseline Biological Characterization Data	7	7	4	6
CWIS Flow Reduction Requirements (Track 1)	5	5	3	4
CWIS Velocity Requirements (Track 1)	5	5	3	4
Design and Construction Technology Plan (Track 1)	5	5	3	4
Comprehensive Demonstration Study Plan (Track 2)	2	2	1	4 2 4 1
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	5	3	3	4
Estuary Source Water Baseline Biological Characterization Study (Track 2)	1	1	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	2	2	1	
Submit Characterization Study (Track 2)	4	1	3	3
Freshwater Evaluation of Potential CWIS Effects (Track 2)	4	1	2	2
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	0	1	0
Verification Monitoring Plan (Track 2)	2	2	1	2 3 2 0 2
NPDES Repermitting Activities				
Start-up Activities	12	13	13	13
Permit Application Activities	12	13	13	13
Source Waterbody Flow Information	12	13	13	13
Source Water Baseline Biological Characterization Data	12	13	13	13
CWIS Flow Reduction Requirements (Track 1)	5	10	8	
CWIS Velocity Requirements (Track 1)	5	10	8	8
Design and Construction Technology Plan (Track 1)	5	10	8	8
Comprehensive Demonstration Study Plan (Track 2)	7	3	5	5
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	8	8	7	8
Estuary Source Water Baseline Biological Characterization Study (Track 2)	4	3	3	3
Profile of Source Water Biota for Characterization Study (Track 2)	7	3	5	5
Submit Characterization Study (Track 2)	4	6	5	8 8 8 5 8 3 5 5 5
Annual		,	- J	
Freshwater Verification Study (Track 2)	2	1	1	1
Estuary Verification Study (Track 2)	0	0	1	0
Initial Biological Monitoring for Impingement (Freshwater)	12	13	14	13
Reduced Biological Monitoring for Impingement (Freshwater)	42	49	54	48
Initial Biological Monitoring for Impingement (Estuary)	1	2	1	1
Reduced Biological Monitoring for Impingement (Estuary)	9	9	10	9
Initial Biological Monitoring for Entrainment (Freshwater)	12	13	14	13
Reduced Biological Monitoring for Entrainment (Freshwater)	42	49	54	48
Initial Biological Monitoring for Entrainment (Estuary)	1	2	1	1
Reduced Biological Monitoring for Entrainment (Estuary)	9	9	10	9
Velocity Monitoring	64	73	79	72
Visual Inspection of Installed Technologies	23	27	28	26
Yearly Status Report Activities	64	73	79	72
Respondents	75	82	86	81
	75	UZ.	00	Ŭ.

Directors [2]

Directors [2]	Year 1	Year 2	Year 3	
	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Director Permit Issuance Activities				Ŭ
Reviewing Facility General Permit Application Information	7	7	4	6
Review Source Water Baseline Biological Characterization Data	7	7	4	6
Determine Compliance with Source Waterbody Flow Information	7	7	4	6
Review Design and Construction Technology Plan (Track 1)	5	5	3	4
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	5	3	4
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	5	3	4
Review Comprehensive Demonstration Study Plan (Track 2)	2	2	1	2
Review Source Water Baseline Biological Characterization Study (Track 2)	4	1	3	3
Review Evaluation of Potential CWIS Effects (Track 2)	4	1	3	3
Determining Facility Requirements and Issuing Permit	9	6	6	7
Verification Study Review	2	1	2	2
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	12	13	13	13
Review Source Water Baseline Biological Characterization Data	12	13	13	13
Determine Compliance with Source Waterbody Flow Information	12	13	13	13
Review Design and Construction Technology Plan (Track 1)	5	10	8	8
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	10	8	8
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	10	8	8
Review Comprehensive Demonstration Study Plan (Track 2)	7	3	5	5
Review Source Water Baseline Biological Characterization Study (Track 2)	4	6	5	5
Determining Facility Requirements and Issuing Permit	5	18	20	14
Annual Director Activities				
Review of Yearly Report	64	73	79	72
Compliance Tracking	64	73	79	72
Determination on Monitoring Scope Reduction	64	73	79	72
Record Keeping	64	73	79	72
Respondents	75	82	86	81

#### **Sum for Facilities and Directors**

	Year 1	Year 2	Year 3	
	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Facilities	75	82	86	81
Directors	75	82	86	81
Yearly Total*	150	164	172	162

<sup>[1]</sup> Each facility is one respondent. One respondent may be involved in more than one activity;

however, in order to avoid double-counting, the maximum number of respondents expected to be involved in the rule activities annually is assumed to be the number of respondents for that year.

<sup>[2]</sup> Each Director is one respondent.

<sup>\*</sup> Total does not add due to rounding.

Exhibit A.6
Responses for the ICR Approval Period Year by Year by Activity

#### **Facilities**

	Year 1	Year 2	Year 3	
	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Initial Permitting				
Start-up Activities	7	7	4	6
Permit Application Activities	7	7	4	6
Source Waterbody Flow Information	7	7	4	6
Use Existing Data- Source Water Baseline Biological Characterization Data	7	7	4	6
CWIS Flow Reduction Requirements (Track 1)	5	5	3	4
CWIS Velocity Requirements (Track 1)	5	5	3	4
Design and Construction Technology Plan (Track 1)	5	5	3	4
Comprehensive Demonstration Study Plan (Track 2)	2		1	4 2 4
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	5	2 3	3	4
Estuary Source Water Baseline Biological Characterization Study (Track 2)	1	l ,	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	2	2	1	
Submit Characterization Study (Track 2)	4	1	3	2
Freshwater Evaluation of Potential CWIS Effects (Track 2)	4		2	2
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	Ó	1	
Verification Monitoring Plan (Track 2)	2	2	1	٥
NPDES Repermitting Activities	0	0	0	2 3 2 0 2
Start-up Activities	12	13	13	13
Permit Application Activities	12	13	13	13
Source Waterbody Flow Information	12	13	13	13
Source Water Baseline Biological Characterization Data	12	13	13	13
CWIS Flow Reduction Requirements (Track 1)	5	10	8	8
CWIS Flow Reduction Requirements (Track 1)	5	10	8	l °
Design and Construction Technology Plan (Track 1)	5	10	8	l °
Comprehensive Demonstration Study Plan (Track 1)	7	3	5	٥
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	8	8	7	
Estuary Source Water Baseline Biological Characterization Study (Track 2)	4	3	2	٥
Profile of Source Water Biota for Characterization Study (Track 2)	7	3	5	3
Submit Characterization Study (Track 2)	4	6	5	8 8 5 8 3 5 5
Annual	0	0	0	0
Freshwater Verification Study (Track 2)	2	1	1	1
Estuary Verification Study (Track 2)	0	0	1	0
Initial Biological Monitoring for Impingement (Freshwater)	12	13	14	13
Reduced Biological Monitoring for Impingement (Freshwater)	42	49	54	48
Initial Biological Monitoring for Implingement (Estuary)	1	2	1	
		9	10	1
Reduced Biological Monitoring for Impingement (Estuary)	9	13	10	9 13
Initial Biological Monitoring for Entrainment (Freshwater)	12 42	49	14 54	48
Reduced Biological Monitoring for Entrainment (Freshwater)			-	
Initial Biological Monitoring for Entrainment (Estuary)	1	2	1	1
Reduced Biological Monitoring for Entrainment (Estuary)	9	9	10	9
Velocity Monitoring	64	73	79	72
Visual Inspection of Installed Technologies	23	27	28	26
Yearly Status Report Activities	64	73	79	72
Responses	437	480	485	467

