

**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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21								B	C
	A				Level of Effort (hrs)																
Read and Understand Rule Mobilization/Planning	8	7	8	23	12	12	0	0	0	0	0	1	25	\$1,577	\$0	\$0		575	\$36,271		
Training	8	7	8	23	4	8	0	0	0	0	0	1	13	\$697	\$0	\$0		299	\$16,022		
Other Direct Costs	8	7	8	23	2	2	0	0	0	0	0	1	5	\$280	\$0	\$0		115	\$6,440		
Totals	8	7	8	23	0	0	0	0	0	0	0	0	43	\$2,554	\$0	\$50	\$2,604	989	\$59,883		

**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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21								B	C
	A				Level of Effort (hrs)																
Detailed Source Water Body Characterization	8	7	8	23	2	16	40	0	0	0	0	0	58	\$2,250	\$0	\$0		1,334	\$51,741		
Description of CWIS Configuration and Location	8	7	8	23	2	5	8	0	0	0	0	0	15	\$665	\$0	\$0		345	\$15,302		
Facility Water Balance Diagram	8	7	8	23	1	1	1	0	0	0	0	0	3	\$166	\$0	\$0		69	\$3,811		
Operational Characteristics Narrative	8	7	8	23	16	40	0	0	0	0	0	0	56	\$3,018	\$0	\$0		1,288	\$69,423		
Submit Materials for Review by State	8	7	8	23	0	0	0	0	0	0	0	6	6	\$124	\$0	\$0		138	\$2,843		
Recordkeeping	8	7	8	23	2	2	2	0	0	0	0	2	8	\$373	\$0	\$0		184	\$8,570		
Other Direct Costs	8	7	8	23	0	0	0	0	0	0	0	0	0	\$0	\$0	\$500		-	\$11,500		
Totals	8	7	8	23									146	\$6,595	\$0	\$500	\$7,095	3,358	\$163,190		

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21								B	C
	A				Level of Effort (hrs)																
Gather Information Characterizing Flow	8	7	8	23	0	32	0	0	0	0	0	0	32	\$1,258	\$0	\$0		736	\$28,925		
Perform Engineering Calculations	8	7	8	23	8	32	0	0	0	0	0	0	40	\$1,981	\$0	\$0		920	\$45,558		
Submit Data and Analysis for Review	8	7	8	23	0	0	0	0	0	0	0	16	16	\$330	\$0	\$0		368	\$7,581		
Recordkeeping	8	7	8	23	0	8	0	0	0	0	0	8	16	\$479	\$0	\$0		368	\$11,022		
Other Direct Costs	8	7	8	23	0	0	0	0	0	0	0	0	0	\$0	\$0	\$100		-	\$2,300		
Totals	8	7	8	23									104	\$4,047	\$0	\$100	\$4,147	2,392	\$95,386		

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)														
Identify Available Data and Document Efforts	8	7	8	23	40	80	0	0	0	0	0	8	128	\$6,925	\$0	\$0		2,944	\$159,270
Compile and Analyze Existing Data	8	7	8	23	32	60	20	0	0	0	0	4	116	\$6,053	\$0	\$0		2,668	\$139,224
Submit Data for Review by State	8	7	8	23	0	0	0	0	0	0	0	8	8	\$165	\$0	\$0		184	\$3,790
Recordkeeping	8	7	8	23	2	4	1	0	0	0	0	6	13	\$498	\$0	\$0		299	\$11,445
Other Direct Costs	8	7	8	23	0	0	0	0	0	0	0	0	0	\$0	\$0	\$750		-	\$17,250
Totals	8	7	8	23									265	\$13,640	\$0	\$750	\$14,390	6,095	\$330,979

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)														
Develop Narrative	6	6	4	16	8	16	0	0	0	0	0	0	24	\$1,352	\$0	\$0		384	\$21,632
Perform Engineering Calculations	6	6	4	16	4	12	0	0	0	0	0	0	16	\$833	\$0	\$0		256	\$13,331
Document Minimization of Blow Down and Flows Not	6	6	4	16	0	40	0	0	0	0	0	6	46	\$1,696	\$0	\$0		736	\$27,130
Submit Data and Analysis for Review	6	6	4	16	0	0	0	0	0	0	0	8	8	\$165	\$0	\$0		128	\$2,637
Recordkeeping	6	6	4	16	2	4	0	0	0	0	0	8	14	\$503	\$0	\$0		224	\$8,045
Other Direct Costs	6	6	4	16	0	0	0	0	0	0	0	0	0	\$0	\$0	\$400		-	\$6,400
Totals	6	6	4	16									108	\$4,548	\$0	\$400	\$4,948	1,728	\$79,174

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)														
Develop Narrative	6	6	4	16	16	32	0	0	0	0	0	0	48	\$2,704	\$0	\$0		768	\$43,264
Perform Engineering Calculations	6	6	4	16	8	32	0	0	0	0	0	0	40	\$1,981	\$0	\$0		640	\$31,693
Submit Data and Analysis for Review	6	6	4	16	0	0	0	0	0	0	0	16	16	\$330	\$0	\$0		256	\$5,274
Revise Based on State review	6	6	4	16	4	16	0	0	0	0	0	0	20	\$990	\$0	\$0		320	\$15,846
Recordkeeping	6	6	4	16	2	4	0	0	0	0	0	8	14	\$503	\$0	\$0		224	\$8,045
Other Direct Costs	6	6	4	16	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,000		-	\$16,000
Totals	6	6	4	16									138	\$6,508	\$0	\$1,000	\$7,508	2,208	\$120,122

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Delineate Hydraulic Zone of Influence	6	6	4	16	2	5	8	0	0	0	0	0	15	\$665	\$0	\$0		240	\$10,645
Develop Narrative Description	6	6	4	16	16	32	0	0	0	0	0	0	48	\$2,704	\$0	\$0		768	\$43,264
Perform Engineering Calculations	6	6	4	16	6	24	0	0	0	0	0	0	30	\$1,486	\$0	\$0		480	\$23,770
Submit Data and Analysis for Review	6	6	4	16	0	0	0	0	0	0	0	6	6	\$124	\$0	\$0		96	\$1,978
Recordkeeping	6	6	4	16	1	2	0	0	0	0	0	6	9	\$293	\$0	\$0		144	\$4,682
Other Direct Costs	6	6	4	16	0	0	0	0	0	0	0	0	0	\$0	\$0	\$50		-	\$800
Totals	6	6	4	16									108	\$5,271	\$0	\$50	\$5,321	1,728	\$85,138

Exhibit A.1h

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Description of Historical Studies that will be Used	2	1	4	7	20	40	0	0	0	0	0	2	62	\$3,421	\$0	\$0		434	\$23,948
Description of Proposed and/or Implemented Technologies	2	1	4	7	8	20	0	0	0	0	0	0	28	\$1,509	\$0	\$0		196	\$10,564
Develop Baseline Biological Characterization Sampling Plan	2	1	4	7	40	60	8	8	0	0	0	4	120	\$7,258	\$0	\$0		840	\$50,806
Submit Data and Plans for Review	2	1	4	7	0	0	0	0	0	0	0	12	12	\$247	\$0	\$0		84	\$1,730
Revise Based on State Review	2	1	4	7	8	16	4	0	0	0	0	4	32	\$1,578	\$0	\$0		224	\$11,049
Recordkeeping	2	1	4	7	2	4	2	1	0	0	0	8	17	\$689	\$0	\$0		119	\$4,823
Other Direct Costs	2	1	4	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$750		-	\$5,250
Totals	2	1	4	7									271	\$14,703	\$0	\$750	\$15,453	1,897	\$108,171

