

"200 MGD For All Waterbodies" Option

OMB REVIEW DRAFT
SUPPORTING SPREADSHEETS
FOR
INFORMATION COLLECTION
COSTS FOR SECTION 316(b) PHASE III
EXISTING MANUFACTURERS

27-Oct-04

(APPENDIX A)

Exhibit A.200MGD.1

Facility Cost and Burden Estimates for NPDES Permit Application Activities

Exhibit A.200MGD.1a

Start-up Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
					\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19							
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D+E)
Read and Understand Rule	7	5	1	13	12	12	0	0	0	0	0	1	25	\$1,305	\$0	\$0		325	\$16,964
Mobilization/Planning	7	5	1	13	4	8	0	0	0	0	0	1	13	\$583	\$0	\$0		169	\$7,583
Training	7	5	1	13	2	2	0	0	0	0	0	1	5	\$233	\$0	\$0		65	\$3,028
Other Direct Costs	7	5	1	13	0	0	0	0	0	0	0	0	0	\$0	\$0	\$50		-	\$650
Totals	7	5	1	13	18	22	0	0	0	0	0	3	43	\$2,121	\$0	\$50	\$2,171	559	\$28,224

Exhibit A.200MGD.1b

Permit Application Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
					\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19							
	A				Level of Effort (hrs)								B	C	D	E	C+D+E	A*B	A*(C+D+E)
Statement of Compliance Option Selected	7	5	1	13	1	0	0	0	0	0	0	1	2	\$92	\$0	\$0		26	\$1,192
Source Water Physical Data	7	5	1	13	2	16	40	0	0	0	0	0	58	\$1,902	\$0	\$0		754	\$24,731
Configuration and Location of CWIS	7	5	1	13	2	5	8	0	0	0	0	0	15	\$559	\$0	\$0		195	\$7,264
Facility Water Balance Diagram	7	5	1	13	1	1	1	0	0	0	0	0	3	\$138	\$0	\$0		39	\$1,788
CWIS Operation Narrative	7	5	1	13	16	40	0	0	0	0	0	0	56	\$2,531	\$0	\$0		728	\$32,906
CWS Operation Narrative	7	5	1	13	16	40	0	0	0	0	0	0	56	\$2,531	\$0	\$0		728	\$32,906
Engineering Calculations	7	5	1	13	8	32	0	0	0	0	0	0	40	\$1,674	\$0	\$0		520	\$21,757
Submit Materials for Review by State	7	5	1	13	0	0	0	0	0	0	0	6	6	\$111	\$0	\$0		78	\$1,443
Recordkeeping	7	5	1	13	2	5	2	0	0	0	0	2	11	\$414	\$0	\$0		143	\$5,382
Other Direct Costs	7	5	1	13	0	0	0	0	0	0	0	0	0	\$0	\$0	\$510		-	\$6,630
Totals	7	5	1	13									247	\$9,951	\$0	\$510	\$10,461	3,211	\$135,998

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.200MGD.1c

Proposal for Collection of Information for Comprehensive Demonstration Study

Activity	Facilities (Respondents)				Facility	Junior	CAD	Contracted	Biologist	Statistician	Biological	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Manager	Technical	Operator	Manager											
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Description of Historical Studies that will be Used	5	3	1	9	20	40	0	0	0	0	0	2	62	\$2,861	\$0	\$0		558	\$25,749
Description of Proposed and/or Implemented Technologies	5	3	1	9	8	20	0	0	0	0	0	28	\$1,266	\$0	\$0		252	\$11,390	
Develop Source Water Sampling Plan	5	3	1	9	40	60	8	8	0	0	0	4	120	\$6,012	\$0	\$0		1,080	\$54,104
Submit Data and Plans for Review	5	3	1	9	0	0	0	0	0	0	0	12	12	\$222	\$0	\$0		108	\$1,998
Revise Based on State Review	5	3	1	9	8	16	4	0	0	0	0	4	32	\$1,325	\$0	\$0		288	\$11,923
Recordkeeping	5	3	1	9	3	5	1	1	0	0	0	8	18	\$659	\$0	\$0		162	\$5,929
Other Direct Costs	5	3	1	9	0	0	0	0	0	0	0	0	0	\$0	\$0	\$770		-	\$6,930
Totals	5	3	1	9								272	\$12,344	\$0	\$770	\$13,114	2,448	\$118,024	