#### **Directors**

Directors	Year 1	Year 2	Year 3	
-	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Director Permit Issuance Activities	11/2012	11/2010	11/2014	Avolugo
Reviewing Facility General Permit Application Information	7	7	4	6
Review Source Water Baseline Biological Characterization Data	7	7	4	6
Determine Compliance with Source Waterbody Flow Information	7	7	4	6
Review Design and Construction Technology Plan (Track 1)	5	5	3	4
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	5	3	4
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	5	3	4
Review Comprehensive Demonstration Study Plan (Track 2)	2	2	1	2
Review Source Water Baseline Biological Characterization Study (Track 2)	4	1	3	3
Review Evaluation of Potential CWIS Effects (Track 2)	4	1	3	3
Determining Facility Requirements and Issuing Permit	9	6	6	7
Verification Study Review	2	1	2	2
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	12	13	13	13
Review Source Water Baseline Biological Characterization Data	12	13	13	13
Determine Compliance with Source Waterbody Flow Information	12	13	13	13
Review Design and Construction Technology Plan (Track 1)	5	10	8	8
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	10	8	8
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	10	8	8
Review Comprehensive Demonstration Study Plan (Track 2)	7	3	5	5
Review Source Water Baseline Biological Characterization Study (Track 2)	4	6	5	5
Determining Facility Requirements and Issuing Permit	5	18	20	14
Annual Director Activities				
Review of Yearly Report	64	73	79	72
Compliance Tracking	64	73	79	72
Determination on Monitoring Scope Reduction	64	73	79	72
Record Keeping	64	73	79	72
Responses	380	435	445	420

#### **Sum for Facilities and Directors**

	Year 1	Year 2	Year 3	
	12/2011-	12/2012-	12/2013-	Annual
	11/2012	11/2013	11/2014	Average
Facilities	437	480	485	467
Directors	380	435	445	420
Yearly Total*	817	915	930	887

Exhibit A.7 Hourly Burden for the ICR Approval Period Year by Year for Facilities

#### **Facility Activities**

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
NPDES Permit Application Activities					
Start-up Activities	A1a	301	301	172	258
Permit Application Activities	A1b	1,022	1,022	584	876
Source Waterbody Flow Information	A1c	728	728	416	624
Use Existing Data- Source Water Baseline Biological Characterization Data	A1d	1,855	1,855	1,060	1,590
CWIS Flow Reduction Requirements (Track 1)	A1e	540	540	324	468
CWIS Velocity Requirements (Track 1)	A1f	690	690	414	598
Design and Construction Technology Plan (Track 1)	A1g	540	540	324	468
Comprehensive Demonstration Study Plan (Track 2)	A1h	542	542	271	452
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A1i	11,098	6,659	6,659	8,138
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A1i	2,870	2,870	2,870	2,870
Profile of Source Water Biota for Characterization Study (Track 2)	A1i	746	746	373	622
Submit Characterization Study (Track 2)	A1i	1,536	384	1,152	1,024
Freshwater Evaluation of Potential CWIS Effects (Track 2)	A1j	6,504	1,626	3,252	3,794
Estuary Evaluation of Potential CWIS Effects (Track 2)	A1j	0	0	1,950	650
Verification Monitoring Plan (Track 2)	A1k	256	256	128	213
NPDES Permit Application Activity Total		28,972	18,503	17,871	21,782
NPDES Repermitting Activities					
Start-up Activities	A12a	156	169	169	165
Permit Application Activities	A12b	864	936	936	912
Source Waterbody Flow Information	A12c	372	403	403	393
Source Water Baseline Biological Characterization Data	A12d	948	1,027	1,027	1,001
CWIS Flow Reduction Requirements (Track 1)	A12e	540	1,080	864	828
CWIS Velocity Requirements (Track 1)	A12f	375	750	600	575
Design and Construction Technology Plan (Track 1)	A12g	215	430	344	330
Comprehensive Demonstration Study Plan (Track 2)	A12h	560	240	400	400
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A12i	10,320	10,320	9,030	9,890
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A12i	6,720	5,040	5,040	5,600
Profile of Source Water Biota for Characterization Study (Track 2)	A12i	791	339	565	565
Submit Characterization Study (Track 2)	A12i	460	690	575	575
NPDES Repermitting Activity Total		22,321	21,424	19,953	21,233
Annual Activities					
Freshwater Verification Study (Track 2)	A2a	184	92	92	123
Estuary Verification Study (Track 2)	A2b	0	0	122	41
Initial Biological Monitoring for Impingement (Freshwater)	A2c1	4,548	4,927	5,306	4,927
Reduced Biological Monitoring for Impingement (Freshwater)	A2c2	8,022	9,359	10,314	9,232
Initial Biological Monitoring for Impingement (Estuary)	A2d1	482	963	482	642
Reduced Biological Monitoring for Impingement (Estuary)	A2d2	2,196	2,196	2,440	2,277
Initial Biological Monitoring for Entrainment (Freshwater)	A2e1	7,368	7,982	8,596	7,982
Reduced Biological Monitoring for Entrainment (Freshwater)	A2e2	12,936	15,092	16,632	14,887
Initial Biological Monitoring for Entrainment (Estuary)	A2f1	776	1,552	776	1,035
Reduced Biological Monitoring for Entrainment (Estuary)	A2f2	3,528	3,528	3,920	3,659
Velocity Monitoring	A2g	10,432	11,899	12,877	11,736
Visual Inspection of Installed Technologies	A2h	5,819	6,831	7,084	6,578
Yearly Status Report Activities	A2i	22,272	25,404	27,492	25,056
Annual Activity Yearly Labor Total		78,563	89,825	96,133	88,173
Yearly Labor Total		129,855	129,752	133,956	131,188

#### Exhibit A.8 Hourly Burden for the ICR Approval Period Year by Year for Directors and Federal Government

#### **Director Activities**

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Director Permit Issuance Activities	A3a	3,316	1,690	2,294	2,433
Verification Study Review	A3b	42	21	42	35
Director Permit Reissuance Activities	A13	872	1,349	1,274	1,165
Annual Director Activities	A3c	3,200	3,650	3,950	3,600
Yearly Total		7,430	6,710	7,560	7,233