Exhibit A.1i

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Implement Freshwater Sampling	3	2	5	8	6	52	0	120	2080	67	2080	34	4439	\$245,642	\$0	\$0		22,195	\$1,228,211
Other Direct Costs for Implement Freshwater Sampling	3	2	5	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$5,200		-	\$26,000
Implement Estuary Sampling	1	1	1	1	10	101	0	160	4095	100	4095	50	8611	\$471,928	\$0	\$0		8,611	\$471,928
Other Direct Costs for Implement Estuary Sampling	1	1	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$13,000		-	\$13,000
Biological Study Laboratory Analysis (Freshwater)	3	2	5	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$78,000		-	\$390,000
Biological Study Laboratory Analysis (Estuary)	1	1	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$152,100		-	\$152,100
Profile of Source Water Biota	2	1	4	7	32	20	0	32	60	0	20	8	172	\$12,200	\$0	\$0		1,204	\$85,400
Identification of Critical Species	2	1	4	7	32	20	0	20	40	0	0	3	115	\$8,577	\$0	\$0		805	\$60,036
Description of Additional Stresses	2	1	4	7	16	10	0	16	30	0	10	4	86	\$6,100	\$0	\$0		602	\$42,700
Write Study based on Results and Submit for Review by	2	1	2	5	80	160	0	16	8	8	0	8	280	\$16,626	\$0	\$0		1,400	\$83,128
Recordkeeping	2	1	2	5	6	12	0	6	0	0	0	24	48	\$2,194	\$0	\$0		240	\$10,968
Finalize study based on State review	2	1	2	5	16	32	0	0	0	0	0	8	56	\$2,869	\$0	\$0		280	\$14,344
Freshwater Totals	8												5,196	\$294,207	\$0	\$83,200	\$377,407	25,969	\$1,892,223
Marine Totals	1												9,368	\$520,492	\$0	\$165,100	\$685,592	9,368	\$685,592

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Calculate Reduction in Impingement Mortality and Entrainment	2	1	2	5	80	80	8	0	0	0	0	12	180	\$10,911	\$0	\$0		900	\$54,556
Perform Engineering Calculations for Efficacy Projections	2	1	2	5	40	32	0	0	0	0	0	4	76	\$4,956	\$0	\$0		380	\$24,780
Perform Impingement Pilot Study (Freshwater)	2	1	1	4	16	25	0	80	240	40	240	20	661	\$40,793	\$0	\$0		2,644	\$163,172
Perform Entrainment Pilot Study (Freshwater)	2	1	1	4	16	25	0	80	180	40	250	20	611	\$37,402	\$0	\$0		2,444	\$149,608
Pilot Study Entrainment Laboratory Analysis (Freshwater)	2	1	1	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,000		-	\$24,000
Perform Impingement Pilot Study (Estuary)	0	0	1	1	16	33	0	80	312	52	312	26	831	\$49,856	\$0	\$0		831	\$49,856
Perform Entrainment Pilot Study (Estuary)	0	0	1	1	16	33	0	80	234	52	325	26	766	\$45,448	\$0	\$0		766	\$45,448
Pilot Study Entrainment Laboratory Analysis (Estuary)	0	0	1	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$7,800		-	\$7,800
Purchase & Installation of Pilot Study Technology	2	1	2	5	0	0	0	0	0	0	0	0	0	\$0	\$286,153	\$0		-	\$1,430,763
Operation & Maintenance of Pilot Technology	2	1	2	5	0	0	0	0	0	0	0	0	0	\$0	\$0	\$30,000		-	\$150,000
Submit Data and Analysis for Review	2	1	2	5	8	10	0	8	6	4	0	16	52	\$3,044	\$0	\$0		260	\$15,219
Recordkeeping	2	1	2	5	4	8	0	4	8	2	0	20	46	\$2,206	\$0	\$0		230	\$11,030
Other Direct Costs	2	1	2	5	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,000		-	\$5,000
Freshwater Totals	2	1	1	4									1626	\$99,312	\$286,153	\$37,000	\$422,464	6,504	\$1,689,858
Marine Totals	0	0	1	1									1,950	\$116,421	\$286,153	\$38,800	\$441,373	1,950	\$441,373

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Develop Verification Monitoring Plan	2	1	4	7	40	60	8	0	0	0	0	4	112	\$6,344	\$0	\$0		784	\$44,411
Submit Data and Analysis for Review	2	1	4	7	0	0	0	0	0	0	0	2	2	\$41	\$0	\$0		14	\$288
Revise Based on State Review	2	1	4	7	2	4	1	0	0	0	0	1	8	\$395	\$0	\$0		56	\$2,762
Recordkeeping	2	1	4	7	1	1	1	1	0	0	0	2	6	\$321	\$0	\$0		42	\$2,248
Other Direct Costs	2	1	4	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$400		-	\$2,800
Totals	2	1	4	7									128	\$7,101	\$0	\$400	\$7,501	896	\$52,509

Exhibit A.1l

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Purchase and Installation of Remote Monitoring Device	6	6	4	16	0	0	0	0	0	0	0	0	0	\$0	\$58,154	\$0		-	\$930,458
Other Direct Costs	6	6	4	16	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,000		-	\$16,000
Totals				16									-	\$0	\$58,154	\$1,000	\$59,154	-	\$946,458

Total Burden and Costs for All NPDES Application Activities

																Total Burden (hrs.)	Total Initial Cost
Totals																65,082	\$6,750,055

* 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	\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Perform Statistical Analysis	9	2	2	13	20	20	10	10	20	0	1	81	\$5,903			1,053	\$76,734
Submit Monitoring Results & Study Analysis	9	2	2	13	0	0	0	0	0	0	4	4	\$82			52	\$1,071
Record Keeping	9	2	2	13	1	2	0	0	0	0	4	7	\$251			91	\$3,268
Totals				13	21	22	10	10	20	0	9	92	\$6,236	\$500	\$6,736	1,196	\$87,573

**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	\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Perform Statistical Analysis	4	0	1	5	25	30	15	15	25	0	1	111	\$8,015			555	\$40,073
Submit Monitoring Results & Study Analysis	4	0	1	5	0	0	0	0	0	0	4	4	\$82			20	\$412
Record Keeping	4	0	1	5	1	2	0	0	0	0	4	7	\$251			35	\$1,257
Totals				5	26	32	15	15	25	0	9	122	\$8,348	\$500	\$8,848	610	\$44,242

**Exhibit A.2c
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	\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Monthly Sample Collection	35	42	49	126	2	0	4	72	0	72	0	150	\$8,378			18,900	\$1,055,578
Onsite Analysis of Samples	35	42	49	126	4	0	12	72	0	72	0	160	\$9,472			20,160	\$1,193,472
Perform Statistical Analysis	35	42	49	126	8	4	0	0	32	0	0	44	\$3,293			5,544	\$414,943
Record Keeping	35	42	49	126	2	1	1	4	1	0	16	25	\$995			3,150	\$125,307
Totals				126	16	5	17	148	33	144	16	379	\$22,137	\$500	\$22,637	47,754	\$2,852,300

