

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

Exhibit A.1a
Start-up Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)														
Read and Understand Rule	6	6	6	18	12	12	0	0	0	0	0	1	25	\$1,883	\$0	\$0		450	\$33,896
Mobilization/Planning	6	6	6	18	4	8	0	0	0	0	0	1	13	\$825	\$0	\$0		234	\$14,852
Training	6	6	6	18	2	2	0	0	0	0	0	1	5	\$336	\$0	\$0		90	\$6,050
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$55	-	\$990
Totals	6	6	6	18									43	\$3,044	\$0	\$55	\$3,099	774	\$55,787

Exhibit A.1b
Permit Application Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)														
Detailed Source Water Body Characterization	6	6	6	18	2	16	40	0	0	0	0	0	58	\$2,610	\$0	\$0		1,044	\$46,980
Description of CWIS Configuration and Location	6	6	6	18	2	5	8	0	0	0	0	0	15	\$779	\$0	\$0		270	\$14,013
Facility Water Balance Diagram	6	6	6	18	1	1	1	0	0	0	0	0	3	\$197	\$0	\$0		54	\$3,537
Operational Characteristics Narrative	6	6	6	18	16	40	0	0	0	0	0	0	56	\$3,553	\$0	\$0		1,008	\$63,950
Submit Materials for Review by State	6	6	6	18	0	0	0	0	0	0	0	6	6	\$160	\$0	\$0		108	\$2,884
Recordkeeping	6	6	6	18	2	2	2	0	0	0	0	2	8	\$446	\$0	\$0		144	\$8,035
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$575	-	\$10,350
Totals	6	6	6	18									146	\$7,744	\$0	\$575	\$8,319	2,628	\$149,749

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

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)														
Gather Information Characterizing Flow	6	6	6	18	0	32	0	0	0	0	0	0	32	\$1,437	\$0	\$0		576	\$25,862
Perform Engineering Calculations	6	6	6	18	8	32	0	0	0	0	0	0	40	\$2,315	\$0	\$0		720	\$41,674
Submit Data and Analysis for Review	6	6	6	18	0	0	0	0	0	0	0	16	16	\$427	\$0	\$0		288	\$7,690
Recordkeeping	6	6	6	18	0	8	0	0	0	0	0	8	16	\$573	\$0	\$0		288	\$10,310
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$115	-	\$2,070
Totals	6	6	6	18									104	\$4,752	\$0	\$115	\$4,867	1,872	\$87,606

Exhibit A.1d
Source Water Baseline Biological Characterization Data

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)														
Totals	6	6	6	18															

Identify Available Data and Document Efforts	6	6	6	18	40	80	0	0	0	0	0	8	128	\$8,198	\$0	\$0	2,304	\$147,557	
Compile and Analyze Existing Data	6	6	6	18	32	60	20	0	0	0	0	4	116	\$7,150	\$0	\$0	2,088	\$128,707	
Submit Data for Review by State	6	6	6	18	0	0	0	0	0	0	0	8	8	\$214	\$0	\$0	144	\$3,845	
Recordkeeping	6	6	6	18	2	4	1	0	0	0	0	6	13	\$601	\$0	\$0	234	\$10,822	
Other Direct Costs	6	6	6	18	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	-	\$15,480	
Totals	6	6	6	18									265	\$16,163	\$0	\$860	\$17,023	4,770	\$306,410

Exhibit A.1e
CWIS Flow Reduction Requirements (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E		
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Develop Narrative	5	4	5	14	8	16	0	0	0	0	0	0	24	\$1,597	\$0	\$0	336	\$22,355	
Perform Engineering Calculations	5	4	5	14	4	12	0	0	0	0	0	0	16	\$978	\$0	\$0	224	\$13,692	
Document Minimization of Blow Down and Flows Not	5	4	5	14	0	40	0	0	0	0	0	6	46	\$1,956	\$0	\$0	644	\$27,387	
Submit Data and Analysis for Review	5	4	5	14	0	0	0	0	0	0	0	8	8	\$214	\$0	\$0	112	\$2,990	
Recordkeeping	5	4	5	14	2	4	0	0	0	0	0	8	14	\$613	\$0	\$0	196	\$8,579	
Other Direct Costs	5	4	5	14	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0	-	\$6,440	
Totals	5	4	5	14									108	\$5,357	\$0	\$460	\$5,817	1,512	\$81,444

Exhibit A.1f
CWIS Velocity Requirements (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E		
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Develop Narrative	5	4	5	14	16	32	0	0	0	0	0	0	48	\$3,194	\$0	\$0	672	\$44,710	
Perform Engineering Calculations	5	4	5	14	8	32	0	0	0	0	0	0	40	\$2,315	\$0	\$0	560	\$32,413	
Submit Data and Analysis for Review	5	4	5	14	0	0	0	0	0	0	0	16	16	\$427	\$0	\$0	224	\$5,981	
Revise Based on State review	5	4	5	14	4	16	0	0	0	0	0	0	20	\$1,158	\$0	\$0	280	\$16,206	
Recordkeeping	5	4	5	14	2	4	0	0	0	0	0	8	14	\$613	\$0	\$0	196	\$8,579	
Other Direct Costs	5	4	5	14	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,150	-	\$16,100	
Totals	5	4	5	14									138	\$7,706	\$0	\$1,150	\$8,856	1,932	\$123,990

Exhibit A.1g
Design and Construction Technology Plan (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E		
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Delineate Hydraulic Zone of Influence	5	4	5	14	2	5	8	0	0	0	0	0	15	\$779	\$0	\$0	210	\$10,899	
Develop Narrative Description	5	4	5	14	16	32	0	0	0	0	0	0	48	\$3,194	\$0	\$0	672	\$44,710	
Perform Engineering Calculations	5	4	5	14	6	24	0	0	0	0	0	0	30	\$1,736	\$0	\$0	420	\$24,310	
Submit Data and Analysis for Review	5	4	5	14	0	0	0	0	0	0	0	6	6	\$160	\$0	\$0	84	\$2,243	
Recordkeeping	5	4	5	14	1	2	0	0	0	0	0	6	9	\$360	\$0	\$0	126	\$5,037	
Other Direct Costs	5	4	5	14	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55	-	\$770	
Totals	5	4	5	14									108	\$6,229	\$0	\$55	\$6,284	1,512	\$87,969

Comprehensive Demonstration Study Plan (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Description of Historical Studies that will be Used	1	2	1	4	20	40	0	0	0	0	0	2	62	\$4,045	\$0	\$0		248	\$16,182
Description of Proposed and/or Implemented Technologies	1	2	1	4	8	20	0	0	0	0	0	0	28	\$1,776	\$0	\$0		112	\$7,106
Develop Baseline Biological Characterization Sampling Plan	1	2	1	4	40	60	8	8	0	0	0	4	120	\$8,602	\$0	\$0		480	\$34,410
Submit Data and Plans for Review	1	2	1	4	0	0	0	0	0	0	0	12	12	\$320	\$0	\$0		48	\$1,282
Revise Based on State Review	1	2	1	4	8	16	4	0	0	0	0	4	32	\$1,871	\$0	\$0		128	\$7,483
Recordkeeping	1	2	1	4	2	4	2	1	0	0	0	8	17	\$831	\$0	\$0		68	\$3,323
Other Direct Costs	1	2	1	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$860		-	\$3,440
Totals	1	2	1	4									271	\$17,446	\$0	\$860	\$18,306	1,084	\$73,225