Exhibit A.200MGD.1d

Source Water Body Flow Information

Activity	Facilities (Respondents)				Facility	Junior	CAD	Contracted	Biologist	Statistician	Biological	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Manager	Technical	Operator	Manager											
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Galther Information to Characterize Flow (FW River/Stream)	1	0	0	1	0	32	0	0	0	0	0	0	32	\$1,088	\$0	\$0		32	\$1,088
Water Body Thermal Stratification Narrative (Lake/Reservoir)	0	0	0	0	4	40	0	0	0	0	0	0	44	\$1,653	\$0	\$0		-	\$0
Perform Engineering Calculations	1	0	0	1	8	32	0	0	0	0	0	0	40	\$1,674	\$0	\$0		40	\$1,674
Submit Data and Analysis for Review	1	0	0	1	0	0	0	0	0	0	0	16	16	\$296	\$0	\$0		16	\$296
Recordkeeping	1	0	0	1	1	3	0	0	0	0	0	8	12	\$323	\$0	\$0		12	\$323
Other Direct Costs	1	0	0	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$200		-	\$200
Totals	1	0	0	1								100	3381	\$0	\$200	\$3,581	100	\$3,581	

Exhibit A.200MGD.1e

Design and Construction Technology Plan

Activity	Facilities (Respondents)				Facility	Junior	CAD	Contracted	Biologist	Statistician	Biological	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Manager	Technical	Operator	Manager											
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19	B	C	D	E	C+D+E	A*B	A*(C+D+E)
Delineate Hydraulic Zone of Influence	1	3	1	5	2	5	8	0	0	0	0	0	15	\$559	\$0	\$0		75	\$2,794
Develop Narrative Description of Technologies (Impingement)	1	3	1	5	5	11	0	0	0	0	0	0	16	\$740	\$0	\$0		80	\$3,700
Perform Engineering Calculations (Impingement)	1	3	1	5	3	12	0	0	0	0	0	0	15	\$628	\$0	\$0		75	\$3,138
Develop Narrative Description of Technologies (Entrainment)	0	3	1	4	5	11	0	0	0	0	0	0	16	\$740	\$0	\$0		64	\$2,960
Perform Engineering Calculations (Entrainment)	0	3	1	4	3	12	0	0	0	0	0	0	15	\$628	\$0	\$0		60	\$2,510
Submit Data and Analysis for Review	1	3	1	5	0	0	0	0	0	0	0	6	6	\$111	\$0	\$0		30	\$555
Recordkeeping	1	3	1	5	1	2	0	0	0	0	0	6	9	\$252	\$0	\$0		45	\$1,261
Other Direct Costs	1	3	1	5	0	0	0	0	0	0	0	0	0	\$0	\$0	\$380		-	\$1,900
Totals	1	3	1	5								86	\$3,384	\$0	\$380	\$3,764	429	\$18,818	