**Exhibit A.2d
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	
					Assumed Loaded Hourly Rate \$							Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost
	Year 1	Year 2	Year 3	Total	\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Monthly Sample Collection	8	9	9	26	2	0	5	94	0	94	0	194	\$10,837			5,054	\$281,753
Handling and Preparation of Samples	8	9	9	26	4	0	16	94	0	94	0	207	\$12,205			5,377	\$317,333
Perform Statistical Analysis	8	9	9	26	8	4	0	0	42	0	0	54	\$4,017			1,394	\$104,443
Record Keeping	8	9	9	26	2	1	1	5	1	0	16	27	\$1,128			697	\$29,326
Totals				26	16	5	22	192	43	187	16	482	\$28,187	\$650	\$28,837	12,522	\$749,755

Exhibit A.2e

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	Assumed Loaded Hourly Rate \$						Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	Level of Effort (hrs)																
Biweekly Sample Collection	35	42	49	126	4	0	12	156	0	156	0	328	\$18,502		41,328	\$2,331,252	
Handling and Preparation of Samples	35	42	49	126	4	0	12	78	0	78	0	172	\$10,117		21,672	\$1,274,742	
Perform Statistical Analysis	35	42	49	126	16	4	0	0	64	0	0	84	\$6,429		10,584	\$810,079	
Recordkeeping	35	42	49	126	2	1	1	8	2	0	16	30	\$1,325		3,780	\$166,963	
Totals				126	26	5	25	242	66	234	16	614	\$36,373	\$1,000	\$37,373	77,364	\$4,709,036

Exhibit A.2f

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	Assumed Loaded Hourly Rate \$						Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	Level of Effort (hrs)																
Biweekly Sample Collection	8	9	9	26	4	0	12	203	0	203	0	422	\$23,555		10,972	\$612,417	
Handling and Preparation of Samples	8	9	9	26	4	0	12	101	0	101	0	218	\$12,590		5,668	\$327,327	
Perform Statistical Analysis	8	9	9	26	16	4	0	0	83	0	0	103	\$7,862		2,678	\$204,407	
Recordkeeping	8	9	9	26	2	1	1	10	3	0	16	33	\$1,528		858	\$39,731	
Totals				26	26	5	25	314	86	304	16	776	\$45,534	\$1,150	\$46,684	20,176	\$1,213,781

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	Assumed Loaded Hourly Rate \$						Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	Level of Effort (hrs)																
Monitor Average Through Technology	43	51	58	152	2	100	0	0	0	0	0	102	\$4,111		15,504	\$624,842	
Analyze Data	43	51	58	152	4	40	0	0	0	0	0	44	\$1,934		6,688	\$293,907	
Recordkeeping	43	51	58	152	1	8	0	0	0	0	8	17	\$570		2,584	\$86,579	
Totals				152	7	148	0	0	0	0	8	163	\$6,614	\$100	\$6,714	24,776	\$1,020,528

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	Assumed Loaded Hourly Rate \$						Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	Level of Effort (hrs)																
Visually Inspect All Installed Technologies	18	20	21	59	24	208	0	0	0	0	0	232	\$10,344		13,688	\$610,296	
Recordkeeping	18	20	21	59	3	16	0	0	0	0	2	21	\$941		1,239	\$55,531	
Totals				59	27	224	0	0	0	0	2	253	\$11,285	\$100	\$11,385	14,927	\$671,727

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	
					Assumed Loaded Hourly Rate \$						Burden (hrs)	Labor Cost	ODCs lump sum*	Total Costs	Burden (hrs.)	Annual Cost	
	Year 1	Year 2	Year 3	Total	\$90	\$39	\$114	\$64	\$75	\$44	\$21	B	C	D	C+D	A*B	A*(C+D)
	A				Level of Effort (hrs)						B				C+D		A*B
Report on Inspection and Maintenance	43	51	58	152	16	16	0	0	0	0	0	32	\$2,075			4,864	\$315,430
Detail Velocity Monitoring Results	43	51	58	152	8	16	0	0	0	0	0	24	\$1,352			3,648	\$205,504
Detail Biological Monitoring Results	43	51	58	152	24	32	4	4	24	0	0	88	\$5,949			13,376	\$904,218
Compile and Submit Report	43	51	58	152	80	80	0	0	0	0	16	176	\$10,706			26,752	\$1,627,251
Recordkeeping	43	51	58	152	8	12	0	0	0	0	8	28	\$1,360			4,256	\$206,659
Totals				152	136	156	4	4	24	0	24	348	\$21,441	\$750	\$22,191	52,896	\$3,373,062

Total Burden and Cost for All Annual Activities

Activity	Burden Per Facility	Cost per Facility	ODCs lump sum*	Total Cost per Facility	Total Burden (hrs.)	Total Annual Cost
Track 1 Freshwater	1,757	97,851	2,450	100,301		
Track 1 Estuary	2,022	113,061	2,750	115,811		
Track 2 Freshwater	1,849	104,087	2,950	107,037		
Track 2 Estuary	2,144	121,409	3,250	124,659		
Totals	1,904	97,851	2,450	100,301	#####	\$14,722,004

Exhibit A.2j
Facility Annual O&M Costs

Activity	Facilities (Responses)				Contracted Laboratory Analysis Cost	Operation and Maintenance Costs	ODCs lump sum*	Cost (\$)
Operation of Remote Sensing Device	25	31	37	93		\$200	\$50	\$23,250
Identify & Enumerate Entrained Freshwater Biota	35	42	49	126	\$7,800			\$982,800
Identify & Enumerate Entrained Estuary Biota	8	9	9	26	\$10,140			\$263,640
Totals							\$50	\$1,269,690

Total Cost for All NPDES Application Activities

Totals	Total Cost (\$)
	\$15,991,694

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

**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							
		Assumed Loaded Hourly Rate \$								
A	68	39	26	B	C	D	C+D	A*B	A*(C+D)	
Reviewing CWIS location and design data	23	6	18	0	24	\$1,111			552	\$25,544
Determine Compliance with Source Waterbody Flow Information	23	2	6	0	8	\$370			184	\$8,515
Review Source Water Baseline Biological Characterization Data	23	20	20	0	40	\$2,146			920	\$49,358
Review Design and Construction Technology Plan (Track 1)	16	24	8	0	32	\$1,953			512	\$31,245
Determine Compliance with CWIS Velocity Requirements (Track 1)	16	2	6	0	8	\$370			128	\$5,923
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	16	8	8	0	16	\$858			256	\$13,734
Review Comprehensive Demonstration Study Plan (Track 2)	7	16	16	0	32	\$1,717			224	\$12,018
Review Source Water Baseline Biological Characterization Study (Track 2)	5	400	50	0	450	\$29,305			2,250	\$146,525
Review Evaluation of Potential CWIS Effects (Track 2)	5	16	16	0	32	\$1,717			160	\$8,584
Determine Monitoring Frequency	21	2	6	0	8	\$370			168	\$7,774
Determine Record keeping and Reporting Frequency	21	2	6	0	8	\$370			168	\$7,774
Considering Public Comments	21	16	16	0	32	\$1,717			672	\$36,053
Issuing Permit	21	1	6	1	8	\$328			168	\$6,878
Permit Record Keeping	21	1	1	2	4	\$159			84	\$3,333
Totals	23	516	183	3	702	\$42,490	\$300	\$42,790	6,446	\$370,157
Track 1 Totals					188	\$9,752	\$300	\$10,052		
Track 2 Totals					646	\$39,309	\$300	\$39,609		