Exhibit A.1

Source Water Baseline Biological Characterization Study (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Implement Freshwater Sampling	2	2	2	4	6	52	0	120	2080	67	2080	34	4439	\$269,446	\$0	0		13,317	\$808,339
Other Direct Costs for Implement Freshwater Sampling	2	2	2	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,000		\$18,000	
Implement Estuary Sampling	0	1	1	1	10	101	0	160	4095	100	4095	50	8611	\$516,627	\$0	0		5,741	\$344,418
Other Direct Costs for Implement Estuary Sampling	0	1	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$14,900		\$9,933	
Biological Study Laboratory Analysis (Freshwater)	2	2	2	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$89,600		\$268,800	
Biological Study Laboratory Analysis (Estuary)	0	1	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$174,800		\$116,533	
Profile of Source Water Biota	1	2	1	4	32	20	0	32	60	0	20	8	172	\$14,042	\$0	\$0		688	\$56,168
Identification of Critical Species	1	2	1	4	32	20	0	20	40	0	0	3	115	\$9,956	\$0	\$0		460	\$39,823
Description of Additional Stresses	1	2	1	4	16	10	0	16	30	0	10	4	86	\$7,021	\$0	\$0		344	\$28,084
Write Study based on Results and Submit for Review by	1	1	1	3	80	160	0	16	8	8	0	8	280	\$19,610	\$0	\$0		840	\$58,831
Recordkeeping	1	1	1	3	6	12	0	6	0	0	0	24	48	\$2,645	\$0	\$0		144	\$7,934
Finalize study based on State review	1	1	1	3	16	32	0	0	0	0	0	8	56	\$3,407	\$0	\$0		168	\$10,222
Freshwater Totals				4									5,196	\$326,127	\$0	\$95,600	\$421,727	16,356	\$1,265,182
Marine Totals				1									9,368	\$573,308	\$0	\$189,700	\$763,008	6,114	\$501,903

Exhibit A.1j

Evaluation of Potential CWIS Effects (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Calculate Reduction in Impingement Mortality and Entrainment	1	1	1	3	80	80	8	0	0	0	0	12	180	\$13,031	\$0	\$0		540	\$39,092
Perform Engineering Calculations for Efficacy Projections	1	1	1	3	40	32	0	0	0	0	0	4	76	\$5,936	\$0	\$0		228	\$17,807
Perform Impingement Pilot Study (Freshwater)	1	1	1	3	16	25	0	80	240	40	240	20	661	\$45,861	\$0	\$0		1,983	\$137,584
Perform Entrainment Pilot Study (Freshwater)	1	1	1	3	16	25	0	80	180	40	250	20	611	\$42,173	\$0	\$0		1,833	\$126,520
Pilot Study Entrainment Laboratory Analysis (Freshwater)	1	1	1	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,900		-	\$20,700
Perform Impingement Pilot Study (Estuary)	0	0	0	0	16	33	0	80	312	52	312	26	831	\$55,867	\$0	\$0		-	\$0
Perform Entrainment Pilot Study (Estuary)	0	0	0	0	16	33	0	80	234	52	325	26	766	\$51,073	\$0	\$0		-	\$0
Pilot Study Entrainment Laboratory Analysis (Estuary)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$9,000		-	\$0
Purchase & Installation of Pilot Study Technology	1	1	1	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$303,000		-	\$909,000
Operation & Maintenance of Pilot Technology	1	1	1	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$34,500		-	\$103,500
Submit Data and Analysis for Review	1	1	1	3	8	10	0	8	6	4	0	16	52	\$3,608	\$0	\$0		156	\$10,823
Recordkeeping	1	1	1	3	4	8	0	4	8	2	0	20	46	\$2,606	\$0	\$0		138	\$7,818

Other Direct Costs	1	1	1	3	0	0	0	0	0	0	0	0	\$0	\$0	\$1,100	-	\$3,300		
Freshwater Totals	1	1	1	3									1626	\$113,215	\$303,000	\$42,500	\$458,715	4,878	\$1,376,144
Marine Totals	0	0	0	0									1,950	\$132,120	\$303,000	\$44,600	\$479,720	-	\$0

Exhibit A.1k
Verification Monitoring Plan (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Develop Verification Monitoring Plan	1	2	1	4	40	60	8	0	0	0	0	4	112	\$7,527	\$0	\$0		448	\$30,109
Submit Data and Analysis for Review	1	2	1	4	0	0	0	0	0	0	0	2	2	\$53	\$0	\$0		8	\$214
Revise Based on State Review	1	2	1	4	2	4	1	0	0	0	0	1	8	\$468	\$0	\$0		32	\$1,871
Recordkeeping	1	2	1	4	1	1	1	1	0	0	0	2	6	\$384	\$0	\$0		24	\$1,537
Other Direct Costs	1	2	1	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$460		-	\$1,840
Totals	1	2	1	4									128	\$8,433	\$0	\$460	\$8,893	512	\$35,570

Exhibit A.11
Remote Monitoring

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Purchase and Installation of Remote Monitoring Device	5	4	5	14	0	0	0	0	0	0	0	0	0	\$0	\$62,000	\$0		-	\$868,000
Other Direct Costs	5	4	5	14	0	0	0	0	0	0	0	0	0	\$0	\$1,100			-	\$15,400
Totals				14									-	\$0	\$62,000	\$1,100	\$63,100	-	\$883,400

Total Burden and Costs for All NPDES Application Activities

																	Total Burden (hrs.)	Total Initial Cost
Totals																43,944	\$5,028,380	

* 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)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27						
	A	Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)			
Perform Statistical Analysis	4	1	2	7	20	20	10	10	20	0	1	81	\$6,967			567	\$48,767
Submit Monitoring Results & Study Analysis	4	1	2	7	0	0	0	0	0	0	4	4	\$107			28	\$748
Record Keeping	4	1	2	7	1	2	0	0	0	0	4	7	\$306			49	\$2,145
Totals				7	21	22	10	10	20	0	9	92	\$7,380	\$575	\$7,955	644	\$55,684

Exhibit A.2b

Estuary Verification Study (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27						
	A	Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)			
Perform Statistical Analysis	0	0	1	1	25	30	15	15	25	0	1	111	\$9,436			111	\$9,436
Submit Monitoring Results & Study Analysis	0	0	1	1	0	0	0	0	0	0	4	4	\$107			4	\$107
Record Keeping	0	0	1	1	1	2	0	0	0	0	4	7	\$306			7	\$306
Totals				1	26	32	15	15	25	0	9	122	\$9,849	\$575	\$10,424	122	\$10,424

Exhibit A.2c.1

Initial Biological Monitoring for Impingement (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27						
	A	Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)			
Monthly Sample Collection	11	10	10	31	2	0	4	72	0	72	0	150	\$9,181			4,650	\$284,617
Onsite Analysis of Samples	11	10	10	31	4	0	12	72	0	72	0	160	\$10,476			4,960	\$324,756
Perform Statistical Analysis	11	10	10	31	8	4	0	0	32	0	0	44	\$3,951			1,364	\$122,475
Record Keeping	11	10	10	31	2	1	1	4	1	0	16	25	\$1,194			775	\$37,017
Totals				31	16	5	17	148	33	144	16	379	\$24,802	\$575	\$25,377	11,749	\$786,690

Exhibit A.2c.2

Reduced Biological Monitoring for Impingement (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27						
	A	Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)			
Reduced Sample Collection	62	68	73	203	1	0	2	36	0	36	0	75	\$4,591			15,225	\$931,892
Onsite Analysis of Samples	62	68	73	203	2	0	6	36	0	36	0	80	\$5,238			16,240	\$1,063,314
Perform Statistical Analysis	62	68	73	203	4	2	0	0	16	0	0	22	\$1,975			4,466	\$401,006
Record Keeping	62	68	73	203	1	1	1	2	1	0	8	14	\$732			2,842	\$148,576
Totals				203	8	3	9	74	17	72	8	191	\$12,536	\$288	\$12,823	38,773	\$2,603,150

Exhibit A.2d.1

Initial Biological Monitoring for Impingement (Estuary)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period			
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs
					Level of Effort (hrs)										B	C	D	C+D	A*B
Monthly Sample Collection	1	2	1	4	2	0	5	94	0	94	0	194	\$11,870					778	\$47,479
Handling and Preparation of Samples	1	2	1	4	4	0	16	94	0	94	0	207	\$13,487					827	\$53,948
Perform Statistical Analysis	1	2	1	4	8	4	0	0	42	0	0	54	\$4,819					214	\$19,275
Record Keeping	1	2	1	4	2	1	1	5	1	0	16	27	\$1,345					107	\$5,379
Totals				4	16	5	22	192	43	187	16	482	\$31,520	\$745	\$32,265	1,926	\$129,061		

Exhibit A.2d.2

Reduced Biological Monitoring for Impingement (Estuary)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period			
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs
					Level of Effort (hrs)										B	C	D	C+D	A*B
Reduced Sample Collection	11	11	12	34	1	0	3	47	0	47	0	98	\$6,012					3,332	\$204,408
Handling and Preparation of Samples	11	11	12	34	2	0	8	47	0	47	0	104	\$6,794					3,536	\$230,989
Perform Statistical Analysis	11	11	12	34	4	2	0	0	21	0	0	27	\$2,427					918	\$82,532
Record Keeping	11	11	12	34	1	1	1	3	1	0	8	15	\$801					510	\$27,244
Totals				34	8	3	12	97	22	94	8	244	\$16,035	\$373	\$16,407	8,296	\$557,838		