#### **Federal Activities**

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Federal Permit Program Oversight Activities	A4a	282	195	184	220
Yearly Total		282	195	184	220

Exhibit A.9
Costs for the ICR Approval Period Year by Year for Facilities

**Facility Activities** 

NPDES Permit Application Activities	1 denity Activities		Year 1	Year 2	Year 3	
NPDES Permit Application Activities   Slart-up Activities   Permit Application Activities   A1ta   \$19,314   \$19,314   \$11,036   \$16,525   \$12,255   \$13,031   \$13,0		Source				Annual
Start-up Activities		(Exhibit)	11/2012	11/2013	11/2014	Average
Permit Application Activities   A15	NPDES Permit Application Activities					
Source Water Baseline Biological Characterization Study (Track.)   Characterization Data   Characterization Study (Track.)   Characterization Data   Characterization Study (Track.)   Characterization Study (T	Start-up Activities	A1a			\$11,036	\$16,555
Use Existing Data- Source Water Baseline Biological Characterization CWIS Flow Reduction Requirements (Track 1)						\$42,431
Data   A1		A1c	\$30,313	\$30,313	\$17,322	\$25,982
CWIS Flow Reduction Requirements (Track 1)   A1e   S24,383   \$44,830   \$21,102   \$30,33   \$30,483   \$14,630   \$21,132   \$35,004   \$35,004   \$21,002   \$30,33   \$30,483   \$30,4	· · ·					
CWIS Velocity Requirements (Track 1)						\$88,123
Design and Construction Technology Plan (Track 1)	,	-	. ,			\$21,132
Comprehensive Demonstration Study   Plan (Track 2)			. ,		. ,	. ,
Freshwater Source Water Baseline Biological Characterization Study (Track 2)						
Estuary Source Water Baseline Biological Characterization Study (Track z)		A1h	\$31,738	\$31,738	\$15,869	\$26,448
Estuary Source Water Baseline Biological Characterization Study (Track 2) Profile of Source Water Biota for Characterization Study (Track 2) Submit Characterization Study (Track 2) A1i \$56,939 \$56,939 \$28,470 \$47,48  Freshwater Evaluation of Potential CWIS Effects (Track 2) Estuary Evaluation of Potential CWIS Effects (Track 2) Verification Monitoring Plan (Track 2) A1j \$416,084 \$104,021 \$208,042 \$242,71  Estuary Evaluation of Potential CWIS Effects (Track 2) Verification Monitoring Plan (Track 2) Verification Monitoring Plan (Track 2) A1j \$0 \$0 \$0 \$121,414 \$40,47  A1k \$15,319 \$15,319 \$7,660 \$12,76  NPDES Permit Application Activity Total  NPDES Repermitting Activities  Start-up Activities  Start-up Activities  Permit Application Activities  Permit Application Activities  Source Water Baseline Biological Characterization Data A12c \$15,258 \$16,530 \$11,474 \$41,474 \$41,1144  A11,474 \$41,474 \$41,1144  A12d \$53,360 \$57,807 \$57,807 \$56,32  CWIS Flow Reduction Requirements (Track 1) CWIS Veloicity Requirements (Track 1) CWIS Veloicity Requirements (Track 1) Comprehensive Demonstration Study Plan (Track 2) Freshwater Source Water Baseline Biological Characterization Study (Track 2) Freshwater Source Water Baseline Biological Characterization Study (Track 2) Profile of Source Water Baseline Biological Characterization Study (Track 2) Profile of Source Water Biota for Characterization Study (Track 2) Estuary Verification Study (Track 2) Linitial Biological Monitoring for Impingement (Freshwater) Initial Biological Monitoring for Impingement (Feshwater) Initial Biological Monitoring for Impingement (Estuary) Reduced Biological Monitoring for Intrainment (Estuary) Reduced Biological Monitoring for Intrainment (Estuary) Reduced Biological Monitoring for Intrainment (Estuary) Reduced Biological Monitoring	,	۸4٠	#000 0F0	0070 775	<b>4070 77</b> 5	<b>#</b> 450.000
Profile of Source Water Biota for Characterization Study (Track 2)	,	ATI	\$622,958	\$3/3,7/5	\$3/3,//5	\$456,836
Profile of Source Water Biota for Characterization Study (Track 2)   Submit Characterization Study (Track 2)   A1i   \$93,442   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,227   \$23,360   \$70,081   \$62,27   \$23,360   \$70,081   \$62,27   \$24,27   \$23,360   \$70,081   \$62,27   \$24,27   \$24,27   \$24,27   \$24,27   \$24,47   \$24		۸4٠	<b>#450.000</b>	<b>#450.000</b>	<b>#450.000</b>	<b>#450.000</b>
Submit Characterization Study (Track 2)	,		. ,	. ,		
Freshwater Evaluation of Potential CWIS Effects (Track 2)	, ,		. ,			
Estuary Evaluation of Potential CWIS Effects (Track 2)   Verification Monitoring Plan (Track 2)   A1   \$15,319   \$15,319   \$7,660   \$12,741   \$10,474   \$11,1474	, ,		. ,			
Verification Monitoring Plan (Track 2)	,					
NPDES Repermitting Activities   Start-up Activities   Start-up Activities   Start-up Activities   Start-up Activities   Start-up Activities   A12a   St0,591   St1,474   St1,4						
NPDES Repermitting Activities   Start-up Activities   Permit Application Activities   Substitute   Start-up Activities   Substitute		AIK				
Start-up Activities			\$1,000,417	ψ1,054,050	ψ1,132,010	ψ1,237,373
Permit Application Activities   A12b   \$44,711   \$48,437   \$48,437   \$47,15   \$48,437   \$47,15   \$48,437   \$48,437   \$47,15   \$48,437   \$47,15   \$48,437   \$48,437   \$47,15   \$48,437   \$48,437   \$47,15   \$48,437   \$48,437   \$47,15   \$48,437   \$48,437   \$48,437   \$47,15   \$48,437   \$48	, ,	A12a	\$10 591	\$11 474	\$11 474	\$11 180
Source Water Baseline Biological Characterization Data	·		. ,			\$47,195
Source Water Baseline Biological Characterization Data CWIS Flow Reduction Requirements (Track 1)	· · ·					\$16,106
CWIS Flow Reduction Requirements (Track 1) CWIS Velocity Requirements (Track 1) CWIS Velocity Requirements (Track 1) A12e \$24,383 \$48,766 \$39,013 \$37,385 CWIS Velocity Requirements (Track 1) A12f \$18,744 \$37,488 \$29,990 \$28,74 A12f \$18,744 \$37,488 \$29,990 \$28,74 A12f \$11,199 \$22,398 \$17,918 \$17,918 \$17,175 A12h \$32,380 \$13,877 \$23,129 \$23,125 Freshwater Source Water Baseline Biological Characterization Study (Track 2) A12f \$569,431 \$569,431 \$498,252 \$545,70 A12f \$368,518 \$276,388 \$276,388 \$307,05 A12f \$369,431 \$43,517 \$43,517 \$43,517 \$43,517 \$43,517 \$43,517 \$43,517 \$43,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$444,517 \$	,		. ,			\$56,325
CWIS Velocity Requirements (Track 1)   A12f   \$18,744   \$37,488   \$29,990   \$28,74   Besign and Construction Technology Plan (Track 1)   A12g   \$11,199   \$22,398   \$17,918   \$17,17   \$1,075   \$23,129   \$23,122   \$13,357   \$23,129   \$23,122   \$13,357   \$23,129   \$23,122   \$13,357   \$23,129   \$23,122   \$2						\$37,387
Design and Construction Technology Plan (Track 1)   Comprehensive Demonstration Study Plan (Track 2)   A12h   \$32,380   \$13,877   \$23,129   \$23,125     Freshwater Source Water Baseline Biological Characterization Study (Track 2)   A12i   \$569,431   \$569,431   \$498,252   \$545,70     Estuary Source Water Baseline Biological Characterization Study (Track 2)   A12i   \$368,518   \$276,388   \$276,388   \$307,09     Profile of Source Water Biota for Characterization Study (Track 2)   A12i   \$60,923   \$26,110   \$43,517   \$43,517     Submit Characterization Study (Track 2)   A12i   \$80,923   \$26,110   \$43,517   \$43,517     Submit Characterization Study (Track 2)   A12i   \$80,923   \$26,110   \$43,517   \$43,517     Submit Characterization Study (Track 2)   A12i   \$80,923   \$26,110   \$43,517   \$43,517     Submit Characterization Study (Track 2)   A12i   \$80,923   \$1,171,007   \$1,097,706   \$1,168,80     NPDES Repermitting Activity Total   \$1,237,699   \$1,171,007   \$1,097,706   \$1,168,80     Annual Activities   Freshwater Verification Study (Track 2)   A2b   \$0   \$8,930   \$2,97     Initial Biological Monitoring for Impingement (Freshwater)   A2c1   \$273,230   \$296,000   \$318,769   \$296,000     Reduced Biological Monitoring for Impingement (Estuary)   A2d1   \$28,952   \$57,904   \$28,952   \$38,60     Reduced Biological Monitoring for Impingement (Estuary)   A2d2   \$132,555   \$132,555   \$147,283   \$137,46     Reduced Biological Monitoring for Entrainment (Freshwater)   A2e1   \$448,668   \$486,057   \$523,446   \$486,057     Reduced Biological Monitoring for Entrainment (Feshwater)   A2e2   \$788,672   \$920,117   \$1,014,007   \$907,55     Reduced Biological Monitoring for Entrainment (Estuary)   A2f1   \$46,689   \$93,379   \$46,689   \$62,25   \$63,411   \$60,472						\$28,741