**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							
		Assumed Loaded Hourly Rate \$								
A	68	39	26	B	C	D	C+D	A*B	A*(C+D)	
Review of Verification Studies	18	2	4	0	6	\$292			108	\$5,263
Permit Modification due to Unfavorable Results	18	4	10	0	14	\$663			252	\$11,927
Record Keeping	18	0	0	1	1	\$26			18	\$463
Totals	18	6	14	1	21	\$981	\$50	\$1,031	378	\$19,000

**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							
		Assumed Loaded Hourly Rate \$								
A	68	39	26	B	C	D	C+D	A*B	A*(C+D)	
Review of Yearly Report	152	6	12	0	18	\$877			2,736	\$133,334
Compliance Tracking	152	4	12	0	16	\$740			2,432	\$112,541
Determination on Monitoring Scope Reduction	152	4	8	0	12	\$585			1,824	\$88,890
Record Keeping	152	1	2	1	4	\$172			608	\$26,129
Totals	152	15	34	1	50	\$2,374	\$50	\$2,424	7,600	\$368,000

Total Burden and Cost for All Director Activities

									Total Burden (hrs.)	Total Initial Cost
Totals									14,046	\$757,157

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

**Exhibit A.4a
Federal Permit Program Oversight Activities**

Activity	Federal (Responses)	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 \$								
		68	39	26						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Reviewing CWIS location and design data	23	1	2	0	3	\$146			69	\$3,363
Determine Compliance with Source Waterbody Flow Information	23	1	3	0	4	\$185			92	\$4,257
Review Source Water Baseline Biological Characterization Data	23	1	2	0	3	\$146			69	\$3,363
Review Design and Construction Technology Plan (Track 1)	16	1	3	0	4	\$185			64	\$2,962
Determine Compliance with CWIS Velocity Requirements (Track 1)	16	1	2	0	3	\$146			48	\$2,339
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	16	1	2	0	3	\$146			48	\$2,339
Review Comprehensive Demonstration Study Plan (Track 2)	7	1	2	0	3	\$146			21	\$1,023
Review Source Water Baseline Biological Characterization Study (Track 2)	5	6	12	0	18	\$877			90	\$4,386
Review Evaluation of Potential CWIS Effects (Track 2)	5	1	2	0	3	\$146			15	\$731
Determine Monitoring Frequency	21	1	3	0	4	\$185			84	\$3,887
Permit Record Keeping	21	1	1	2	4	\$159			84	\$3,333
Totals	23	16	34	2	30	1,198	\$50	\$1,248	684	\$33,033
Track 1 Totals					28	\$1,299	\$50	\$1,349		
Track 2 Totals					42	\$1,991	\$50	\$2,041		

Exhibit A.5

Respondents for the ICR Approval Period Year by Year by Activity

Facilities [1]

	Year 1	Year 2	Year 3	Annual Average
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Initial NPDES Permit Application Activities				
Start-up Activities	8	7	8	8
Permit Application Activities	8	7	8	8
Source Waterbody Flow Information	8	7	8	8
Use Existing Data- Source Water Baseline Biological Characterization Data	8	7	8	8
CWIS Flow Reduction Requirements (Track 1)	6	6	4	5
CWIS Velocity Requirements (Track 1)	6	6	4	5
Design and Construction Technology Plan (Track 1)	6	6	4	5
Comprehensive Demonstration Study Plan (Track 2)	2	1	4	2
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	3	2	5	3
Estuary Source Water Baseline Biological Characterization Study (Track 2)	1	1	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	2	1	4	2
Submit Characterization Study (Track 2)	2	1	2	2
Freshwater Evaluation of Potential CWIS Effects (Track 2)	2	1	1	1
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	0	1	0
Verification Monitoring Plan (Track 2)	2	1	4	2
NPDES Repermitting Activities				
Start-up Activities	3	1	6	3
Permit Application Activities	3	1	6	3
Source Waterbody Flow Information	3	1	6	3
Source Water Baseline Biological Characterization Data	3	1	6	3
CWIS Flow Reduction Requirements (Track 1)	0	0	2	1
CWIS Velocity Requirements (Track 1)	0	0	2	1
Design and Construction Technology Plan (Track 1)	0	0	2	1
Comprehensive Demonstration Study Plan (Track 2)	3	1	4	3
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	3	2	3	3
Estuary Source Water Baseline Biological Characterization Study (Track 2)	2	2	3	2
Profile of Source Water Biota for Characterization Study (Track 2)	3	1	4	3
Submit Characterization Study (Track 2)	2	2	1	2
Annual				
Freshwater Verification Study (Track 2)	9	2	2	4
Estuary Verification Study (Track 2)	4	0	1	2
Biological Monitoring for Impingement (Freshwater)	35	42	49	42
Biological Monitoring for Impingement (Estuary)	8	9	9	9
Biological Monitoring for Entrainment (Freshwater)	35	42	49	42
Biological Monitoring for Entrainment (Estuary)	8	9	9	9
Velocity Monitoring	43	51	58	51
Visual Inspection of Installed Technologies	18	20	21	20
Yearly Status Report Activities	43	51	58	51
Respondents	53	60	68	60

Directors [2]

	Year 1	Year 2	Year 3	Annual Average
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Director Permit Issuance Activities				
Reviewing Facility General Permit Application Information	8	7	8	8
Review Source Water Baseline Biological Characterization Data	8	7	8	8
Determine Compliance with Source Waterbody Flow Information	8	7	8	8
Review Design and Construction Technology Plan (Track 1)	6	6	4	5
Determine Compliance with CWIS Velocity Requirements (Track 1)	6	6	4	5
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	6	6	4	5
Review Comprehensive Demonstration Study Plan (Track 2)	2	1	4	2
Review Source Water Baseline Biological Characterization Study (Track 2)	2	1	2	2
Review Evaluation of Potential CWIS Effects (Track 2)	2	1	2	2
Determining Facility Requirements and Issuing Permit	8	7	6	7
Verification Study Review	13	2	3	6
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	3	1	6	3
Review Source Water Baseline Biological Characterization Data	3	1	6	3
Determine Compliance with Source Waterbody Flow Information	3	1	6	3
Review Design and Construction Technology Plan (Track 1)	0	0	2	1
Determine Compliance with CWIS Velocity Requirements (Track 1)	0	0	2	1
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	0	0	2	1
Review Comprehensive Demonstration Study Plan (Track 2)	3	1	4	3
Review Source Water Baseline Biological Characterization Study (Track 2)	2	2	1	2
Determining Facility Requirements and Issuing Permit	0	3	6	3
Annual Director Activities				
Review of Yearly Report	43	51	58	51
Compliance Tracking	43	51	58	51
Determination on Monitoring Scope Reduction	43	51	58	51
Record Keeping	43	51	58	51
Respondents	53	60	68	60

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Facilities	53	60	68	60
Directors	53	60	68	60
Yearly Total*	106	120	136	121