Exhibit A.2e.1

Initial Biological Monitoring for Entrainment (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period			
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs
					Level of Effort (hrs)										B	C	D	C+D	A*B
Biweekly Sample Collection	11	10	10	31	4	0	12	156	0	156	0	328	\$20,304					10,168	\$629,424
Handling and Preparation of Samples	11	10	10	31	4	0	12	78	0	78	0	172	\$11,178					5,332	\$346,518
Perform Statistical Analysis	11	10	10	31	16	4	0	0	64	0	0	84	\$7,722					2,604	\$239,382
Recordkeeping	11	10	10	31	2	1	1	8	2	0	16	30	\$1,562					930	\$48,425
Totals				31	26	5	25	242	66	234	16	614	\$40,766	\$1,150	\$41,916	19,034	\$1,299,399		

Exhibit A.2e.2

Reduced Biological Monitoring for Entrainment (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period			
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs
					Level of Effort (hrs)										B	C	D	C+D	A*B
Reduced Sample Collection	62	68	73	203	2	0	6	78	0	78	0	164	\$10,152					33,292	\$2,060,856
Handling and Preparation of Samples	62	68	73	203	2	0	6	39	0	39	0	86	\$5,589					17,458	\$1,134,567
Perform Statistical Analysis	62	68	73	203	8	2	0	0	32	0	0	42	\$3,861					8,526	\$783,783
Recordkeeping	62	68	73	203	1	1	1	4	1	0	8	16	\$871					3,248	\$176,752
Totals				203	13	3	13	121	33	117	8	308	\$20,473	\$575	\$21,048	62,524	\$4,272,683		

Exhibit A.2f.1

Initial Biological Monitoring for Entrainment (Estuary)

Activity	Facilities (Respondents)			Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period		
				Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*
				Level of Effort (hrs)								B	C	D	C+D	A*B	A*(C+D)
	A																
Biweekly Sample Collection	1	2	1	4	4	0	12	203	0	203	0	422	\$25,803			1,688	\$103,212
Handling and Preparation of Samples	1	2	1	4	4	0	12	101	0	101	0	218	\$13,869			872	\$55,476
Perform Statistical Analysis	1	2	1	4	16	4	0	0	83	0	0	103	\$9,440			412	\$37,758
Recordkeeping	1	2	1	4	2	1	1	10	3	0	16	33	\$1,791			132	\$7,165
Totals				4	26	5	25	314	86	304	16	776	\$50,903	\$1,320	\$52,223	3,104	\$208,892

Exhibit A.2f.2

Reduced Biological Monitoring for Entrainment (Estuary)

Activity	Facilities (Respondents)			Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period		
				Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*
				Level of Effort (hrs)								B	C	D	C+D	A*B	A*(C+D)
	A																
Reduced Sample Collection	11	11	12	34	2	0	6	102	0	102	0	212	\$12,960			7,208	\$440,640
Handling and Preparation of Samples	11	11	12	34	2	0	6	51	0	51	0	110	\$6,993			3,740	\$237,762
Perform Statistical Analysis	11	11	12	34	8	2	0	0	42	0	0	52	\$4,765			1,768	\$162,010
Recordkeeping	11	11	12	34	1	1	1	5	2	0	8	18	\$1,031			612	\$35,037
Totals				34	13	3	13	158	44	153	8	392	\$25,749	\$660	\$26,409	13,328	\$897,889

Exhibit A.2g

Velocity Monitoring

Activity	Facilities (Respondents)			Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period		
				Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*
				Level of Effort (hrs)								B	C	D	C+D	A*B	A*(C+D)
	A																
Monitor Average Through Technology	85	91	96	272	2	100	0	0	0	0	0	102	\$4,710			27,744	\$1,281,011
Analyze Data	85	91	96	272	4	40	0	0	0	0	0	44	\$2,235			11,968	\$607,974
Recordkeeping	85	91	96	272	1	8	0	0	0	0	0	17	\$683			4,624	\$185,667
Totals				272	7	148	0	0	0	0	8	163	\$7,627	\$115	\$7,742	44,336	\$2,105,933

Exhibit A.2h

Inspection of Installed Technologies

Activity	Facilities (Respondents)			Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period		
				Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*
				Level of Effort (hrs)								B	C	D	C+D	A*B	A*(C+D)
	A																
Visually Inspect All Installed Technologies	31	32	33	96	24	208	0	0	0	0	0	232	\$11,974			22,272	\$1,149,542
Recordkeeping	31	32	33	96	3	16	0	0	0	0	2	21	\$1,101			2,016	\$105,715
Totals				96	27	224	0	0	0	0	2	253	\$13,076	\$115	\$13,191	24,288	\$1,266,298

Exhibit A.2i

Yearly Status Report Activities

Activity	Facilities (Respondents)			Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period				Total for All Facilities in the ICR Approval Period		
				Year 1	Year 2	Year 3	Total	\$110	\$45	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	ODCs lump sum*
				Level of Effort (hrs)								B	C	D	C+D	A*B	A*(C+D)
	A																
Report on Inspection and Maintenance	85	91	96	272	16	16	0	0	0	0	0	32	\$2,475			8,704	\$673,254
Detail Velocity Monitoring Results	85	91	96	272	8	16	0	0	0	0	0	24	\$1,597			6,528	\$434,330
Detail Biological Monitoring Results	85	91	96	272	24	32	4	4	24	0	0	88	\$7,057			23,936	\$1,919,450
Compile and Submit Report	85	91	96	272	80	80	0	0	0	0	16	176	\$12,803			47,872	\$3,482,470
Recordkeeping	85	91	96	272	8	12	0	0	0	0	8	28	\$1,631			7,616	\$443,578
Totals				272	136	156	4	4	24	0	24	348	\$25,563	\$860	\$26,423	94,656	\$7,187,002

Total Burden and Cost for All Annual Activities

				Burden Per Facility	Cost per Facility	ODCs lump sum*	Total Cost per Facility	Total Burden (hrs.)	Total Annual Cost
Track 1 Freshwater				1,757	111,834	2,815	114,649		
Track 1 Freshwater - Reduced				1,263	79,274	1,953	81,227		
Track 1 Estuary				2,022	128,689	3,155	131,844		
Track 1 Estuary - Reduced				1,400	88,049	2,123	90,171		
Track 2 Freshwater				1,849	119,214	3,390	122,604		
Track 2 Freshwater - Reduced				1,355	86,654	2,528	89,182		
Track 2 Estuary				2,144	138,538	3,730	142,268		
Track 2 Estuary - Reduced				1,522	97,898	2,698	100,595		
Totals								322,780	21,380,943

Exhibit A.2j

Facility Annual O&M Costs

Activity	Facilities (Responses)			Contracted Laboratory Analysis Cost	Operation and Maintenance Costs	ODCs lump sum*	Cost (\$)
				\$230	\$9,000		
Operation of Remote Sensing Device	54	59	63	176		\$55	\$50,160
Identify & Enumerate Entrained Freshwater Biota	73	78	83	234			\$2,106,000
Identify & Enumerate Entrained Estuary Biota	12	13	13	38	\$11,700		\$444,600
						\$55	\$2,600,760

Total Cost for All NPDES Application Activities

	Total Cost (\$)
Totals	\$23,981,703

Exhibit A.3

Director Burden and Cost Estimates for Activities

Exhibit A.3a

Director Start-up Activities

Activity	12/2011-11/2012	12/2012-11/2013	12/2013-11/2014	Clerical	Burden Per Director	Labor Cost per Director	ODCs lump sum*	Total Cost Per Director	Total Burden (hrs.)	Total Initial Cost						
		Assumed Loaded Hourly Rate \$														
		75	35	29												
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)							
Read and Understand Rule	-	12	12	0	24	\$1,313		-	-	\$0						
Mobilization/Planning	-	24	16	0	40	\$2,348		-	-	\$0						
Training	-	4	32	0	36	\$1,409		-	-	\$0						
Totals	-	40	60	0	100	\$5,070	\$50	\$5,120	-	\$0						