Comprehensive Demonstration Study Plan (Track 2)   Freshwater Source Water Baseline Biological Characterization Study (Track 2)   A12i   \$569,431   \$569,431   \$498,252   \$545,70						\$17,172
Carack 2	Comprehensive Demonstration Study Plan (Track 2)	-	\$32,380	\$13,877	\$23,129	\$23,129
Estuary Source Water Baseline Biological Characterization Study (Track 2) Profile of Source Water Biota for Characterization Study (Track 2) Profile of Source Water Biota for Characterization Study (Track 2) Submit Characterization Study (Track 2) A12i \$368,518 \$276,388 \$307,05 \$43,51 \$42,302 \$35,252 \$35,252 \$43,525	Freshwater Source Water Baseline Biological Characterization Study			. ,	. ,	, ,
2	(Track 2)	A12i	\$569,431	\$569,431	\$498,252	\$545,705
Profile of Source Water Biota for Characterization Study (Track 2)	Estuary Source Water Baseline Biological Characterization Study (Track					
Submit Characterization Study (Track 2)   \$128,201   \$42,302   \$35,252   \$	2)	A12i	\$368,518	\$276,388	\$276,388	\$307,098
Study (Track 2)	Profile of Source Water Biota for Characterization Study (Track 2)	A12i	\$60,923	\$26,110	\$43,517	\$43,517
Annual Activities  Freshwater Verification Study (Track 2)		A12i		\$42,302	\$35,252	\$35,252
Freshwater Verification Study (Track 2)   A2a   \$13,357   \$6,678   \$6,678   \$8,900   \$2,975			\$1,237,699	\$1,171,007	\$1,097,706	\$1,168,804
Estuary Verification Study (Track 2) Initial Biological Monitoring for Impingement (Freshwater) Reduced Biological Monitoring for Impingement (Freshwater) Initial Biological Monitoring for Impingement (Freshwater) Reduced Biological Monitoring for Impingement (Estuary) Reduced Biological Monitoring for Impingement (Estuary) Initial Biological Monitoring for Entrainment (Freshwater) Reduced Biological Monitoring for Entrainment (Freshwater) Reduced Biological Monitoring for Entrainment (Freshwater) Initial Biological Monitoring for Entrainment (Freshwater) Reduced Biological Monitoring for Entrainment (Estuary) A261 Reduced Biological Monitoring for Entrainment (Estuary) A262 Reduced Biological Monitoring for Entrainment (Estuary) A261 Reduced Biological Monitoring for Entrainment (Estuary) A261 A262 S483,328 S563,882 S621,421 S556,21 S132,555 S147,283 S137,46 S486,057 S523,446 S486,057 S920,117 S1,014,007 S907,55 Reduced Biological Monitoring for Entrainment (Estuary) A261 A262 A262 S483,328 S621,421 S28,952 S132,555 S147,283 S137,46 S486,057 S523,446 S486,057 S23,446 S486,057 S20,411 S46,689 S93,379 S46,689 S62,26 S20,41 A261 S483,328 S61,386 S21,471 S48,668 S93,379 S46,689 S62,26 S483,328 S62,482 S485,057 S523,446 S486,057 S523,446						
Initial Biological Monitoring for Impingement (Freshwater)   A2c1   \$273,230   \$296,000   \$318,769   \$296,000   Reduced Biological Monitoring for Impingement (Freshwater)   A2c2   \$483,328   \$563,882   \$621,421   \$556,21   A2c1   \$28,952   \$57,904   \$28,952   \$38,600   \$318,769   \$296,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,769   \$286,000   \$318,000   \$286,000   \$318,000   \$31						\$8,904
Reduced Biological Monitoring for Impingement (Freshwater)   A2c2   \$483,328   \$563,882   \$621,421   \$556,21     Initial Biological Monitoring for Impingement (Estuary)   A2d2   \$28,952   \$57,904   \$28,952   \$38,60     Reduced Biological Monitoring for Impingement (Estuary)   A2d2   \$132,555   \$132,555   \$147,283   \$137,46     Initial Biological Monitoring for Entrainment (Freshwater)   A2e1   \$448,668   \$486,057   \$523,446   \$486,05     Reduced Biological Monitoring for Entrainment (Festwater)   A2e2   \$788,672   \$920,117   \$1,014,007   \$907,59     Reduced Biological Monitoring for Entrainment (Estuary)   A2f1   \$46,689   \$93,379   \$46,689   \$62,25     Reduced Biological Monitoring for Entrainment (Estuary)   A2f2   \$212,544   \$212,544   \$236,160   \$220,41     Velocity Monitoring   A2g   \$448,333   \$511,380   \$553,411   \$5504,37     Visual Inspection of Installed Technologies   A2h   \$275,719   \$323,671   \$335,668   \$311,664,72     Yearly Status Report Activities   A2i   \$1,479,757   \$1,687,848   \$1,826,575   \$1,664,72						
Reduced Biological Monitoring for Impingement (Estuary)   A2d1   \$28,952   \$57,904   \$28,952   \$38,605   \$132,555   \$132,555   \$147,283   \$137,465   \$132,555   \$13						
Reduced Biological Monitoring for Impingement (Estuary)   A2d2   \$132,555   \$132,555   \$147,283   \$137,46   \$132,555   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$137,46   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,555   \$147,283   \$132,46   \$142,283   \$132,46   \$142,283   \$14						
Initial Biological Monitoring for Entrainment (Freshwater)   A2e1   \$448,668   \$486,057   \$523,446   \$486,055   Reduced Biological Monitoring for Entrainment (Freshwater)   A2e2   \$788,672   \$920,117   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007   \$1,0			. ,			
Reduced Biological Monitoring for Entrainment (Freshwater)   A2e2   \$788,672   \$920,117   \$1,014,007   \$907,55   \$1,014,007   \$907,55   \$1,014,007						
Initial Biological Monitoring for Entrainment (Estuary)   A2f1   \$46,689   \$93,379   \$46,689   \$62,250     Reduced Biological Monitoring for Entrainment (Estuary)   A2f2   \$212,544   \$212,544   \$236,160   \$220,41     Velocity Monitoring   A2g   \$448,333   \$511,380   \$553,411   \$504,370     Visual Inspection of Installed Technologies   A2h   \$275,719   \$323,671   \$335,658   \$311,680     Yearly Status Report Activities   A2i   \$1,479,757   \$1,687,848   \$1,826,575   \$1,664,72     Status Report Activities   A2i   \$1,479,757   \$1,687,848   \$1,826,575   \$1,684,72     Status Report Activities   A2i   \$1,479,757   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575   \$1,826,575   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575   \$1,687,848   \$1,826,575				. ,		
Reduced Biological Monitoring for Entrainment (Estuary)       A2f2       \$212,544       \$212,544       \$236,160       \$220,41         Velocity Monitoring Visual Inspection of Installed Technologies Yearly Status Report Activities       A2h       \$275,719       \$323,671       \$335,658       \$311,68         Yearly Status Report Activities       A2i       \$1,479,757       \$1,687,848       \$1,826,575       \$1,664,72				. ,		
Velocity Monitoring         A2g         \$448,333         \$511,380         \$553,411         \$504,37           Visual Inspection of Installed Technologies         A2h         \$275,719         \$323,671         \$335,658         \$311,68           Yearly Status Report Activities         A2i         \$1,479,757         \$1,687,848         \$1,826,575         \$1,664,72						
Visual Inspection of Installed Technologies A2h \$275,719 \$323,671 \$335,658 \$311,68 Yearly Status Report Activities A2i \$1,479,757 \$1,687,848 \$1,826,575 \$1,664,72						
Yearly Status Report Activities A2i \$1,479,757 \$1,687,848 \$1,826,575 \$1,664,72						
	, ,			. ,	. ,	
7,,55,,550 45,551,610 46,561,610 46,161,610		/\LI				\$5,197,265
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , ,	,,	Ţ2, 1 <b>3. ,230</b>
Yearly Labor Total \$7,554,920 \$7,517,110 \$7,918,301 \$7,663,44	Yearly Labor Total		\$7,554,920	\$7,517,110	\$7,918,301	\$7,663,444