[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
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Initial Permitting				
Start-up Activities	8	7	8	8
Permit Application Activities	8	7	8	8
Source Waterbody Flow Information	8	7	8	8
Use Existing Data- Source Water Baseline Biological Characterization Data	8	7	8	8
CWIS Flow Reduction Requirements (Track 1)	6	6	4	5
CWIS Velocity Requirements (Track 1)	6	6	4	5
Design and Construction Technology Plan (Track 1)	6	6	4	5
Comprehensive Demonstration Study Plan (Track 2)	2	1	4	2
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	3	2	5	3
Estuary Source Water Baseline Biological Characterization Study (Track 2)	1	1	1	1
Profile of Source Water Biota for Characterization Study (Track 2)	2	1	4	2
Submit Characterization Study (Track 2)	2	1	2	2
Freshwater Evaluation of Potential CWIS Effects (Track 2)	2	1	1	1
Estuary Evaluation of Potential CWIS Effects (Track 2)	0	0	1	0
Verification Monitoring Plan (Track 2)	2	1	4	2
NPDES Repermitting Activities	0	0	0	0
Start-up Activities	3	1	6	3
Permit Application Activities	3	1	6	3
Source Waterbody Flow Information	3	1	6	3
Source Water Baseline Biological Characterization Data	3	1	6	3
CWIS Flow Reduction Requirements (Track 1)	0	0	2	1
CWIS Velocity Requirements (Track 1)	0	0	2	1
Design and Construction Technology Plan (Track 1)	0	0	2	1
Comprehensive Demonstration Study Plan (Track 2)	3	1	4	3
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	3	2	3	3
Estuary Source Water Baseline Biological Characterization Study (Track 2)	2	2	3	2
Profile of Source Water Biota for Characterization Study (Track 2)	3	1	4	3
Submit Characterization Study (Track 2)	2	2	1	2
Annual	0	0	0	0
Freshwater Verification Study (Track 2)	9	2	2	4
Estuary Verification Study (Track 2)	4	0	1	2
Biological Monitoring for Impingement (Freshwater)	35	42	49	42
Biological Monitoring for Impingement (Estuary)	8	9	9	9
Biological Monitoring for Entrainment (Freshwater)	35	42	49	42
Biological Monitoring for Entrainment (Estuary)	8	9	9	9
Velocity Monitoring	43	51	58	51
Visual Inspection of Installed Technologies	18	20	21	20
Yearly Status Report Activities	43	51	58	51
Responses	292	292	367	317

Directors

	Year 1	Year 2	Year 3	Annual Average
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Director Permit Issuance Activities				
Reviewing Facility General Permit Application Information	8	7	8	8
Review Source Water Baseline Biological Characterization Data	8	7	8	8
Determine Compliance with Source Waterbody Flow Information	8	7	8	8
Review Design and Construction Technology Plan (Track 1)	6	6	4	5
Determine Compliance with CWIS Velocity Requirements (Track 1)	6	6	4	5
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	6	6	4	5
Review Comprehensive Demonstration Study Plan (Track 2)	2	1	4	2
Review Source Water Baseline Biological Characterization Study (Track 2)	2	1	2	2
Review Evaluation of Potential CWIS Effects (Track 2)	2	1	2	2
Determining Facility Requirements and Issuing Permit	8	7	6	7
Verification Study Review	13	2	3	6
Director Permit Reissuance Activities				
Reviewing Facility General Permit Application Information	3	1	6	3
Review Source Water Baseline Biological Characterization Data	3	1	6	3
Determine Compliance with Source Waterbody Flow Information	3	1	6	3
Review Design and Construction Technology Plan (Track 1)	0	0	2	1
Determine Compliance with CWIS Velocity Requirements (Track 1)	0	0	2	1
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	0	0	2	1
Review Comprehensive Demonstration Study Plan (Track 2)	3	1	4	3
Review Source Water Baseline Biological Characterization Study (Track 2)	2	2	1	2
Determining Facility Requirements and Issuing Permit	0	3	6	3
Annual Director Activities				
Review of Yearly Report	43	51	58	51
Compliance Tracking	43	51	58	51
Determination on Monitoring Scope Reduction	43	51	58	51
Record Keeping	43	51	58	51
Responses	255	264	320	280

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Facilities	292	292	367	317
Directors	255	264	320	280
Yearly Total*	547	556	687	597

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
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
NPDES Permit Application Activities					
Start-up Activities	A1a	344	301	344	330
Permit Application Activities	A1b	1,168	1,022	1,168	1,119
Source Waterbody Flow Information	A1c	832	728	832	797
Use Existing Data- Source Water Baseline Biological Characterization Data	A1d	2,120	1,855	2,120	2,032
CWIS Flow Reduction Requirements (Track 1)	A1e	648	648	432	576
CWIS Velocity Requirements (Track 1)	A1f	828	828	552	736
Design and Construction Technology Plan (Track 1)	A1g	648	648	432	576
Comprehensive Demonstration Study Plan (Track 2)	A1h	542	271	1,084	632
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A1i	6,659	4,439	11,098	7,398
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	373	1,492	870
Submit Characterization Study (Track 2)	A1i	768	384	768	640
Freshwater Evaluation of Potential CWIS Effects (Track 2)	A1j	3,252	1,626	1,626	2,168
Estuary Evaluation of Potential CWIS Effects (Track 2)	A1j	0	0	1,950	650
Verification Monitoring Plan (Track 2)	A1k	256	128	512	299
NPDES Permit Application Activity Total		21,425	15,993	24,818	20,745
NPDES Repermitting Activities					
Start-up Activities	A12a	39	13	78	43
Permit Application Activities	A12b	216	72	432	240
Source Waterbody Flow Information	A12c	93	31	186	103
Source Water Baseline Biological Characterization Data	A12d	237	79	474	263
CWIS Flow Reduction Requirements (Track 1)	A12e	0	0	216	72
CWIS Velocity Requirements (Track 1)	A12f	0	0	150	50
Design and Construction Technology Plan (Track 1)	A12g	0	0	86	29
Comprehensive Demonstration Study Plan (Track 2)	A12h	240	80	320	213
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A12i	3,870	2,580	3,870	3,440
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A12i	3,360	3,360	5,040	3,920
Profile of Source Water Biota for Characterization Study (Track 2)	A12i	339	113	452	301
Submit Characterization Study (Track 2)	A12i	230	230	115	192
NPDES Repermitting Activity Total		8,624	6,558	11,419	8,867
Annual Activities					
Freshwater Verification Study (Track 2)	A2a	828	184	184	399
Estuary Verification Study (Track 2)	A2b	488	0	122	203
Biological Monitoring for Impingement (Freshwater)	A2c	13,265	15,918	18,571	15,918
Biological Monitoring for Impingement (Estuary)	A2d	3,853	4,334	4,334	4,174
Biological Monitoring for Entrainment (Freshwater)	A2e	21,490	25,788	30,086	25,788
Biological Monitoring for Entrainment (Estuary)	A2f	6,208	6,984	6,984	6,725
Velocity Monitoring	A2g	7,009	8,313	9,454	8,259
Visual Inspection of Installed Technologies	A2h	4,554	5,060	5,313	4,976
Yearly Status Report Activities	A2i	14,964	17,748	20,184	17,632
Annual Activity Yearly Labor Total		71,343	84,145	94,926	83,472
Yearly Labor Total		101,392	106,697	131,163	113,084

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
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Director Permit Issuance Activities	A3a	2,420	1,774	2,252	2,149
Verification Study Review	A3b	273	42	63	126
Director Permit Reissuance Activities	A13	283	272	397	317
Annual Director Activities	A3c	2,150	2,550	2,900	2,533
Yearly Total		5,126	4,638	5,612	5,125