Exhibit A.200MGD.1f

Impingement Mortality Study and/or Entrainment Characterization Study

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Max. Burden Per Facility over 3 yrs	Max. Labor Cost per Facility for 3 yrs	Max. Capital Cost per Facility for 3 yrs	Max. O&M Cost per Facility for 3 yrs	Avg. Total Cost Per Facility over 3 yrs	Total Burden (hrs.) for ICR period	Total Initial Cost (\$) for ICR period
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38								\$19
	A				Level of Effort (hrs)														
Implement Offshore Freshwater Sampling	1	1	1	2	6	52	0	100	2080	67	2080	34	4419	\$205,099	\$0	\$0		6,629	\$307,648
Other Direct Costs for Offshore Freshwater Sampling	1	1	1	2	0	0	0	0	0	0	0	0	0	\$0	\$0	\$3,076		-	\$4,615
Impingement Monitoring Freshwater	1	1	1	2	3	16	0	60	1040	33	1040	17	2209	\$103,088	\$0	\$0		3,314	\$154,632
Other Direct Costs for Impingement Monitoring Freshwater	1	1	1	2	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,546		-	\$2,319
Entrainment Monitoring Freshwater	0	0	0	0	3	16	0	60	780	33	780	17	1689	\$79,454	\$0	\$0		-	\$0
Other Direct Costs for Entrainment Monitoring Freshwater	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,192		-	\$0
Implement Offshore Marine Sampling	4	7	7	7	10	101	0	160	4056	100	4056	50	8533	\$394,445	\$0	\$0		51,147	\$2,364,306
Other Direct Costs for Offshore Marine Sampling	4	7	7	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$5,917		-	\$35,465
Impingement Monitoring Marine	4	6	6	6	4	31	0	80	2028	50	2028	25	4246	\$196,487	\$0	\$0		22,623	\$1,046,880
Other Direct Costs for Impingement Monitoring Marine	4	6	6	6	0	0	0	0	0	0	0	0	0	\$0	\$0	\$2,947		-	\$15,703
Entrainment Monitoring Marine	4	7	7	7	4	31	0	80	1521	50	1521	25	3232	\$150,400	\$0	\$0		19,373	\$901,499
Other Direct Costs for Entrainment Monitoring Marine	4	7	7	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$2,256		-	\$13,522
Biological Study Laboratory Analysis (Freshwater)	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$78,000		-	\$0
Biological Study Laboratory Analysis (Marine)	4	7	7	7	0	0	0	0	0	0	0	0	0	\$0	\$0	\$152,100		-	\$912,600
Profile of Source Water Biota	5	3	1	9	32	20	0	32	60	0	20	8	172	\$10,017	\$0	\$0		1,548	\$90,155
Identification of Critical Species	5	3	1	9	32	20	0	20	40	0	0	3	115	\$7,016	\$0	\$0		1,035	\$63,143
Description of Additional Stresses	5	3	1	9	16	10	0	16	30	0	10	4	86	\$5,009	\$0	\$0		774	\$45,077
Write Study based on Results and Submit for Review by State	1	3	1	5	80	160	0	16	8	8	0	8	280	\$13,812	\$0	\$0		1,400	\$69,060
Recordkeeping	1	3	1	5	6	12	0	6	12	3	0	24	63	\$2,656	\$0	\$0		315	\$13,281
Finalize study based on State review	1	3	1	5	16	32	0	0	0	0	0	8	56	\$2,407	\$0	\$0		280	\$12,036
Other Direct Costs for Study Report	1	3	1	5	0	0	0	0	0	0	0	0	0	\$0	\$0	\$614		-	\$3,069
Freshwater Totals	1	1	1	2									9,089	\$428,557	\$0	\$84,428	\$512,985		
Marine Totals	4	7	7	7									16,783	\$782,249	\$0	\$163,834	\$946,083	108,436	\$6,055,010

\$11,734

Exhibit A.200MGD.1g

Pilot Study for New Impingement & Entrainment Technology

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Avg. Burden Per Facility	Avg. Labor Cost per Facility	Avg. Capital Costs	Avg. O&M Costs*	Avg. Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							B	C	D	E	C+D+E	A*B	A*(C+D+E)	
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38								\$19
	A				Level of Effort (hrs)														
Calculate Reduction in Impingement Mortality and Entrainment	1	3	1	5	80	80	8	0	0	0	0	12	180	\$9,040	\$0	\$0		900	\$45,202
Perform Engineering Estimates of Efficacy	1	3	1	5	40	32	0	0	0	0	0	4	76	\$4,090	\$0	\$0		380	\$20,450
Purchase, Installation & Operation of Pilot Study Technology- Freshwater	0	1	0	1	0	0	0	0	0	0	0	0	0	\$0	\$804,252	\$0		-	\$804,252
Purchase, Installation & Operation of Pilot Study Technology- Freshwater-Impingement Only	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0
Purchase, Installation & Operation of Pilot Study Technology- Marine	1	2	1	4	0	0	0	0	0	0	0	0	0	\$0	\$183,241	\$0		-	\$732,963
Purchase, Installation & Operation of Pilot Study Technology- Marine- Impingement Only	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0	\$0		-	\$0
Perform Impingement Monitoring (Freshwater)	0	1	0	1	16	25	0	80	240	40	240	20	661	\$33,927	\$0	\$0		661	\$33,927
Perform Entrainment Monitoring (Freshwater)	0	1	0	1	16	25	0	80	180	40	180	20	541	\$28,473	\$0	\$0		541	\$28,473
Perform Impingement Monitoring (Marine)	1	2	1	4	16	33	0	80	312	52	312	26	831	\$41,572	\$0	\$0		3,322	\$166,290
Perform Entrainment Monitoring (Marine)	1	2	1	4	16	33	0	80	234	52	234	26	675	\$34,482	\$0	\$0		2,698	\$137,929
Pilot Study Entrainment Laboratory Analysis (Freshwater)	0	1	0	1	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,000		-	\$6,000
Pilot Study Entrainment Laboratory Analysis (Marine)	1	2	1	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$7,800		-	\$31,200
Submit Data and Analysis for Review	1	3	1	5	8	10	0	8	6	4	0	16	52	\$2,512	\$0	\$0		260	\$12,558
Recordkeeping	1	3	1	5	4	8	0	4	8	2	0	20	46	\$1,845	\$0	\$0		230	\$9,224
Other Direct Costs	1	3	1	5	0	0	0	0	0	0	0	0	0	\$0	\$0	\$1,020		-	\$5,100
Totals	1	3	1	5									1,798	\$90,811	\$307,443	\$7,440	\$405,694	8,992	\$2,033,568