#### Facility O&M

racility Oaw					
		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
NPDES Application					
Purchase and Installation of Remote Monitoring Device	A.1k	\$290,000	\$290,000	\$174,000	\$251,333
Purchase & Installation of Pilot Study Technology	A.1j	\$1,140,000	\$285,000	\$855,000	\$760,000
Operation & Maintenance of Pilot Technology	A.1j	\$130,000	\$32,500	\$97,500	\$86,667
Biological Study Laboratory Analysis (Freshwater)	A.1i	\$211,000	\$126,600	\$126,600	\$154,733
Biological Study Laboratory Analysis (Estuary)	A.1i	\$54,867	\$54,867	\$54,867	\$54,867
Pilot Study Entrainment Laboratory Analysis (Freshwater)	A.1j	\$26,000	\$6,500	\$13,000	\$15,167
Pilot Study Entrainment Laboratory Analysis (Estuary)	A.1j	\$0	\$0	\$8,400	\$2,800
Other Direct Costs	A.1a-k	\$49,545	\$40,645	\$31,715	\$40,635
Repermitting					
Biological Study Laboratory Analysis (Freshwater)	A.12i	\$202,400	\$202,400	\$177,100	\$193,967
Biological Study Laboratory Analysis (Estuary)	A.12i	\$131,600	\$98,700	\$98,700	\$109,667
Other Direct Costs	A.12a-i	\$56,500	\$59,825	\$56,605	\$57,643
Annual					
Operation of Remote Sensing Device	A.2f	\$8,815	\$9,890	\$10,965	\$9,890
Identify & Enumerate Entrained Freshwater Biota	A.2f	\$453,600	\$520,800	\$571,200	\$515,200
Identify & Enumerate Entrained Estuary Biota	A.2f	\$110,000	\$121,000	\$121,000	\$117,333
Other Direct Costs	A.2a-f	\$128,930	\$146,625	\$157,765	\$144,440
Equipment Capital Cost Subtotal		\$1,438,815	\$584,890	\$1,039,965	\$1,021,223
Equipment O&M Cost Subtotal		\$130,000	\$32,500	\$97,500	\$86,667
Laboratory Analysis Subtotal		\$1,189,467	\$1,130,867	\$1,170,867	\$1,163,733
Other Direct Costs Subtotal		\$234,975	\$247,095	\$246,085	\$242,718
Yearly O&M Total		\$2,993,257	\$1,995,352	\$2,554,417	\$2,514,342