Federal Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Federal Permit Program Oversight Activities	A4a	252	210	222	228
Yearly Total		252	210	222	228

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
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
NPDES Permit Application Activities					
Start-up Activities	A1a	\$20,429	\$17,875	\$20,429	\$19,578
Permit Application Activities	A1b	\$52,762	\$46,166	\$52,762	\$50,563
Source Waterbody Flow Information	A1c	\$32,378	\$28,330	\$32,378	\$31,029
Use Existing Data- Source Water Baseline Biological Characterization Data	A1d	\$109,123	\$95,483	\$109,123	\$104,576
CWIS Flow Reduction Requirements (Track 1)	A1e	\$27,290	\$27,290	\$18,194	\$24,258
CWIS Velocity Requirements (Track 1)	A1f	\$39,046	\$39,046	\$26,030	\$34,707
Design and Construction Technology Plan (Track 1)	A1g	\$31,627	\$31,627	\$21,084	\$28,113
Comprehensive Demonstration Study Plan (Track 2)	A1h	\$29,406	\$14,703	\$58,812	\$34,307
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A1i	\$368,463	\$245,642	\$614,106	\$409,404
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A1i	\$157,309	\$157,309	\$157,309	\$157,309
Profile of Source Water Biota for Characterization Study (Track 2)	A1i	\$53,753	\$26,877	\$107,506	\$62,712
Submit Characterization Study (Track 2)	A1i	\$43,376	\$21,688	\$43,376	\$36,147
Freshwater Evaluation of Potential CWIS Effects (Track 2)	A1j	\$198,624	\$99,312	\$99,312	\$132,416
Estuary Evaluation of Potential CWIS Effects (Track 2)	A1j	\$0	\$0	\$116,421	\$38,807
Verification Monitoring Plan (Track 2)	A1k	\$14,203	\$7,101	\$28,405	\$16,570
NPDES Permit Application Activity Total		\$1,177,788	\$858,450	\$1,505,247	\$1,180,495
NPDES Repermitting Activities					
Start-up Activities	A12a	\$2,453	\$818	\$4,905	\$2,725
Permit Application Activities	A12b	\$10,415	\$3,472	\$20,831	\$11,573
Source Waterbody Flow Information	A12c	\$3,569	\$1,190	\$7,138	\$3,965
Source Water Baseline Biological Characterization Data	A12d	\$12,388	\$4,129	\$24,776	\$13,764
CWIS Flow Reduction Requirements (Track 1)	A12e	\$0	\$0	\$9,097	\$3,032
CWIS Velocity Requirements (Track 1)	A12f	\$0	\$0	\$6,979	\$2,326
Design and Construction Technology Plan (Track 1)	A12g	\$0	\$0	\$4,164	\$1,388
Comprehensive Demonstration Study Plan (Track 2)	A12h	\$12,863	\$4,288	\$17,150	\$11,434
Freshwater Source Water Baseline Biological Characterization Study (Track 2)	A12i	\$211,192	\$140,795	\$211,192	\$187,726
Estuary Source Water Baseline Biological Characterization Study (Track 2)	A12i	\$182,420	\$182,420	\$273,630	\$212,824
Profile of Source Water Biota for Characterization Study (Track 2)	A12i	\$24,635	\$8,212	\$32,846	\$21,898
Submit Characterization Study (Track 2)	A12i	\$13,087	\$13,087	\$6,543	\$10,906
NPDES Repermitting Activity Total		\$473,021	\$358,409	\$619,252	\$483,561
Annual Activities					
Freshwater Verification Study (Track 2)	A2a	\$56,128	\$12,473	\$12,473	\$27,024
Estuary Verification Study (Track 2)	A2b	\$33,394	\$0	\$8,348	\$13,914
Biological Monitoring for Impingement (Freshwater)	A2c	\$774,806	\$929,767	\$1,084,728	\$929,767
Biological Monitoring for Impingement (Estuary)	A2d	\$225,494	\$253,681	\$253,681	\$244,285
Biological Monitoring for Entrainment (Freshwater)	A2e	\$1,273,066	\$1,527,679	\$1,782,292	\$1,527,679
Biological Monitoring for Entrainment (Estuary)	A2f	\$364,271	\$409,805	\$409,805	\$394,627
Velocity Monitoring	A2g	\$284,402	\$337,314	\$383,612	\$335,109
Visual Inspection of Installed Technologies	A2h	\$203,134	\$225,704	\$236,989	\$221,942
Yearly Status Report Activities	A2i	\$921,972	\$1,093,501	\$1,243,590	\$1,086,354
Annual Activity Yearly Labor Total		\$4,136,665	\$4,789,923	\$5,415,517	\$4,780,702
Yearly Labor Total		\$5,787,474	\$6,006,782	\$7,540,016	\$6,444,757

Facility O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
NPDES Application					
Purchase and Installation of Remote Monitoring Device	A.1k	\$348,922	\$348,922	\$232,614	\$310,153
Purchase & Installation of Pilot Study Technology	A.1j	\$572,305	\$286,153	\$572,305	\$476,921
Operation & Maintenance of Pilot Technology	A.1j	\$60,000	\$30,000	\$60,000	\$50,000
Biological Study Laboratory Analysis (Freshwater)	A.1i	\$117,000	\$78,000	\$195,000	\$130,000
Biological Study Laboratory Analysis (Estuary)	A.1i	\$50,700	\$50,700	\$50,700	\$50,700
Pilot Study Entrainment Laboratory Analysis (Freshwater)	A.1j	\$12,000	\$6,000	\$6,000	\$8,000
Pilot Study Entrainment Laboratory Analysis (Estuary)	A.1j	\$0	\$0	\$7,800	\$2,600
Other Direct Costs	A.1a-k	\$42,333	\$36,183	\$44,933	\$41,150
Repermitting					
Biological Study Laboratory Analysis (Freshwater)	A.12i	\$70,200	\$46,800	\$70,200	\$62,400
Biological Study Laboratory Analysis (Estuary)	A.12i	\$60,840	\$60,840	\$91,260	\$70,980
Other Direct Costs	A.12a-i	\$16,330	\$10,470	\$26,780	\$17,860
Annual					
Operation of Remote Sensing Device	A.2f	\$5,000	\$6,200	\$7,400	\$6,200
Identify & Enumerate Entrained Freshwater Biota	A.2f	\$273,000	\$327,600	\$382,200	\$327,600
Identify & Enumerate Entrained Estuary Biota	A.2f	\$81,120	\$91,260	\$91,260	\$87,880
Other Direct Costs	A.2a-f	\$113,000	\$127,100	\$144,450	\$128,183
Equipment Capital Cost Subtotal		\$926,227	\$641,274	\$812,320	\$793,274
Equipment O&M Cost Subtotal		\$60,000	\$30,000	\$60,000	\$50,000
Laboratory Analysis Subtotal		\$664,860	\$661,200	\$894,420	\$740,160
Other Direct Costs Subtotal		\$171,663	\$173,753	\$216,163	\$187,193
Yearly O&M Total		\$1,822,750	\$1,506,228	\$1,982,903	\$1,770,627

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
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Director Permit Issuance Activities	A3a	\$137,127	\$97,818	\$128,311	\$121,086
Verification Study Review	A3b	\$12,749	\$1,961	\$2,942	\$5,884
Director Permit Reissuance Activities	A13	\$16,920	\$16,363	\$21,851	\$18,378
Annual Director Activities	A3c	\$102,095	\$121,089	\$137,709	\$120,298
Yearly Total		\$268,891	\$237,232	\$290,814	\$265,646