Exhibit A.3a

Director Permit Issuance Activities

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technical	Clerical						
		Assumed Loaded Hourly Rate \$	75	35	29					
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Reviewing CWIS location and design data	18	6	18	0	24	\$1,073		432	\$19,310	
Determine Compliance with Source Waterbody Flow Information	18	2	6	0	8	\$358		144	\$6,437	
Review Source Water Baseline Biological Characterization Data	18	20	20	0	40	\$2,188		720	\$39,384	
Review Design and Construction Technology Plan (Track 1)	14	24	8	0	32	\$2,070		448	\$28,986	
Determine Compliance with CWIS Velocity Requirements (Track 1)	14	2	6	0	8	\$358		112	\$5,006	
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	14	8	8	0	16	\$875		224	\$12,253	
Review Comprehensive Demonstration Study Plan (Track 2)	4	16	16	0	32	\$1,750		128	\$7,002	
Review Source Water Baseline Biological Characterization Study (Track 2)	3	400	50	0	450	\$31,615		1,350	\$94,845	
Review Evaluation of Potential CWIS Effects (Track 2)	3	16	16	0	32	\$1,750		96	\$5,251	
Determine Monitoring Frequency	17	2	6	0	8	\$358		136	\$6,079	
Determine Record keeping and Reporting Frequency	17	2	6	0	8	\$358		136	\$6,079	
Considering Public Comments	17	16	16	0	32	\$1,750		544	\$29,757	
Issuing Permit	17	1	6	1	8	\$312		136	\$5,301	
Permit Record keeping	17	1	1	2	4	\$167		68	\$2,842	
Totals	18	516	183	3	702	\$44,982	\$345	\$45,327	4,674	\$274,742
Track 1 Totals					188	\$9,866	\$345	\$10,211		
Track 2 Totals					646	\$41,679	\$345	\$42,024		

Exhibit A.3b
Verification Study Review

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost
		Technical	Technical	Clerical						
		Assumed Loaded Hourly Rate \$	75	35						
Review of Verification Studies	8	2	4	0	6	\$288		48	\$2,306	
Permit Modification due to Unfavorable Results	8	4	10	0	14	\$646		112	\$5,166	
Record Keeping	8	0	0	1	1	\$29		8	\$231	
Totals	8	6	14	1	21	\$963	\$55	\$1,018	168	\$8,000

Exhibit A.3c
Annual Director Activities

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit	Total Burden (hrs.)	Total Annual Cost
		Technical	Technical	Clerical						
		Assumed Loaded Hourly Rate \$	75	35						
Review of Yearly Report	272	6	12	0	18	\$865		4,896	\$235,171	
Compliance Tracking	272	4	12	0	16	\$715		4,352	\$194,534	
Determination on Monitoring Scope Reduction	272	4	8	0	12	\$576		3,264	\$156,781	
Record Keeping	272	1	2	1	4	\$173		1,088	\$47,056	
Totals	272	15	34	1	50	\$2,329	\$55	\$2,384	13,600	\$649,000

Total Burden and Cost for All Director Activities

									Total Burden (hrs.)	Total Initial Cost
									18,274	\$931,742

Exhibit A.4
Federal Burden and Cost Estimates for Activities

Exhibit A.4a
Federal Permit Program Oversight Activities

Activity	Federal (Responses) Over Three Years	Senior Technical			Junior Technical			Clerical			Burden per permit Review	Labor Cost per Permit Review	ODCs lump sum*	Total Cost per Permit Review	Total Burden (hrs.)	Total Initial Cost *						
		Assumed Loaded Hourly Rate \$																				
		75	35	29	Level of Effort (hrs)			B	C	D												
A																						
Reviewing CWIS location and design data	18	1	2	0	3	\$144						54	\$2,594									
Determine Compliance with Source Waterbody Flow Information	18	1	3	0	4	\$179						72	\$3,218									
Review Source Water Baseline Biological Characterization Data	18	1	2	0	3	\$144						54	\$2,594									
Review Design and Construction Technology Plan (Track 1)	14	1	3	0	4	\$179						56	\$2,503									
Determine Compliance with CWIS Velocity Requirements (Track 1)	14	1	2	0	3	\$144						42	\$2,017									
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	14	1	2	0	3	\$144						42	\$2,017									
Review Comprehensive Demonstration Study Plan (Track 2)	4	1	2	0	3	\$144						12	\$576									
Review Source Water Baseline Biological Characterization Study (Track 2)	3	6	12	0	18	\$865						54	\$2,594									
Review Evaluation of Potential CWIS Effects (Track 2)	3	1	2	0	3	\$144						9	\$432									
Determine Monitoring Frequency	17	1	3	0	4	\$179						68	\$3,040									
Permit Record Keeping	17	1	1	2	4	\$167						68	\$2,842									
Totals	18	16	34	2	30	1,184	\$55	\$1,239	531	\$25,364												
Track 1 Totals					28	\$1,280	\$55	\$1,335														
Track 2 Totals					42	\$1,966	\$55	\$2,021														

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

Facilities [1]

	Year 1	Year 2	Year 3	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Initial NPDES Permit Application Activities				
Start-up Activities	6	6	6	6
Permit Application Activities	6	6	6	6
Source Waterbody Flow Information	6	6	6	6
Use Existing Data- Source Water Baseline Biological Characterization Data	6	6	6	6
CWIS Flow Reduction Requirements (Track 1)	5	4	5	5
CWIS Velocity Requirements (Track 1)	5	4	5	5
Design and Construction Technology Plan (Track 1)	5	4	5	5
Comprehensive Demonstration Study Plan (Track 2)	1	2	1	1
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	2	2	2	2
Estuary Source Water Baseline Biological Characterization Study (Track 2)	0	1	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	1	2	1	1
Submit Characterization Study (Track 2)	1	1	1	1
Freshwater Evaluation of Potential CWIS Effects (Track 2)	1	1	1	1
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	0	0	0
Verification Monitoring Plan (Track 2)	1	2	1	1
NPDES Repermitting Activities				
Start-up Activities	9	13	20	14
Permit Application Activities	9	13	20	14
Source Waterbody Flow Information	9	13	20	14
Source Water Baseline Biological Characterization Data	9	13	20	14
CWIS Flow Reduction Requirements (Track 1)	6	8	9	8
CWIS Velocity Requirements (Track 1)	6	8	9	8
Design and Construction Technology Plan (Track 1)	6	8	9	8
Comprehensive Demonstration Study Plan (Track 2)	3	5	11	6
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	5	5	13	8
Estuary Source Water Baseline Biological Characterization Study (Track 2)	3	4	5	4
Profile of Source Water Biota for Characterization Study (Track 2)	3	5	11	6
Submit Characterization Study (Track 2)	4	2	6	4
Annual				
Freshwater Verification Study (Track 2)	4	1	2	2
Estuary Verification Study (Track 2)	0	0	1	0
Initial Biological Monitoring for Impingement (Freshwater)	11	10	10	10
Reduced Biological Monitoring for Impingement (Freshwater)	62	68	73	68
Initial Biological Monitoring for Impingement (Estuary)	1	2	1	1
Reduced Biological Monitoring for Impingement (Estuary)	11	11	12	11
Initial Biological Monitoring for Entrainment (Freshwater)	11	10	10	10
Reduced Biological Monitoring for Entrainment (Freshwater)	62	68	73	68
Initial Biological Monitoring for Entrainment (Estuary)	1	2	1	1
Reduced Biological Monitoring for Entrainment (Estuary)	11	11	12	11
Velocity Monitoring	85	91	96	91
Visual Inspection of Installed Technologies	31	32	33	32
Yearly Status Report Activities	85	91	96	91
Respondents	92	98	104	98

Directors [2]

	Year 1	Year 2	Year 3	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Director Permit Issuance Activities				
Reviewing Facility General Permit Application Information	6	6	6	6
Review Source Water Baseline Biological Characterization Data	6	6	6	6
Determine Compliance with Source Waterbody Flow Information	6	6	6	6
Review Design and Construction Technology Plan (Track 1)	5	4	5	5
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	4	5	5
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	4	5	5
Review Comprehensive Demonstration Study Plan (Track 2)	1	2	1	1
Review Source Water Baseline Biological Characterization Study (Track 2)	1	1	1	1
Review Evaluation of Potential CWIS Effects (Track 2)	1	1	1	1
Determining Facility Requirements and Issuing Permit	6	5	6	6
Verification Study Review	4	1	3	3
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	9	13	20	14
Review Source Water Baseline Biological Characterization Data	9	13	20	14
Determine Compliance with Source Waterbody Flow Information	9	13	20	14
Review Design and Construction Technology Plan (Track 1)	6	8	9	8
Determine Compliance with CWIS Velocity Requirements (Track 1)	6	8	9	8
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	6	8	9	8
Review Comprehensive Demonstration Study Plan (Track 2)	3	5	11	6
Review Source Water Baseline Biological Characterization Study (Track 2)	4	2	6	4
Determining Facility Requirements and Issuing Permit	6	13	17	12
Annual Director Activities				
Review of Yearly Report	85	91	96	91
Compliance Tracking	85	91	96	91
Determination on Monitoring Scope Reduction	85	91	96	91
Record Keeping	85	91	96	91
Respondents	92	98	104	98

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Facilities	92	98	104	98
Directors	92	98	104	98
Yearly Total*	184	196	208	196

[1] 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.