# Exhibit A.10 Costs for the ICR Approval Period Year by Year for Directors and Federal Government

#### **Director Activities**

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Director Permit Issuance Activities	A3a	\$205,701	\$97,953	\$143,856	\$149,170
Verification Study Review	A3b	\$2,034	\$1,017	\$2,034	\$1,695
Director Permit Reissuance Activities	A13	\$52,598	\$81,360	\$75,864	\$69,941
Annual Director Activities	A3c	\$157,530	\$179,682	\$194,451	\$177,221
Yearly Total		\$417,863	\$360,013	\$416,205	\$398,027

#### Director O&M

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Start-Up & NPDES Application					
Other Direct Costs	A3a-b	\$3,035	\$2,005	\$2,060	\$2,367
Annual					
Other Direct Costs	A3c	\$3,520	\$4,015	\$4,345	\$3,960
Yearly O&M Cost Total		\$6,555	\$6,020	\$6,405	\$6,327

#### **Federal Labor Activities**

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Federal Permit Program Oversight Activities	A4b	13,719	9,456	8,955	\$10,710
Yearly Total		\$13,719	\$9,456	\$8,955	\$10,710

#### Federal O&M

		Year 1	Year 2	Year 3	
	Source	12/2011-	12/2012-	12/2013-	Annual
	(Exhibit)	11/2012	11/2013	11/2014	Average
Federal Permit Program Oversight ODCs	A4a	\$495	\$330	\$330	\$385
Yearly Total		\$495	\$330	\$330	\$385

Exhibit A.11 Summary of the Burden, Respondents, Responses, and Costs for the ICR Approval Period by Year and Annual Averages

#### **Facilities**

		Year 1	Year 2	Year 3		
	Source	12/2011-	12/2012-	12/2013-	Annual	Three Year Total
	(Exhibit)*	11/2012	11/2013	11/2014	Average	
Burden (hours)	A7	129,855	129,752	133,956	131,188	393,564
Respondents (number)	A5	75	82	86	81	86
Responses (number)	A6	437	480	485	467	1,402
Costs (labor)	A9	\$7,554,920	\$7,517,110	\$7,918,301	\$7,663,444	\$22,990,331
Costs (capital)	A9	\$1,438,815	\$584,890	\$1,039,965	\$1,021,223	\$3,063,670
Costs (equipment O&M)	А9	\$130,000	\$32,500	\$97,500	\$86,667	\$260,000
Costs (lab analysis)	А9	\$1,189,467	\$1,130,867	\$1,170,867	\$1,163,733	\$3,491,200
Costs (other direct costs)		\$234,975	\$247,095	\$246,085	\$242,718	\$728,155
Total Costs		\$10,548,177	\$9,512,462	\$10,472,717	\$10,177,785	\$30,533,356

#### Directors

	Source (Exhibit)*	Year 1 12/2011- 11/2012	Year 2 12/2012- 11/2013	Year 3 12/2013- 11/2014	Annual Average	Three Year Total
Burden (hours)	A8	7,430	6,710	7,560	7,233	21,700
Respondents (number)	A5	47	47	47	47	47
Responses (number)	A6	380	435	445	420	1,260
Costs(labor)	A10	\$417,863	\$360,013	\$416,205	\$398,027	\$1,194,081
Costs (other direct costs)	A10	\$6,555	\$6,020	\$6,405	\$6,327	\$18,980
Total Costs		\$424,418	\$366,033	\$422,610	\$404,354	\$1,213,061

#### **Federal Government**

		Year 1	Year 2	Year 3		
	Source	12/2011-	12/2012-	12/2013-	Annual	Three Year Total
	(Exhibit)	11/2012	11/2013	11/2014	Average	
Burden (hours)	A8	282	195	184	220	661
Costs(labor)	A10	\$13,719	\$9,456	\$8,955	\$10,710	\$32,130
Costs (O&M)	A10	\$495	\$330	\$330	\$385	\$1,155
Total Costs		\$14,214	\$9,786	\$9,285	\$11,095	\$33,285

Totals for Respondents (Facilities and Directors)\*

	Annual	Three Year
	Average	Total
Total Respondent Burden (hours)	138,421	415,264
Total Respondents (number)	128	133
Total Respondent Labor Costs	\$8,061,471	\$24,184,412
Total Respondent Capital and O&M Cost -	\$2,520,668	\$7,302,005
Total Respondent Cost for All Activities	\$10,582,139	\$31,746,417

* Totals for annual averages may not match exactly due to rounding discrepancies		

#### Exhibit A.12

#### Facility Cost and Burden Estimates for NPDES Permit Renewal Activities

Exhibit A.12a

#### Start-up Activities

						Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	To	otals Per Facili	ty for the ICR	Approval P	eriod	Total	
		Facili	ties (Re	espone	dents)			As	sumed Loade	ed Hourly R	ate \$									Total Initial Cost
														Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**		Total lilitial Cost
		Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23							
Α	ctivity		ļ	4					Level of E	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
	Read and Understand Rule	12	13	13	38	4	4	0	0	0	0	0	0	8	\$561	\$0	\$0		304	\$21,310
	Mobilization/Planning	12	13	13	38	1	2	0	0	0	0	0	0	3	\$182	\$0	\$0		114	\$6,901
	Training	12	13	13	38	1	1	0	0	0	0	0	0	2	\$140	\$0	\$0		76	\$5,328
L	Other Direct Costs	12	13	13	38	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55		-	\$2,090
	Totals	12	13	13	38									13	\$883	\$0	\$55	\$938	494	\$35,629

#### Exhibit A.12b

**Permit Application Activities** 

					Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	To	otals Per Facili	ty for the ICR	Approval P	Total		
	Facili	ties (R	espon	lents)			As	sumed Loade	ed Hourly R	ate \$			Burden		Capital	O&M			<b>Total Initial Cost</b>
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity		- 1	A					Level of E	ffort (hrs)				В	С	D	Е	C+D+E	A*B	A*(C+D+E)
Detailed Source Water Body Characterization	12	13	13	38	1	5	12	0	0	0	0	0	18	\$768	\$0	\$0		684	\$29,176
Description of CWIS Configuration and Location	12	13	13	38	0	1	1	0	0	0	0	0	2	\$80	\$0	\$0		76	\$3,036
Facility Water Balance Diagram	12	13	13	38	1	1	1	0	0	0	0	0	3	\$179	\$0	\$0		114	\$6,791
Operational Characteristics Narrative	12	13	13	38	12	30	0	0	0	0	0	0	42	\$2,428	\$0	\$0		1,596	\$92,249
Submit Materials for Review by State	12	13	13	38	0	0	0	0	0	0	0	3	3	\$70	\$0	\$0		114	\$2,656
Recordkeeping	12	13	13	38	1	1	1	0	0	0	0	1	4	\$202	\$0	\$0		152	\$7,676
Other Direct Costs	12	13	13	38	0	0	0	0	0	0	0	0	0	\$0	\$0	\$540		-	\$20,520
Totals	12	13	13	38									72	\$3,726	\$0	\$540	\$4,266	2,736	\$162,104

Water balance diagram is assumed to be taken from the facility design report. The hours reported here are for incorporation of the diagram(s) in the permit.