Exhibit A.200MGD.1h

Technology Installation and Operation Plan

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19							
	Level of Effort (hrs)																		
Installation & Maintenance Schedule	1	4	1	6	8	16	0	0	0	0	0	0	24	\$1,130	\$0	\$0		144	\$6,778
Description of Proposed Monitoring Parameters	1	4	1	6	2	6	0	0	0	0	0	0	8	\$350	\$0	\$0		48	\$2,102
List of Technology Assessment Activities	1	4	1	6	2	4	0	0	0	0	0	0	6	\$282	\$0	\$0		36	\$1,694
Schedule & Methodology of Assessment Activities	1	4	1	6	4	4	0	0	0	0	0	0	8	\$429	\$0	\$0		48	\$2,573
Submit Plan for Review	1	4	1	6	0	0	0	0	0	0	0	2	2	\$37	\$0	\$0		12	\$222
Recordkeeping	1	4	1	6	1	1	0	0	0	0	0	2	4	\$144	\$0	\$0		24	\$865
Other Direct Costs	1	4	1	6	0	0	0	0	0	0	0	0	0	\$0	\$0	\$80		-	\$480
Totals	1	4	1	6									52	\$2,372	\$0	\$80	\$2,452	312	\$14,714

Exhibit A.200MGD.1i

Verification Monitoring Plan

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Costs	O&M Costs*	Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate														
	A				\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19							
	Level of Effort (hrs)																		
Develop Verification Monitoring Plan	1	4	1	6	40	60	8	0	0	0	0	4	112	\$5,284	\$0	\$0		672	\$31,706
Submit Data and Plans for Review	1	4	1	6	0	0	0	0	0	0	0	2	2	\$37	\$0	\$0		12	\$222
Revise Based on State Review	1	4	1	6	2	4	1	0	0	0	0	1	8	\$331	\$0	\$0		48	\$1,987
Recordkeeping	1	4	1	6	1	1	1	1	0	0	0	2	6	\$265	\$0	\$0		36	\$1,592
Other Direct Costs	1	4	1	6	0	0	0	0	0	0	0	0	0	\$0	\$0	\$410		-	\$2,460
Totals	1	4	1	6									128	\$5,918	\$0	\$410	\$6,328	768	\$37,968

Total Labor Burden, Labor Cost, and ODCs for All NPDES Application Activities

	Facilities (Respondents)				Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total		
Totals					125,255	\$8,445,905

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

Exhibit A.200MGD.2
Facility Cost and Burden Estimates for Annual Activities

Exhibit A.200MGD.2a
Annual Monitoring for Impingement (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in 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	O&M Costs*	Total Costs	Burden (hrs.)	Cost (\$)	
	A				\$73	\$34	\$91	\$53	\$61	\$38							\$19
	A				Level of Effort (hrs)						B	C	D	C+D	A*B	A*(C+D)	
Monthly Sample Collection	0	1	1	1	2	0	4	72	0	72	0	150	\$7,055	\$0		300	\$14,110
Onsite Analysis of Samples	0	1	1	1	4	0	12	72	0	72	0	160	\$7,928	\$0		320	\$15,857
Perform Statistical Analysis	0	1	1	1	8	4	0	0	32	0	0	44	\$2,680	\$0		88	\$5,360
Record Keeping	0	1	1	1	2	1	1	4	1	0	16	25	\$841	\$0		50	\$1,681
Other Direct Costs	0	1	1	1	0	0	0	0	0	0	0	0	\$0	\$510		-	\$1,020
Totals	0	1	1	1	16	5	17	148	33	144	16	379	\$18,504	\$510	\$19,014	758	\$38,027