[2] Each Director is one respondent.

* 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	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Initial Permitting				
Start-up Activities	6	6	6	6
Permit Application Activities	6	6	6	6
Source Waterbody Flow Information	6	6	6	6
Use Existing Data- Source Water Baseline Biological Characterization Data	6	6	6	6
CWIS Flow Reduction Requirements (Track 1)	5	4	5	5
CWIS Velocity Requirements (Track 1)	5	4	5	5
Design and Construction Technology Plan (Track 1)	5	4	5	5
Comprehensive Demonstration Study Plan (Track 2)	1	2	1	1
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	2	2	2	2
Estuary Source Water Baseline Biological Characterization Study (Track 2)	0	1	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	1	2	1	1
Submit Characterization Study (Track 2)	1	1	1	1
Freshwater Evaluation of Potential CWIS Effects (Track 2)	1	1	1	1
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	0	0	0
Verification Monitoring Plan (Track 2)	1	2	1	1
NPDES Repermitting Activities	0	0	0	0
Start-up Activities	9	13	20	14
Permit Application Activities	9	13	20	14
Source Waterbody Flow Information	9	13	20	14
Source Water Baseline Biological Characterization Data	9	13	20	14
CWIS Flow Reduction Requirements (Track 1)	6	8	9	8
CWIS Velocity Requirements (Track 1)	6	8	9	8
Design and Construction Technology Plan (Track 1)	6	8	9	8
Comprehensive Demonstration Study Plan (Track 2)	3	5	11	6
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	5	5	13	8
Estuary Source Water Baseline Biological Characterization Study (Track 2)	3	4	5	4
Profile of Source Water Biota for Characterization Study (Track 2)	3	5	11	6
Submit Characterization Study (Track 2)	4	2	6	4
Annual	0	0	0	0
Freshwater Verification Study (Track 2)	4	1	2	2
Estuary Verification Study (Track 2)	0	0	1	0
Initial Biological Monitoring for Impingement (Freshwater)	11	10	10	10
Reduced Biological Monitoring for Impingement (Freshwater)	62	68	73	68
Initial Biological Monitoring for Impingement (Estuary)	1	2	1	1
Reduced Biological Monitoring for Impingement (Estuary)	11	11	12	11
Initial Biological Monitoring for Entrainment (Freshwater)	11	10	10	10
Reduced Biological Monitoring for Entrainment (Freshwater)	62	68	73	68
Initial Biological Monitoring for Entrainment (Estuary)	1	2	1	1
Reduced Biological Monitoring for Entrainment (Estuary)	11	11	12	11
Velocity Monitoring	85	91	96	91
Visual Inspection of Installed Technologies	31	32	33	32
Yearly Status Report Activities	85	91	96	91
Responses	493	541	620	551

Directors

	Year 1	Year 2	Year 3	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Director Permit Issuance Activities				
Reviewing Facility General Permit Application Information	6	6	6	6
Review Source Water Baseline Biological Characterization Data	6	6	6	6
Determine Compliance with Source Waterbody Flow Information	6	6	6	6
Review Design and Construction Technology Plan (Track 1)	5	4	5	5
Determine Compliance with CWIS Velocity Requirements (Track 1)	5	4	5	5
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	5	4	5	5
Review Comprehensive Demonstration Study Plan (Track 2)	1	2	1	1
Review Source Water Baseline Biological Characterization Study (Track 2)	1	1	1	1
Review Evaluation of Potential CWIS Effects (Track 2)	1	1	1	1
Determining Facility Requirements and Issuing Permit	6	5	6	6
Verification Study Review	4	1	3	3
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	9	13	20	14
Review Source Water Baseline Biological Characterization Data	9	13	20	14
Determine Compliance with Source Waterbody Flow Information	9	13	20	14
Review Design and Construction Technology Plan (Track 1)	6	8	9	8
Determine Compliance with CWIS Velocity Requirements (Track 1)	6	8	9	8
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	6	8	9	8
Review Comprehensive Demonstration Study Plan (Track 2)	3	5	11	6
Review Source Water Baseline Biological Characterization Study (Track 2)	4	2	6	4
Determining Facility Requirements and Issuing Permit	6	13	17	12
Annual Director Activities				
Review of Yearly Report	85	91	96	91
Compliance Tracking	85	91	96	91
Determination on Monitoring Scope Reduction	85	91	96	91
Record Keeping	85	91	96	91
Responses	444	487	550	494

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	12/2014-11/2015	12/2015-11/2016	12/2016-11/2017	
Facilities	493	541	620	551
Directors	444	487	550	494
Yearly Total*	937	1,028	1,170	1,045

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

Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
NPDES Permit Application Activities					
Start-up Activities	A1a	258	258	258	258
Permit Application Activities	A1b	876	876	876	876
Source Waterbody Flow Information	A1c	624	624	624	624
Use Existing Data- Source Water Baseline Biological Characterization Data	A1d	1,590	1,590	1,590	1,590
CWIS Flow Reduction Requirements (Track 1)	A1e	540	432	540	504
CWIS Velocity Requirements (Track 1)	A1f	690	552	690	644
Design and Construction Technology Plan (Track 1)	A1g	540	432	540	504
Comprehensive Demonstration Study Plan (Track 2)	A1h	271	542	271	361
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A1i	4,439	4,439	4,439	4,439
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A1i	0	2,870	2,870	1,914
Profile of Source Water Biota for Characterization Study (Track 2)	A1i	373	746	373	497
Submit Characterization Study (Track 2)	A1i	384	384	384	384
Freshwater Evaluation of Potential CWIS Effects (Track 2)	A1j	1,626	1,626	1,626	1,626
Estuary Evaluation of Potential CWIS Effects (Track 2)	A1j	0	0	0	0
Verification Monitoring Plan (Track 2)	A1k	128	256	128	171
NPDES Permit Application Activity Total		12,211	15,371	15,081	14,221
NPDES Repermitting Activities					
Start-up Activities	A12a	117	169	260	182
Permit Application Activities	A12b	648	936	1,440	1,008
Source Waterbody Flow Information	A12c	279	403	620	434
Source Water Baseline Biological Characterization Data	A12d	711	1,027	1,580	1,106
CWIS Flow Reduction Requirements (Track 1)	A12e	648	864	972	828
CWIS Velocity Requirements (Track 1)	A12f	450	600	675	575
Design and Construction Technology Plan (Track 1)	A12g	258	344	387	330
Comprehensive Demonstration Study Plan (Track 2)	A12h	240	400	880	507
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A12i	6,450	6,450	16,770	9,890
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A12i	5,040	6,720	8,400	6,720
Profile of Source Water Biota for Characterization Study (Track 2)	A12i	339	565	1,243	716
Submit Characterization Study (Track 2)	A12i	460	230	690	460
NPDES Repermitting Activity Total		15,640	18,708	33,917	22,755
Annual Activities					
Freshwater Verification Study (Track 2)	A2a	368	92	184	215
Estuary Verification Study (Track 2)	A2b	0	0	122	41
Initial Biological Monitoring for Impingement (Freshwater)	A2c1	4,169	3,790	3,790	3,916
Reduced Biological Monitoring for Impingement (Freshwater)	A2c2	11,842	12,988	13,943	12,924
Initial Biological Monitoring for Impingement (Estuary)	A2d1	482	963	482	642
Reduced Biological Monitoring for Impingement (Estuary)	A2d2	2,684	2,684	2,928	2,765
Initial Biological Monitoring for Entrainment (Freshwater)	A2e1	6,754	6,140	6,140	6,345
Reduced Biological Monitoring for Entrainment (Freshwater)	A2e2	19,096	20,944	22,484	20,841
Initial Biological Monitoring for Entrainment (Estuary)	A2f1	776	1,552	776	1,035
Reduced Biological Monitoring for Entrainment (Estuary)	A2f2	4,312	4,312	4,704	4,443
Velocity Monitoring	A2g	13,855	14,833	15,648	14,779
Visual Inspection of Installed Technologies	A2h	7,843	8,096	8,349	8,096
Yearly Status Report Activities	A2i	29,580	31,668	33,408	31,552
Annual Activity Yearly Labor Total		101,761	108,062	112,958	107,593
Yearly Labor Total		129,612	142,142	161,956	144,570