#### Exhibit A.12c

**Source Waterbody Flow Information** 

					Facility Manager	Junior Technical	CAD Operator	Contracted Manager		Statistician	Biological Technician	Clerical	То	tals Per Facilit	ty for the ICR	Approval P	eriod	Total	
	Faciliti	ies (Re	spond	dents)			As	sumed Load	ed Hourly R	ate \$			Burden		Capital	O&M			<b>Total Initial Cost</b>
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity		Α						Level of E	Effort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Gather Information Characterizing Flow	12	13	13	38	0	10	0	0	0	0	0	0	10	\$414	\$0	\$0		380	\$15,732
Perform Engineering Calculations	12	13	13	38	2	10	0	0	0	0	0	0	12	\$612	\$0	\$0		456	\$23,241
Submit Data and Analysis for Review	12	13	13	38	0	0	0	0	0	0	0	5	5	\$117	\$0	\$0		190	\$4,427
Recordkeeping	12	13	13	38	0	2	0	0	0	0	0	2	4	\$129	\$0	\$0		152	\$4,917
Other Direct Costs	12	13	13	38	0	0	0	0	0	0	0	0	0	\$0	\$0	\$110		-	\$4,180
Totals	12	13	13	38									31	\$1,272	\$0	\$110	\$1,382	1,178	\$52,497

Exhibit A.12d

Source Water Baseline Biological Characterization Data

					Facility	Junior	CAD	Contracted	l		Biological		T/	otals Per Facili	ty for the ICR	Annroval F	Period		
					Manager	Technica	Operator	Manager	Biologist	Statistician	Technician	Clerical		otalo i ci i acili	ty for the fore	Арріочаі і	ciiou	Total	
	Faciliti	es (Re	spon	dents)			As	sumed Load	ed Hourly R	late \$			Burden		Capital	O&M		Burden	<b>Total Initial Cost</b>
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity		Α	ı					Level of E	Effort (hrs)				В	С	D	Е	C+D+E	A*B	A*(C+D+E)
Identify Available Data and Document Efforts	12	13	13	38	12	24	0	0	0	0	0	2	38	\$2,226	\$0	\$0		1,444	\$84,580
Compile and Analyze Existing Data	12	13	13	38	10	18	6	0	0	0	0	1	35	\$1,988	\$0	\$0		1,330	\$75,525
Submit Data for Review by State	12	13	13	38	0	0	0	0	0	0	0	2	2	\$47	\$0	\$0		76	\$1,771
Recordkeeping	12	13	13	38	1	1	0	0	0	0	0	2	4	\$187	\$0	\$0	)	152	\$7,098
Other Direct Costs	12	13	13	38	0	0	0	0	0	0	0	0	0	\$0	\$0	\$810		-	\$30,780
Totals	12	13	13	38								Ť	79	\$4,447	\$0	\$810	\$5,257	3,002	\$199,755

#### Exhibit A.12e

**CWIS Flow Reduction Requirements (Track 1)** 

OWIO I IOW Reduction Requirements (11	uon i	<u>,                                      </u>																	
					Facility Manager	Junior Technical	CAD Operator	Contracted Manager	l	Statistician	Biological Technician	Clerical	To	otals Per Facili	ity for the ICR	Approval F	Period	Total	
	Facilit	Facilities (Respondents)			Assumed Loaded Hourly Pate \$								Capital	O&M		Burden	<b>Total Initial Cost</b>		
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	Burden (hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity		Α	ı					Level of I	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Develop Narrative	5	10	8	23	8	16	0	C	0	0	0	0	24	\$1,453	\$0	\$0	)	552	\$33,414
Perform Engineering Calculations	5	10	8	23	4	12	0	C	0	0	0	0	16	\$892	\$0	\$0	)	368	\$20,516
Document Minimization of Blow Down and Flows Not	5	10	8	23	0	40	0	C	0	0	0	6	46	\$1,796	\$0	\$0	)	1,058	\$41,303
Submit Data and Analysis for Review	5	10	8	23	0	0	0	C	0	0	0	8	8	\$186	\$0	\$0		184	\$4,287
Recordkeeping	5	10	8	23	2	4	0	C	0	0	0	8	14	\$550	\$0	\$0	)	322	\$12,641
Other Direct Costs	5	10	8	23	0	0	0	C	0	0	0	0	0	\$0	\$0	\$435	5	-	\$10,005
Totals	5	10	8	23		·	·			•			108	\$4,877	\$0	\$435	\$5,312	2,484	\$122,167

#### Exhibit A.12f

**CWIS Velocity Requirements (Track 1)** 

						Junior Technical	_	Contracted Manager	1	Statistician	Biological Technician		To	otals Per Facili	Total				
	Facili	ies (Re	espon	dents)	Assumed Loaded Hourly Rate \$								Burden		Capital	O&M		Burden	Total Initial Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity		P	١					Level of E	ffort (hrs)				В	С	D	Е	C+D+E	A*B	A*(C+D+E)
Develop Narrative	5	10	8	23	5	10	0	0	0	0	0	0	15	\$908	\$0	\$0		345	\$20,884
Perform Engineering Calculations	5	10	8	23	8	32	0	0	0	0	0	0	40	\$2,115	\$0	\$0		920	\$48,650
Submit Data and Analysis for Review	5	10	8	23	0	0	0	0	0	0	0	8	8	\$186	\$0	\$0		184	\$4,287
Revise Based on State review	5	10	8	23	1	5	0	0	0	0	0	0	6	\$306	\$0	\$0		138	\$7,033
Recordkeeping	5	10	8	23	1	1	0	0	0	0	0	4	6	\$233	\$0	\$0		138	\$5,368
Other Direct Costs	5	10	8	23	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,080		-	\$24,840
Totals	5	10	8	23				·		·			75	\$3,749	\$0	\$1,080	\$4,829	1,725	\$111,062

#### Exhibit A.12g

Design and Construction Technology Plan (Track 1)

						Junior Technical	-	Contracted Manager		Statistician	Biological Techniciar		To	otals Per Facili	ty for the ICR	Approval F	Total		
	Facili	ties (R	Respon	dents)			Ass	sumed Loade	d Hourly R	ate \$			Burden		Capital	O&M		Burden	Total Initial Cost
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity			Α					Level of E	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Delineate Hydraulic Zone of Influence	5	10	8 (	23	1	2	2	0	0	0	0	0	5	\$259	\$0	\$0		115	\$5,948
Develop Narrative Description	5	10	8 (	23	5	10	0	0	0	0	0	0	15	\$908	\$0	\$0	)	345	\$20,884
Perform Engineering Calculations	5	10	8 (	23	3	12	0	0	0	0	0	0	15	\$793	\$0	\$0	)	345	\$18,244
Submit Data and Analysis for Review	5	10	8 (	23	0	0	0	0	0	0	0	3	3	\$70	\$0	\$0	)	69	\$1,608
Recordkeeping	5	10	8 (	23	1	1	0	0	0	0	0	3	5	\$210	\$0	\$0		115	\$4,832
Other Direct Costs	5	10	8 (	23	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55	i	-	\$1,265
Totals	5	10	8 (	23									43	\$2,240	\$0	\$55	\$2,295	989	\$52,780