Exhibit A.200MGD.2b
Annual Monitoring for Impingement (Marine)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in 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	O&M Costs*	Total Costs	Burden (hrs.)	Cost (\$)	
	A				\$73	\$34	\$91	\$53	\$61	\$38							\$19
	A				Level of Effort (hrs)						B	C	D	C+D	A*B	A*(C+D)	
Monthly Sample Collection	0	0	3	3	2	0	5	94	0	94	0	194	\$9,127	\$0		583	\$27,382
Onsite Analysis of Samples	0	0	3	3	4	0	16	94	0	94	0	207	\$10,219	\$0		620	\$30,657
Perform Statistical Analysis	0	0	3	3	8	4	0	0	42	0	0	54	\$3,268	\$0		161	\$9,803
Record Keeping	0	0	3	3	2	1	1	5	1	0	16	27	\$950	\$0		80	\$2,849
Other Direct Costs	0	0	3	3	0	0	0	0	0	0	0	0	\$0	\$660		-	\$1,980
Totals	0	0	3	3	16	5	22	192	43	187	16	482	\$23,564	\$660	\$24,224	1,445	\$72,671

Exhibit A.200MGD.2c
Annual Monitoring for Entrapment (Freshwater)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in 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	O&M Costs*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$73	\$34	\$91	\$53	\$61	\$38							\$19
	A				Level of Effort (hrs)						B	C	D	C+D	A*B	A*(C+D)	
Biweekly Sample Collection	0	0	1	1	4	0	12	156	0	156	0	328	\$15,564	\$0		328	\$15,564
Handling and Preparation of Samples	0	0	1	1	4	0	12	78	0	78	0	172	\$8,474	\$0		172	\$8,474
Identify & Enumerate Entrapped Freshwater Biota	0	0	1	1	0	0	0	0	0	0	0	0	\$0	\$7,800		-	\$7,800
Perform Statistical Analysis	0	0	1	1	16	4	0	0	64	0	0	84	\$5,224	\$0		84	\$5,224
Recordkeeping	0	0	1	1	2	1	1	8	2	0	16	30	\$1,114	\$0		30	\$1,114
Other Direct Costs	0	0	1	1	0	0	0	0	0	0	0	-	\$0	\$510		-	\$510
Totals	0	0	1	1	26	5	25	242	66	234	16	614	\$30,376	\$8,310	\$38,686	614	\$38,686

Exhibit A.200MGD.2d

Annual Monitoring for Entrainment (Marine)

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in 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	O&M Costs*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$73	\$34	\$91	\$53	\$61	\$38	\$19	B	C	D	C+D	A*B	A*(C+D)
Level of Effort (hrs)																	
Biweekly Sample Collection	0	0	3	3	4	0	12	203	0	203	0	422	\$19,836	\$0		1,266	\$59,509
Handling and Preparation of Samples	0	0	3	3	4	0	12	101	0	101	0	218	\$10,565	\$0		654	\$31,694
Identify & Enumerate Entrained Marine Biota	0	0	3	3	0	0	0	0	0	0	0	0	\$0	\$10,140		-	\$30,420
Perform Statistical Analysis	0	0	3	3	16	4	0	0	83	0	0	103	\$6,387	\$0		309	\$19,160
Recordkeeping	0	0	3	3	2	1	1	10	3	0	16	33	\$1,281	\$0		99	\$3,843
Other Direct Costs	0	0	3	3	0	0	0	0	0	0	0	-	\$0	\$660		-	\$1,980
Totals	0	0	3	3	26	5	25	314	86	304	16	776	\$38,069	\$10,800	\$48,869	2,328	\$146,606

Exhibit A.200MGD.2e

Biannual Status Report Activities

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in 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	O&M Costs*	Total Costs	Burden (hrs.)	Annual Cost	
	A				\$73	\$34	\$91	\$53	\$61	\$38	\$19	B	C	D	C+D	A*B	A*(C+D)
Level of Effort (hrs)																	
Report on Inspection and Maintenance	0	1	4	5	16	16	0	0	0	0	0	32	\$1,715	\$0		160	\$8,576
Detail Biological Monitoring Results	0	1	4	5	24	32	4	4	24	0	0	88	\$4,889	\$0		440	\$24,446
Compile and Submit Report	0	1	4	5	80	80	0	0	0	0	16	176	\$8,872	\$0		880	\$44,360
Recordkeeping	0	1	4	5	8	12	0	0	0	0	8	28	\$1,142	\$0		140	\$5,708
Other Direct Costs	0	1	4	5	0	0	0	0	0	0	0	-	\$0	\$770		-	\$3,850
Totals	0	1	4	5	128	140	4	4	24	0	24	324	\$16,618	\$770	\$17,388	1,620	\$86,940