Director O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Start-Up & NPDES Application					
Other Direct Costs	A3a-b	\$3,050	\$2,200	\$1,950	\$2,400
Annual					
Other Direct Costs	A3c	\$2,150	\$2,550	\$2,900	\$2,533
Yearly O&M Cost Total		\$5,200	\$4,750	\$4,850	\$4,933

Federal Labor Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Federal Permit Program Oversight Activities	A4b	11,775	9,784	10,424	\$10,661
Yearly Total		\$11,775	\$9,784	\$10,424	\$10,661

Federal O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010	
Federal Permit Program Oversight ODCs	A4a	\$400	\$350	\$300	\$350
Yearly Total		\$400	\$350	\$300	\$350

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
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010		
Burden (hours)	A7	101,392	106,697	131,163	113,084	339,252
Respondents (number)	A5	53	60	68	60	68
Responses (number)	A6	292	292	367	317	951
Costs (labor)	A9	\$5,787,474	\$6,006,782	\$7,540,016	\$6,444,757	\$19,334,271
Costs (capital)	A9	\$926,227	\$641,274	\$812,320	\$793,274	\$2,379,821
Costs (equipment O&M)	A9	\$60,000	\$30,000	\$60,000	\$50,000	\$150,000
Costs (lab analysis)	A9	\$664,860	\$661,200	\$894,420	\$740,160	\$2,220,480
Costs (other direct costs)	A9	\$171,663	\$173,753	\$216,163	\$187,193	\$561,580
Total Costs		\$7,610,224	\$7,513,009	\$9,522,919	\$8,215,384	\$24,646,152

Directors

	Source (Exhibit)*	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010		
Burden (hours)	A8	5,126	4,638	5,612	5,125	15,376
Respondents (number)	A5	46	46	46	46	46
Responses (number)	A6	255	264	320	280	839
Costs(labor)	A10	\$268,891	\$237,232	\$290,814	\$265,646	\$796,937
Costs (other direct costs)	A10	\$5,200	\$4,750	\$4,850	\$4,933	\$14,800
Total Costs		\$274,091	\$241,982	\$295,664	\$270,579	\$811,737

Federal Government

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		Dec. 2007 - Nov. 2008	Dec. 2008 - Nov. 2009	Dec. 2009 - Nov. 2010		
Burden (hours)	A8	252	210	222	228	684
Costs(labor)	A10	\$11,775	\$9,784	\$10,424	\$10,661	\$31,983
Costs (O&M)	A10	\$400	\$350	\$300	\$350	\$1,050
Total Costs		\$12,175	\$10,134	\$10,724	\$11,011	\$33,033

Totals for Respondents (Facilities and Directors)*

	Annual Average	Three Year Total
Total Respondent Burden (hours)	118,209	354,628
Total Respondents (number)	106	114
Total Respondent Labor Costs	\$6,710,403	\$20,131,208
Total Respondent Capital and O&M Costs	\$1,775,560	\$5,176,681
Total Respondent Cost for All Activities	\$8,485,963	\$25,457,890

* 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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Read and Understand Rule Mobilization/Planning	3	1	6	10	4	4	0	0	0	0	0	0	8	\$519	\$0	\$0		80	\$5,188
Training	3	1	6	10	1	2	0	0	0	0	0	0	3	\$169	\$0	\$0		30	\$1,690
Other Direct Costs	3	1	6	10	1	1	0	0	0	0	0	0	2	\$130	\$0	\$0		20	\$1,297
Totals	3	1	6	10	0	0	0	0	0	0	0	0	0	\$0	\$0	\$50		-	\$500
Totals	3	1	6	10									13	\$818	\$0	\$50	\$868	130	\$8,675

**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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Detailed Source Water Body Characterization	3	1	6	10	1	5	12	0	0	0	0	0	18	\$719	\$0	\$0		180	\$7,189
Description of CWIS Configuration and Location	3	1	6	10	0	1	1	0	0	0	0	0	2	\$75	\$0	\$0		20	\$753
Facility Water Balance Diagram	3	1	6	10	1	1	1	0	0	0	0	0	3	\$166	\$0	\$0		30	\$1,657
Operational Characteristics Narrative	3	1	6	10	12	30	0	0	0	0	0	0	42	\$2,264	\$0	\$0		420	\$22,638
Submit Materials for Review by State	3	1	6	10	0	0	0	0	0	0	3	3	\$62	\$0	\$0		30	\$618	
Recordkeeping	3	1	6	10	1	1	1	0	0	0	1	4	\$186	\$0	\$0		40	\$1,863	
Other Direct Costs	3	1	6	10	0	0	0	0	0	0	0	0	0	\$0	\$0	\$500		-	\$5,000
Totals	3	1	6	10									72	\$3,472	\$0	\$500	\$3,972	720	\$39,718

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	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Gather Information Characterizing Flow	3	1	6	10	0	10	0	0	0	0	0	0	10	\$393	\$0	\$0		100	\$3,930
Perform Engineering Calculations	3	1	6	10	2	10	0	0	0	0	0	0	12	\$574	\$0	\$0		120	\$5,738
Submit Data and Analysis for Review	3	1	6	10	0	0	0	0	0	0	5	5	\$103	\$0	\$0		50	\$1,030	
Recordkeeping	3	1	6	10	0	2	0	0	0	0	2	4	\$120	\$0	\$0		40	\$1,198	
Other Direct Costs	3	1	6	10	0	0	0	0	0	0	0	0	0	\$0	\$0	\$100		-	\$1,000
Totals	3	1	6	10									31	\$1,190	\$0	\$100	\$1,290	310	\$12,896

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
					Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**		
	Year 1	Year 2	Year 3	Total	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Identify Available Data and Document Efforts	3	1	6	10	12	24	0	0	0	0	0	2	38	\$2,069	\$0	\$0		380	\$20,692
Compile and Analyze Existing Data	3	1	6	10	10	18	6	0	0	0	0	1	35	\$1,848	\$0	\$0		350	\$18,480
Submit Data for Review by State	3	1	6	10	0	0	0	0	0	0	0	2	2	\$41	\$0	\$0		20	\$412
Recordkeeping	3	1	6	10	1	1	0	0	0	0	0	2	4	\$171	\$0	\$0		40	\$1,709
Other Direct Costs	3	1	6	10	0	0	0	0	0	0	0	0	0	\$0	\$0	\$750		-	\$7,500
Totals	3	1	6	10									79	\$4,129	\$0	\$750	\$4,879	790	\$48,793

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
					Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**		
	Year 1	Year 2	Year 3	Total	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Develop Narrative	0	0	2	2	8	16	0	0	0	0	0	0	24	\$1,352	\$0	\$0		48	\$2,704
Perform Engineering Calculations	0	0	2	2	4	12	0	0	0	0	0	0	16	\$833	\$0	\$0		32	\$1,666
Document Minimization of Blow Down and Flows Not	0	0	2	2	0	40	0	0	0	0	0	6	46	\$1,696	\$0	\$0		92	\$3,391
Submit Data and Analysis for Review	0	0	2	2	0	0	0	0	0	0	0	8	8	\$165	\$0	\$0		16	\$330
Recordkeeping	0	0	2	2	2	4	0	0	0	0	0	8	14	\$503	\$0	\$0		28	\$1,006
Other Direct Costs	0	0	2	2	0	0	0	0	0	0	0	0	0	\$0	\$0	\$400		-	\$800
Totals	0	0	2	2									108	\$4,548	\$0	\$400	\$4,948	216	\$9,897