#### Exhibit A.12h

Comprehensive Demonstration Study Plan (Track 2)

		Facilities (Respondents)			_	Junior Technical	CAD Operator	Contracted Manager	1	Statistician	Biological Technician	Clerical	To	otals Per Facili	Total				
	Facili	ties (R	espon	dents	Assumed Loaded H					ate \$			Burden		Capital	O&M		Burden	<b>Total Initial Cost</b>
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)	Labor Cost	Costs	Costs	Total Costs**	(hrs.)	
Activity			Α					Level of E	ffort (hrs)				В	С	D	E	C+D+E	A*B	A*(C+D+E)
Description of Historical Studies that will be Used	7	3	3 5	15	6	12	0	0	0	0	0	1	19	\$1,113	\$0	\$0	)	285	\$16,694
Description of Proposed and/or Implemented Technologies																			
	7	3	3 5	15	2	6	0	0	0	0	0	0	8	\$446	\$0	\$0	)	120	\$6,690
Develop Baseline Biological Characterization Sampling Plan	7	3	3 5	15	12	18	2	2	0	0	0	1	35	\$2,282	\$0	\$0	)	525	\$34,229
Submit Data and Plans for Review	7	3	3 5	15	0	0	0	0	0	0	0	4	4	\$93	\$0	\$0	)	60	\$1,398
Revise Based on State Review	7	3	3 5	15	2	5	1	0	0	0	0	1	9	\$466	\$0	\$0	)	135	\$6,996
Recordkeeping	7	3	3 5	15	1	1	1	0	0	0	0	2	5	\$225	\$0	\$0		75	\$3,380
Other Direct Costs	7	3	3 5	15	0	0	0	0	0	0	0	0	0	\$0	\$0	\$810	)	-	\$12,150
Totals	7	3	5 5	15		·		·	·	•		,	80	\$4,626	\$0	\$810	\$5,436	1,200	\$81,536

#### Exhibit A.12i

Source Water Baseline Biological Characterization Study (Track 2)

				•	Facility	Junior	CAD	Contracted			Biological								
					Manager	Technical	Operator	Manager	Biologist	Statistician		Clerical	To	tals Per Facili	ty for the ICR	Approval P	eriod	Total	
	Facili	ities (R	espon	dents)				sumed Loade										Burden	Total Initial Cost
				,			1			I			Burden	Labor Cost	Capital	O&M	Total Costs**	(hrs.)	
	Year 1	Year 2	Year 3	Total	\$99	\$41	\$39	\$125	\$64	\$80	\$45	\$23	(hrs)		Costs	Costs		(	
Activity		1.00.2	A		***			Level of E		***	T	, ,-,	В	С	D	Е	C+D+E	A*B	A*(C+D+E)
Implement Freshwater Sampling	8	8	7	8	2	16	0	36	1248	20	1248	10	2580	\$142,358	\$0	0		29,670	\$1,637,115
Other Direct Costs for Implement Freshwater Sampling	8	8	7	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$3,400			\$39,100
Implement Estuary Sampling	4	. 3	3	4	3	30	0	48	2457	30	2457	15	5040	\$276,388	\$0	0		16,800	\$921,294
Other Direct Costs for Implement Estuary Sampling	4	. 3	3	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$8,400			\$28,000
Biological Study Laboratory Analysis (Freshwater)	8	8	7	8	0	0	0	0	0	0	0	0	0	\$0	0	\$50,600		-	\$581,900
Biological Study Laboratory Analysis (Estuary)	4	. 3	3	4	0	0	0	0	0	0	0	0	0	\$0	0	\$98,700		-	\$329,000
Profile of Source Water Biota	7	3	5	15	10	6	0	10	18	0	6	2	52	\$3,951	\$0	\$0		780	\$59,268
Identification of Critical Species	7	3	5	15	10	6	0	6	12	0	0	1	35	\$2,777	\$0	\$0		525	\$41,648
Description of Additional Stresses	7	3	5	15	5	3	0	5	9	0	3	1	26	\$1,976	\$0	\$0		390	\$29,634
Write Study based on Results and Submit for Review by	4	6	5	15	24	48	0	5	2	2	0	2	83	\$5,319	\$0	\$0		1,245	\$79,779
Recordkeeping	4	6	5	15	2	4	0	2	0	0	0	7	15	\$777	\$0	\$0		225	\$11,657
Finalize study based on State review		6	5	15	5	10	0	0	0	0	0	2	17	\$955	\$0	\$0		255	\$14,319
Freshwater Totals				8									2,808	\$158,111	\$50,600	\$3,400	\$212,111	32,291	\$2,440,108
Marine Totals		·		4				·					5,268	\$292,142	\$98,700	\$8,400	\$399,242	17,599	\$1,332,605

Total Burden and Costs for All NPDES Application Activities	ies					
					Total Burden	Total Initial Cost
Totals					63 698	\$4 590 242

<sup>\*</sup> The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

## Exhibit A.13 Director Burden and Cost Estimates for Permit Renewal

Exhibit A.13 Director Permit Reissuance Activities

	Senior Technical Assumed	Junior Technical Loaded Hou	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit
	73	40	28	remin	remit	Suili	remin
Activity	Leve	el of Effort (	hrs)	В	С	D	C+D
Reviewing CWIS location and design data	2	5	0	7	\$344		
Determine Compliance with Source Waterbody Flow Information	1	2	0	2	\$115		
Review Source Water Baseline Biological Characterization Data	6	6	0	12	\$673		
Review Design and Construction Technology Plan (Track 1)	7	2	0	10	\$618		
Determine Compliance with CWIS Velocity Requirements (Track 1)	1	2	0	2	\$115		
etermine Compliance with CWIS Flow Reduction Requirements (Track 1)	2	2	0	5	\$269		
Review Comprehensive Demonstration Study Plan (Track 2)	5	5	0	10	\$539		
eview Source Water Baseline Biological Characterization Study (Track 2)	80	15	0	95	\$6,409		
Determine Monitoring Frequency	1	2	0	2	\$115		
Determine Record keeping and Reporting Frequency	1	2	0	2	\$115		
Considering Public Comments	5	5	0	10	\$539		
Issuing Permit	0	2	0	2	\$101		
Permit Record Keeping	0	0	1	1	\$50		
Totals	110	50	0	160	\$10,001	\$325	\$10,326
Track 1 Totals				55	\$3,054	\$325	\$3,379
Track 2 Totals			·	143	\$8,999	\$325	\$9,324