Exhibit A.200MGD.2f
Verification Study

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility in the ICR Approval Period				Total for All Facilities in the ICR Approval Period	
	Year 1	Year 2	Year 3	Total	\$73	\$34	\$91	\$53	\$61	\$38	\$19	Burden (hrs)	Labor Cost	O&M Costs*	Total Costs	Burden (hrs.)	Total Cost (\$)
	A				Level of Effort (hrs)							B	C	D	C+D	A*B	A*(C+D)
Perform Statistical Analysis	0	1	4	5	25	30	15	15	25	0	1	111	\$6,557	\$0		555	\$32,785
Submit Monitoring Results & Study Analysis	0	0	0	0	0	0	0	0	0	0	4	4	\$74	\$0	-	\$0	
Record Keeping	0	1	4	5	1	2	0	0	0	0	4	7	\$215	\$0	35	\$1,076	
Other Direct Costs	0	1	4	5	0	0	0	0	0	0	0	-	\$0	\$510	-	\$2,550	
Totals	0	1	4	5	26	32	15	15	25	0	9	122	\$6,846	\$510	\$7,356	590	\$36,411

Total Burden and Cost for All Annual Activities

	Facilities (Respondents)															Total Burden (hrs.)	Total Cost
	Year 1	Year 2	Year 3	Total													
Totals																7,355	\$419,340

Exhibit A.200MGD.3

Director Burden and Cost Estimates for Activities

Exhibit A.200MGD.3a

Director Start-up Activities

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Director	Labor Cost per Director	O&M Costs*	Total Cost Per Director	Total Burden (hrs.)	Total Initial Cost
		Assumed Loaded Hourly Rate								
		\$50	\$32	\$24						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Read and Understand Rule	46	12	12	0	24	\$977	\$0		1,104	\$44,933
Mobilization/Planning	46	24	16	0	40	\$1,698	\$0		1,840	\$78,126
Training	46	4	32	0	36	\$1,219	\$0		1,656	\$56,065
Other Direct Costs	46	0	0	0	-	\$0	\$50		-	\$2,300
Totals	46	40	60	0	100	\$3,894	\$50	\$3,944	4,600	\$181,424

Exhibit A.200MGD.3b

Director Permit Issuance Activities

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost*
		Assumed Loaded Hourly Rate								
		\$50	\$32	\$24						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	13	2	6	0	8	\$290	\$0		104	\$3,775
Review CWIS Data	13	6	18	0	24	\$871	\$0		312	\$11,326
Review CWS Operation Narrative	13	6	18	0	24	\$871	\$0		312	\$11,326
Review Proposal for Collection of Information for Comprehensive Demonstration Study	9	16	16	0	32	\$1,302	\$0		288	\$11,722
Review Source Water Body Flow Information	1	2	6	0	8	\$290	\$0		8	\$290
Review Design and Construction Technology Plan	5	24	8	0	32	\$1,443	\$0		160	\$7,216
Review Impingement Mortality Monitoring Results	5	80	10	0	90	\$4,279	\$0		450	\$21,395
Review Entrainment Characterization Monitoring Results	4	80	10	0	90	\$4,279	\$0		360	\$17,116
Review Baseline Characterization Monitoring Results and Study Findings	5	240	25	0	265	\$12,678	\$0		1,325	\$63,388
Review Pilot Study for New Impingement & Entrainment Technology	5	16	16	0	32	\$1,302	\$0		160	\$6,512
Review Restoration Measures	1	400	100	0	500	\$22,990	\$0		650	\$29,887
Review Information to Support Site-Specific Determination of BTA	4	800	200	0	1,000	\$45,980	\$0		4,000	\$183,920
Review Technology Installation and Operation Plan & Verification Monitoring Plan	6	16	8	0	24	\$1,047	\$0		144	\$6,283
Determine Monitoring Frequency	13	2	6	0	8	\$290	\$0		104	\$3,775
Determine Record keeping and Reporting Frequency	13	2	6	0	8	\$290	\$0		104	\$3,775
Establish Requirements for Site-Specific Technology	4	8	24	0	32	\$1,162	\$0		128	\$4,646
Considering Public Comments	13	16	16	0	32	\$1,302	\$0		416	\$16,931
Issuing Permit	13	1	6	1	8	\$265	\$0		104	\$3,446
Permit Record Keeping	13	1	1	2	4	\$130	\$0		52	\$1,687
Other Direct Costs	13	0	0	0	-	\$0	\$310		-	\$4,030
Totals	13	1718	500	3	716	\$31,817	\$310	\$32,127	9,181	\$412,447