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
					Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**		
	Year 1	Year 2	Year 3	Total	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21						B	C
	A				Level of Effort (hrs)													A*B	A*(C+D)
Develop Narrative	0	0	2	2	5	10	0	0	0	0	0	0	15	\$845	\$0	\$0		30	\$1,690
Perform Engineering Calculations	0	0	2	2	8	32	0	0	0	0	0	0	40	\$1,981	\$0	\$0		80	\$3,962
Submit Data and Analysis for Review	0	0	2	2	0	0	0	0	0	0	0	8	8	\$165	\$0	\$0		16	\$330
Revise Based on State review	0	0	2	2	1	5	0	0	0	0	0	0	6	\$287	\$0	\$0		12	\$574
Recordkeeping	0	0	2	2	1	1	0	0	0	0	0	4	6	\$212	\$0	\$0		12	\$424
Other Direct Costs	0	0	2	2	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,000		-	\$2,000
Totals	0	0	2	2									75	\$3,490	\$0	\$1,000	\$4,490	150	\$8,979

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	Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	A*B	A*(C+D)
	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21	B	C	D	E							
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Delineate Hydraulic Zone of Influence	0	0	2	2	1	2	2	0	0	0	0	0	5	\$241	\$0	\$0	10	\$482	
Develop Narrative Description	0	0	2	2	5	10	0	0	0	0	0	0	15	\$845	\$0	\$0	30	\$1,690	
Perform Engineering Calculations	0	0	2	2	3	12	0	0	0	0	0	0	15	\$743	\$0	\$0	30	\$1,486	
Submit Data and Analysis for Review	0	0	2	2	0	0	0	0	0	0	0	3	3	\$62	\$0	\$0	6	\$124	
Recordkeeping	0	0	2	2	1	1	0	0	0	0	0	3	5	\$192	\$0	\$0	10	\$383	
Other Direct Costs	0	0	2	2	0	0	0	0	0	0	0	0	0	\$0	\$0	\$50	-	\$100	
Totals	0	0	2	2									43	\$2,082	\$0	\$50	\$2,132	86	\$4,264

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	Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	A*B	A*(C+D)
	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21	B	C	D	E							
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Description of Historical Studies that will be Used	3	1	4	8	6	12	0	0	0	0	0	1	19	\$1,035	\$0	\$0	152	\$8,277	
Description of Proposed and/or Implemented Technologies	3	1	4	8	2	6	0	0	0	0	0	0	8	\$417	\$0	\$0	64	\$3,333	
Develop Baseline Biological Characterization Sampling Plan	3	1	4	8	12	18	2	2	0	0	0	1	35	\$2,113	\$0	\$0	280	\$16,906	
Submit Data and Plans for Review	3	1	4	8	0	0	0	0	0	0	0	4	4	\$82	\$0	\$0	32	\$659	
Revise Based on State Review	3	1	4	8	2	5	1	0	0	0	0	1	9	\$434	\$0	\$0	72	\$3,471	
Recordkeeping	3	1	4	8	1	1	1	0	0	0	0	2	5	\$207	\$0	\$0	40	\$1,655	
Other Direct Costs	3	1	4	8	0	0	0	0	0	0	0	0	0	\$0	\$0	\$750	-	\$6,000	
Totals	3	1	4	8									80	\$4,288	\$0	\$750	\$5,038	640	\$40,301

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	Assumed Loaded Hourly Rate \$								Burden (hrs)	Labor Cost	Capital Costs	O&M Costs	Total Costs**	A*B	A*(C+D)
	\$90	\$39	\$36	\$114	\$64	\$75	\$44	\$21	B	C	D	E							
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D)
Implement Freshwater Sampling	3	2	3	3	2	16	0	36	1248	20	1248	10	2580	\$140,795	\$0	\$0	10,320	\$563,179	
Other Direct Costs for Implement Freshwater Sampling	3	2	3	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$3,120	0	\$12,480	
Implement Estuary Sampling	2	2	3	3	3	30	0	48	2457	30	2457	15	5040	\$273,630	\$0	\$0	11,760	\$638,471	
Other Direct Costs for Implement Estuary Sampling	2	2	3	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$7,800	0	\$18,200	
Biological Study Laboratory Analysis (Freshwater)	3	2	3	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$46,800	0	\$187,200	
Biological Study Laboratory Analysis (Estuary)	2	2	3	3	0	0	0	0	0	0	0	0	0	\$0	\$0	\$91,260	0	\$212,940	
Profile of Source Water Biota	3	1	4	8	10	6	0	10	18	0	6	2	52	\$3,734	\$0	\$0	416	\$29,869	
Identification of Critical Species	3	1	4	8	10	6	0	6	12	0	0	1	35	\$2,611	\$0	\$0	280	\$20,890	
Description of Additional Stresses	3	1	4	8	5	3	0	5	9	0	3	1	26	\$1,867	\$0	\$0	208	\$14,934	
Write Study based on Results and Submit for Review by	2	2	1	5	24	48	0	5	2	2	0	2	83	\$4,947	\$0	\$0	415	\$24,733	
Recordkeeping	2	2	1	5	2	4	0	2	0	0	0	7	15	\$711	\$0	\$0	75	\$3,553	
Finalize study based on State review	2	2	1	5	5	10	0	0	0	0	0	2	17	\$886	\$0	\$0	85	\$4,431	
Freshwater Totals	3	2	3	3									2,808	\$155,550	\$46,800	\$3,120	\$205,470	11,230	\$823,547
Marine Totals	3	1	4	3									5,268	\$288,385	\$91,260	\$7,800	\$387,445	12,329	\$907,332

Total Burden and Costs for All NPDES Application Activities

													Total Burden (hrs.)	Total Initial Cost
Totals													26,601	\$1,904,403

* 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	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	Total Cost Per Permit
	Technical	Technical					
	Assumed Loaded Hourly Rate \$						
	68	39	26				
	Level of Effort (hrs)			B	C	D	C+D
Reviewing CWIS location and design data	2	5	0	7	\$333		
Determine Compliance with Source Waterbody Flow Information	1	2	0	2	\$111		
Review Source Water Baseline Biological Characterization Data	6	6	0	12	\$644		
Review Design and Construction Technology Plan (Track 1)	7	2	0	10	\$586		
Determine Compliance with CWIS Velocity Requirements (Track 1)	1	2	0	2	\$111		
Determine Compliance with CWIS Flow Reduction Requirements (Track 1)	2	2	0	5	\$258		
Review Comprehensive Demonstration Study Plan (Track 2)	5	5	0	10	\$515		
Review Source Water Baseline Biological Characterization Study (Track 2)	80	15	0	95	\$6,056		
Determine Monitoring Frequency	1	2	0	2	\$111		
Determine Record keeping and Reporting Frequency	1	2	0	2	\$111		
Considering Public Comments	5	5	0	10	\$515		
Issuing Permit	0	2	0	2	\$98		
Permit Record Keeping	0	0	1	1	\$48		
Totals	110	50	0	159	\$9,448	\$300	\$9,748
Track 1 Totals				55	\$2,925	\$300	\$3,225
Track 2 Totals				143	\$8,542	\$300	\$8,842