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

Director Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Director Permit Issuance Activities	A3a	1,586	1,502	1,586	1,558
Verification Study Review	A3b	84	21	63	56
Director Permit Reissuance Activities	A13	803	870	1,542	1,072
Annual Director Activities	A3c	4,250	4,550	4,800	4,533
Yearly Total		6,723	6,943	7,991	7,219

Federal Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Federal Permit Program Oversight Activities	A4a	182	167	182	177
Yearly Total		182	167	182	177

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

Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
NPDES Permit Application Activities					
Start-up Activities	A1a	\$18,266	\$18,266	\$18,266	\$18,266
Permit Application Activities	A1b	\$46,466	\$46,466	\$46,466	\$46,466
Source Waterbody Flow Information	A1c	\$28,512	\$28,512	\$28,512	\$28,512
Use Existing Data- Source Water Baseline Biological Characterization Data	A1d	\$96,977	\$96,977	\$96,977	\$96,977
CWIS Flow Reduction Requirements (Track 1)	A1e	\$26,787	\$21,430	\$26,787	\$25,001
CWIS Velocity Requirements (Track 1)	A1f	\$38,532	\$30,826	\$38,532	\$35,963
Design and Construction Technology Plan (Track 1)	A1g	\$31,143	\$24,914	\$31,143	\$29,066
Comprehensive Demonstration Study Plan (Track 2)	A1h	\$17,446	\$34,892	\$17,446	\$23,262
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A1i	\$269,446	\$269,446	\$269,446	\$269,446
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A1i	\$0	\$172,209	\$172,209	\$114,806
Profile of Source Water Biota for Characterization Study (Track 2)	A1i	\$31,019	\$62,037	\$31,019	\$41,358
Submit Characterization Study (Track 2)	A1i	\$25,662	\$25,662	\$25,662	\$25,662
Freshwater Evaluation of Potential CWIS Effects (Track 2)	A1j	\$113,215	\$113,215	\$113,215	\$113,215
Estuary Evaluation of Potential CWIS Effects (Track 2)	A1j	\$0	\$0	\$0	\$0
Verification Monitoring Plan (Track 2)	A1k	\$8,433	\$16,865	\$8,433	\$11,243
NPDES Permit Application Activity Total		\$751,903	\$961,718	\$924,112	\$879,244
NPDES Repermitting Activities					
Start-up Activities	A12a	\$8,758	\$12,650	\$19,462	\$13,623
Permit Application Activities	A12b	\$36,783	\$53,131	\$81,740	\$57,218
Source Waterbody Flow Information	A12c	\$12,549	\$18,126	\$27,886	\$19,520
Source Water Baseline Biological Characterization Data	A12d	\$44,044	\$63,619	\$97,876	\$68,513
CWIS Flow Reduction Requirements (Track 1)	A12e	\$32,144	\$42,859	\$48,217	\$41,073
CWIS Velocity Requirements (Track 1)	A12f	\$24,736	\$32,981	\$37,103	\$31,607
Design and Construction Technology Plan (Track 1)	A12g	\$14,786	\$19,714	\$22,179	\$18,893
Comprehensive Demonstration Study Plan (Track 2)	A12h	\$15,263	\$25,438	\$55,963	\$32,221
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A12i	\$384,669	\$384,669	\$1,000,138	\$589,825
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A12i	\$298,709	\$398,279	\$497,849	\$398,279
Profile of Source Water Biota for Characterization Study (Track 2)	A12i	\$28,448	\$47,414	\$104,310	\$60,057
Submit Characterization Study (Track 2)	A12i	\$30,967	\$15,483	\$46,450	\$30,967
NPDES Repermitting Activity Total		\$931,855	\$1,114,363	\$2,039,172	\$1,361,796
Annual Activities					
Freshwater Verification Study (Track 2)	A2a	\$29,520	\$7,380	\$14,760	\$17,220
Estuary Verification Study (Track 2)	A2b	\$0	\$0	\$9,849	\$3,283
Initial Biological Monitoring for Impingement (Freshwater)	A2c1	\$272,823	\$248,021	\$248,021	\$256,288
Reduced Biological Monitoring for Impingement (Freshwater)	A2c2	\$777,226	\$852,441	\$915,121	\$848,263
Initial Biological Monitoring for Impingement (Estuary)	A2d1	\$31,520	\$63,040	\$31,520	\$42,027
Reduced Biological Monitoring for Impingement (Estuary)	A2d2	\$176,380	\$176,380	\$192,414	\$181,724
Initial Biological Monitoring for Entrainment (Freshwater)	A2e1	\$448,427	\$407,661	\$407,661	\$421,250
Reduced Biological Monitoring for Entrainment (Freshwater)	A2e2	\$1,269,307	\$1,392,144	\$1,494,507	\$1,385,319
Initial Biological Monitoring for Entrainment (Estuary)	A2f1	\$50,903	\$101,806	\$50,903	\$67,871
Reduced Biological Monitoring for Entrainment (Estuary)	A2f2	\$283,234	\$283,234	\$308,982	\$291,816
Velocity Monitoring	A2g	\$648,329	\$694,093	\$732,230	\$691,551
Visual Inspection of Installed Technologies	A2h	\$405,344	\$418,419	\$431,495	\$418,419
Yearly Status Report Activities	A2i	\$2,172,838	\$2,326,215	\$2,454,029	\$2,317,694
Annual Activity Yearly Labor Total		\$6,565,850	\$6,970,833	\$7,291,492	\$6,942,725
Yearly Labor Total		\$8,249,608	\$9,046,914	\$10,254,776	\$9,183,766

Facility O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
NPDES Application					
Purchase and Installation of Remote Monitoring Device	A.1k	\$310,000	\$248,000	\$310,000	\$289,333
Purchase & Installation of Pilot Study Technology	A.1j	\$303,000	\$303,000	\$303,000	\$303,000
Operation & Maintenance of Pilot Technology	A.1j	\$34,500	\$34,500	\$34,500	\$34,500
Biological Study Laboratory Analysis (Freshwater)	A.1i	\$89,600	\$89,600	\$89,600	\$89,600
Biological Study Laboratory Analysis (Estuary)	A.1i	\$0	\$58,267	\$58,267	\$38,844
Pilot Study Entrainment Laboratory Analysis (Freshwater)	A.1j	\$6,900	\$6,900	\$6,900	\$6,900
Pilot Study Entrainment Laboratory Analysis (Estuary)	A.1j	\$0	\$0	\$0	\$0
Other Direct Costs	A.1a-k	\$31,875	\$35,397	\$36,842	\$34,704
Repermitting					
Biological Study Laboratory Analysis (Freshwater)	A.12i	\$134,500	\$134,500	\$349,700	\$206,233
Biological Study Laboratory Analysis (Estuary)	A.12i	\$104,900	\$139,867	\$174,833	\$139,867
Other Direct Costs	A.12a-i	\$45,015	\$59,485	\$94,945	\$66,482
Annual					
Operation of Remote Sensing Device	A.2f	\$12,420	\$13,570	\$14,490	\$13,493
Identify & Enumerate Entrained Freshwater Biota	A.2f	\$657,000	\$702,000	\$747,000	\$702,000
Identify & Enumerate Entrained Estuary Biota	A.2f	\$140,400	\$152,100	\$152,100	\$148,200
Other Direct Costs	A.2a-f	\$177,583	\$187,613	\$197,253	\$187,483
Equipment Capital Cost Subtotal		\$625,420	\$564,570	\$627,490	\$605,827
Equipment O&M Cost Subtotal		\$34,500	\$34,500	\$34,500	\$34,500
Laboratory Analysis Subtotal		\$1,133,300	\$1,283,233	\$1,578,400	\$1,331,644
Other Direct Costs Subtotal		\$254,473	\$282,494	\$329,039	\$288,669
Yearly O&M Total		\$2,047,693	\$2,164,798	\$2,569,429	\$2,260,640

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

Director Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Director Permit Issuance Activities	A3a	\$91,010	\$86,512	\$91,010	\$89,511
Verification Study Review	A3b	\$3,852	\$963	\$2,889	\$2,568
Director Permit Reissuance Activities	A13	\$48,577	\$49,142	\$90,402	\$62,707
Annual Director Activities	A3c	\$197,982	\$211,957	\$223,603	\$211,181
Yearly Total		\$341,420	\$348,574	\$407,904	\$365,966

Director O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Start-Up & NPDES Application					
Annual	Other Direct Costs	A3a-b	\$2,290	\$1,780	\$2,235
Annual	Other Direct Costs	A3c	\$4,675	\$5,005	\$5,280
Yearly O&M Cost Total		\$6,965	\$6,785	\$7,515	\$7,088

Federal Labor Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Federal Permit Program Oversight Activities	A4b	8,366	7,697	8,366	\$8,143
Yearly Total		\$8,366	\$7,697	\$8,366	\$8,143

Federal O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017	
Federal Permit Program Oversight ODCs	A4a	\$330	\$275	\$330	\$312
Yearly Total		\$330	\$275	\$330	\$312

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

Facilities

	Source (Exhibit)*	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017		
Burden (hours)	A7	129,612	142,142	161,956	144,570	433,709
Respondents (number)	A5	92	98	104	98	104
Responses (number)	A6	493	541	620	551	1,654
Costs (labor)	A9	\$8,249,608	\$9,046,914	\$10,254,776	\$9,183,766	\$27,551,297
Costs (capital)	A9	\$625,420	\$564,570	\$627,490	\$605,827	\$1,817,480
Costs (equipment O&M)	A9	\$34,500	\$34,500	\$34,500	\$34,500	\$103,500
Costs (lab analysis)	A9	\$1,133,300	\$1,283,233	\$1,578,400	\$1,331,644	\$3,994,933
Costs (other direct costs)	A9	\$254,473	\$282,494	\$329,039	\$288,669	\$866,006
Total Costs		\$10,297,300	\$11,211,711	\$12,824,205	\$11,444,405	\$34,333,216

Non-labor Total \$2,260,640

Directors

	Source (Exhibit)*	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017		
Burden (hours)	A8	6,723	6,943	7,991	7,219	21,657
Respondents (number)	A5	47	47	47	47	47
Responses (number)	A6	444	487	550	494	1,481
Costs(labor)	A10	\$341,420	\$348,574	\$407,904	\$365,966	\$1,097,898
Costs (other direct costs)	A10	\$6,965	\$6,785	\$7,515	\$7,088	\$21,265
Total Costs		\$348,385	\$355,359	\$415,419	\$373,054	\$1,119,163

Federal Government

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		12/2014- 11/2015	12/2015- 11/2016	12/2016- 11/2017		
Burden (hours)	A8	182	167	182	177	531
Costs(labor)	A10	\$8,366	\$7,697	\$8,366	\$8,143	\$24,429
Costs (O&M)	A10	\$330	\$275	\$330	\$312	\$935
Total Costs		\$8,696	\$7,972	\$8,696	\$8,455	\$25,364

Totals for Respondents (Facilities and Directors)*

		Annual Average	Three Year Total
Total Respondent Burden (hours)		151,789	455,366
Total Respondents (number)		145	151
Total Respondent Labor Costs		\$9,549,732	\$28,649,195
Total Respondent Capital and O&M Cost	-	\$2,267,728	\$6,699,684
Total Respondent Cost for All Activities		\$11,817,460	\$35,452,380

* 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

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A	Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)				
Read and Understand Rule	9	13	20	42	4	4	0	0	0	0	0	0	8	\$619	\$0	\$0		336	\$25,990
Mobilization/Planning	9	13	20	42	1	2	0	0	0	0	0	0	3	\$200	\$0	\$0		126	\$8,383
Training	9	13	20	42	1	1	0	0	0	0	0	0	2	\$155	\$0	\$0		84	\$6,497
Other Direct Costs	9	13	20	42	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55		-	\$2,310
Totals	9	13	20	42									13	\$973	\$0	\$55	\$1,028	546	\$43,180

Exhibit A.12b
Permit Application Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A	Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)				
Detailed Source Water Body Characterization	9	13	20	42	1	5	12	0	0	0	0	0	18	\$836	\$0	\$0		756	\$35,108
Description of CWIS Configuration and Location	9	13	20	42	0	1	1	0	0	0	0	0	2	\$87	\$0	\$0		84	\$3,641
Facility Water Balance Diagram	9	13	20	42	1	1	1	0	0	0	0	0	3	\$197	\$0	\$0		126	\$8,253
Operational Characteristics Narrative	9	13	20	42	12	30	0	0	0	0	0	0	42	\$2,665	\$0	\$0		1,764	\$111,913
Submit Materials for Review by State	9	13	20	42	0	0	0	0	0	0	0	3	3	\$80	\$0	\$0		126	\$3,364
Recordkeeping	9	13	20	42	1	1	1	0	0	0	0	1	4	\$223	\$0	\$0		168	\$9,374
Other Direct Costs	9	13	20	42	0	0	0	0	0	0	0	0	0	\$0	\$0	\$575		-	\$24,150
Totals	9	13	20	42									72	\$4,087	\$0	\$575	\$4,662	3,024	\$195,804

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

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**			
	Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	B	C	D	E	C+D+E	A*B	A*(C+D+E)
	A	Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D+E)				
Gather Information Characterizing Flow	9	13	20	42	0	10	0	0	0	0	0	0	10	\$449	\$0	\$0		420	\$18,858
Perform Engineering Calculations	9	13	20	42	2	10	0	0	0	0	0	0	12	\$669	\$0	\$0		504	\$28,081
Submit Data and Analysis for Review	9	13	20	42	0	0	0	0	0	0	0	5	5	\$134	\$0	\$0		210	\$5,607
Recordkeeping	9	13	20	42	0	2	0	0	0	0	0	2	4	\$143	\$0	\$0		168	\$6,014
Other Direct Costs	9	13	20	42	0	0	0	0	0	0	0	0	0	\$0	\$0	\$115		-	\$4,830
Totals	9	13	20	42									31	\$1,394	\$0	\$115	\$1,509	1,302	\$63,391

Exhibit A.12d

Source Water Baseline Biological Characterization Data

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost													
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**											
					Assumed Loaded Hourly Rate \$												Level of Effort (hrs)		B		C		D		E		C+D+E		A*B		A*(C+D+E)	
					A												B		C		D		E		C+D+E	A*B	A*(C+D+E)					
Identify Available Data and Document Efforts	9	13	20	42	12	24	0	0	0	0	0	0	0	0	0	0	38	\$2,449	\$0	\$0					1,596	\$102,841						
Compile and Analyze Existing Data	9	13	20	42	10	18	6	0	0	0	0	0	0	0	0	0	35	\$2,184	\$0	\$0					1,470	\$91,715						
Submit Data for Review by State	9	13	20	42	0	0	0	0	0	0	0	0	0	0	0	0	2	\$53	\$0	\$0					84	\$2,243						
Recordkeeping	9	13	20	42	1	1	0	0	0	0	0	0	0	0	0	0	4	\$208	\$0	\$0					168	\$8,740						
Other Direct Costs	9	13	20	42	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$860				-	\$36,120							
Totals	9	13	20	42													79	\$4,894	\$0	\$860	\$5,754	3,318	\$241,660									

Exhibit A.12e

CWIS Flow Reduction Requirements (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost													
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**											
					Assumed Loaded Hourly Rate \$												Level of Effort (hrs)		B		C		D		E		C+D+E		A*B		A*(C+D+E)	
					A												B		C		D		E		C+D+E	A*B	A*(C+D+E)					
Develop Narrative	6	8	9	23	8	16	0	0	0	0	0	0	0	0	0	0	24	\$1,597	\$0	\$0					552	\$36,726						
Perform Engineering Calculations	6	8	9	23	4	12	0	0	0	0	0	0	0	0	0	0	16	\$978	\$0	\$0					368	\$22,494						
Document Minimization of Blow Down and Flows Not	6	8	9	23	0	40	0	0	0	0	0	0	0	0	0	0	6	\$1,956	\$0	\$0					1,058	\$44,993						
Submit Data and Analysis for Review	6	8	9	23	0	0	0	0	0	0	0	0	0	0	0	0	8	\$214	\$0	\$0					184	\$4,913						
Recordkeeping	6	8	9	23	2	4	0	0	0	0	0	0	0	0	0	0	8	\$613	\$0	\$0					322	\$14,094						
Other Direct Costs	6	8	9	23	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$460				-	\$10,580							
Totals	6	8	9	23													108	\$5,357	\$0	\$460	\$5,817	2,484	\$133,800									

Exhibit A.12f

CWIS Velocity Requirements (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost													
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**											
					Assumed Loaded Hourly Rate \$												Level of Effort (hrs)		B		C		D		E		C+D+E		A*B		A*(C+D+E)	
					A												B		C		D		E		C+D+E	A*B	A*(C+D+E)					
Develop Narrative	6	8	9	23	5	10	0	0	0	0	0	0	0	0	0	0	15	\$998	\$0	\$0					345	\$22,954						
Perform Engineering Calculations	6	8	9	23	8	32	0	0	0	0	0	0	0	0	0	0	40	\$2,315	\$0	\$0					920	\$53,250						
Submit Data and Analysis for Review	6	8	9	23	0	0	0	0	0	0	0	0	0	0	0	0	8	\$214	\$0	\$0					184	\$4,913						
Revise Based on State review	6	8	9	23	1	5	0	0	0	0	0	0	0	0	0	0	6	\$334	\$0	\$0					138	\$7,689						
Recordkeeping	6	8	9	23	1	1	0	0	0	0	0	0	0	0	0	0	6	\$262	\$0	\$0					138	\$6,015						
Other Direct Costs	6	8	9	23	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,150				-	\$26,450							
Totals	6	8	9	23													75	\$4,123	\$0	\$1,150	\$5,273	1,725	\$121,270									

Exhibit A.12g

Design and Construction Technology Plan (Track 1)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost	
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs	O&M Costs
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Delineate Hydraulic Zone of Influence	6	8	9	23	1	2	2	0	0	0	0	0	0	5	\$283	\$0	\$0	115	\$6,514	
Develop Narrative Description	6	8	9	23	5	10	0	0	0	0	0	0	0	15	\$998	\$0	\$0	345	\$22,954	
Perform Engineering Calculations	6	8	9	23	3	12	0	0	0	0	0	0	0	15	\$868	\$0	\$0	345	\$19,969	
Submit Data and Analysis for Review	6	8	9	23	0	0	0	0	0	0	0	0	3	3	\$80	\$0	\$0	69	\$1,842	
Recordkeeping	6	8	9	23	1	1	0	0	0	0	0	0	3	5	\$235	\$0	\$0	115	\$5,400	
Other Direct Costs	6	8	9	23	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$55	-	\$1,265	
Totals	6	8	9	23										43	\$2,464	\$0	\$55	\$2,519	989	\$57,944

Exhibit A.12h

Comprehensive Demonstration Study Plan (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost	
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs	O&M Costs
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D+E)	
Description of Historical Studies that will be Used	3	5	11	19	6	12	0	0	0	0	0	0	1	19	\$1,224	\$0	\$0	361	\$23,262	
Description of Proposed and/or Implemented Technologies	3	5	11	19	2	6	0	0	0	0	0	0	0	8	\$489	\$0	\$0	152	\$9,291	
Develop Baseline Biological Characterization Sampling Plan	3	5	11	19	12	18	2	2	0	0	0	0	1	35	\$2,505	\$0	\$0	665	\$47,593	
Submit Data and Plans for Review	3	5	11	19	0	0	0	0	0	0	0	0	4	4	\$107	\$0	\$0	76	\$2,029	
Revise Based on State Review	3	5	11	19	2	5	1	0	0	0	0	0	1	9	\$513	\$0	\$0	171	\$9,739	
Recordkeeping	3	5	11	19	1	1	1	0	0	0	0	0	2	5	\$250	\$0	\$0	95	\$4,748	
Other Direct Costs	3	5	11	19	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$860	-	\$16,340	
Totals	3	5	11	19										80	\$5,088	\$0	\$860	\$5,948	1,520	\$113,003

Exhibit A.12i

Source Water Baseline Biological Characterization Study (Track 2)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total Burden (hrs.)	Total Initial Cost
					Year 1	Year 2	Year 3	Total	\$110	\$45	\$42	\$134	\$69	\$90	\$48	\$27	Burden (hrs)	Labor Cost	Capital Costs
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D+E)
Implement Freshwater Sampling	5	5	13	13	2	16	0	36	1248	20	1248	10	2580	\$153,867	\$0	0	29,670	\$1,769,475	
Other Direct Costs for Implement Freshwater Sampling	5	5	13	13	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$3,600	41,400	
Implement Estuary Sampling	3	4	5	5	3	30	0	48	2457	30	2457	15	5040	\$298,709	\$0	0	20,160	\$1,194,836	
Other Direct Costs for Implement Estuary Sampling	3	4	5	5	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$9,000	36,000	
Biological Study Laboratory Analysis (Freshwater)	5	5	13	13	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$53,800	-	\$618,700
Biological Study Laboratory Analysis (Estuary)	3	4	5	5	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$104,900	-	\$419,600
Profile of Source Water Biota	3	5	11	19	10	6	0	10	18	0	6	2	52	\$4,300	\$0	\$0	988	\$81,692	
Identification of Critical Species	3	5	11	19	10	6	0	6	12	0	0	1	35	\$3,033	\$0	\$0	665	\$57,633	
Description of Additional Stresses	3	5	11	19	5	3	0	5	9	0	3	1	26	\$2,150	\$0	\$0	494	\$40,846	
Write Study based on Results and Submit for Review by	4	2	6	12	24	48	0	5	2	2	0	2	83	\$5,835	\$0	\$0	996	\$70,025	
Recordkeeping	4	2	6	12	2	4	0	2	0	0	0	7	15	\$855	\$0	\$0	180	\$10,259	
Finalize study based on State review	4	2	6	12	5	10	0	0	0	0	0	0	2	17	\$1,051	\$0	\$0	204	\$12,617
Freshwater Totals				13									2,808	\$171,092	\$53,800	\$3,600	\$228,492	32,287	\$2,632,008
Marine Totals				5									5,268	\$315,934	\$104,900	\$9,000	\$429,834	21,070	\$1,721,075

Total Burden and Costs for All NPDES Application Activities

																		Total Burden (hrs.)	Total Initial Cost
Totals																	68,265	\$5,323,134	

* 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**

Activity	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit				
	Assumed Loaded Hourly Rate \$										
	75	35	29								
Activity	Level of Effort (hrs)		B	C	D	C+D					
Reviewing CWIS location and design data	2	5	0	7	\$322						
Determine Compliance with Source Waterbody Flow Information	1	2	0	2	\$107						
Review Source Water Baseline Biological Characterization Data	6	6	0	12	\$656						
Review Design and Construction Technology Plan (Track 1)	7	2	0	10	\$621						
Determine Compliance with CWIS Velocity Requirements (Track 1)	1	2	0	2	\$107						
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	2	2	0	5	\$263						
Review Comprehensive Demonstration Study Plan (Track 2)	5	5	0	10	\$525						
Review Source Water Baseline Biological Characterization Study (Track 2)	80	15	0	95	\$6,497						
Determine Monitoring Frequency	1	2	0	2	\$107						
Determine Record keeping and Reporting Frequency	1	2	0	2	\$107						
Considering Public Comments	5	5	0	10	\$525						
Issuing Permit	0	2	0	2	\$94						
Permit Record Keeping	0	0	1	1	\$50						
Totals	110	50	0	160	\$9,981	\$345	\$10,326				
Track 1 Totals				55	\$2,960	\$345	\$3,305				
Track 2 Totals				143	\$8,991	\$345	\$9,336				