Exhibit A.200MGD.3c
Verification Study Review

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Permit	Total Burden (hrs.)	Total Initial Cost
		Assumed Loaded Hourly Rate								
		\$50	\$32	\$24						
		A	Level of Effort (hrs)							
Review of Verification Studies	0	2	4	0	6	\$227	\$0		-	\$0
Permit Modification Due to Unfavorable Results	0	4	10	0	14	\$517	\$0		-	\$0
Record Keeping	0	0	0	1	1	\$24	\$0		-	\$0
Other Direct Costs	0	0	0	0	-	\$0	\$10		-	\$0
Totals	0	6	14	1	21	\$768	\$10	\$778	0	\$0

Exhibit A.200MGD.3e
Annual Director Activities

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Permit	Total Burden (hrs.)	Total Annual Cost
		Assumed Loaded Hourly Rate								
		\$50	\$32	\$24						
		A	Level of Effort (hrs)							
Review of Biannual Status Report	5	6	12	0	18	\$680	\$0		90	\$3,399
Compliance Tracking	5	4	12	0	16	\$581	\$0		80	\$2,904
Determination on Monitoring Frequency Reduction	5	4	8	0	12	\$453	\$0		60	\$2,266
Record Keeping	5	1	2	1	4	\$138	\$0		20	\$688
Other Direct Costs	5	0	0	0	-	\$0	\$30		-	\$150
Totals	5	15	34	1	50	\$1,851	\$30	\$1,881	250	\$9,407

Total Burden and Cost for All Director Activities

				Total Burden (hrs.)	Total Initial Cost
Totals				14,031	\$603,277

Exhibit A.200MGD.4
Federal Burden and Cost Estimates for Activities

Exhibit A.200MGD.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								
		\$50	\$32	\$24						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	13	1	3	0	4	\$145	\$0		52	\$1,888
Review CWIS Data	13	1	2	0	3	\$113	\$0		39	\$1,473
Review CWS Operation Narrative	13	1	2	0	3	\$113	\$0		39	\$1,473
Review Proposal for Collection of Information for Comprehensive Demonstration Study	9	1	2	0	3	\$113	\$0		27	\$1,020
Review Source Water Body Flow Information	1	1	2	0	3	\$113	\$0		3	\$113
Review Design and Construction Technology Plan	5	1	3	0	4	\$145	\$0		20	\$726
Impingement Mortality Study and/or Entrainment Characterization Study	5	3	6	0	9	\$340	\$0		45	\$1,700
Review Pilot Study for New Impingement & Entrainment Technology	5	1	2	0	3	\$113	\$0		15	\$567
Review Restoration Measures	1	3	6	0	9	\$340	\$0		12	\$442
Review Information to Support Site-Specific Determination of BTA	4	6	12	0	18	\$680	\$0		72	\$2,719
Review Technology Installation and Operation Plan & Verification Monitoring Plan	6	1	3	0	4	\$145	\$0		24	\$871
Review the Monitoring Frequency	13	1	2	0	3	\$113	\$0		39	\$1,473
Review Establish Requirements for Site-Specific Technology	4	1	3	0	4	\$145	\$0		16	\$581
Permit Record Keeping	13	1	1	2	4	\$130	\$0		52	\$1,687
Other Direct Costs	13	0	0	0	-	\$0	\$50		0	\$650
Totals	13	23	49	2	36	\$1,321	\$50	\$1,371	455	\$17,382

Exhibit A.200MGD.5

Respondents for the ICR Approval Period Year by Year by Activity

Facilities

	Year 1	Year 2	Year 3	Annual Average ¹
	2010	2011	2012	
Start-up Activities	7	5	1	4
Permit Application Activities	7	5	1	4
Proposal for Collection of Information for Comprehensive Demonstration Study	5	3	1	3
FW River/Stream Source Water Body Flow Information	1	0	0	0
FW Lake/Reservoir Source Water Body Flow Information	0	0	0	0
Design and Construction Technology Plan (Impingement)	1	3	1	2
Design and Construction Technology Plan (Entrainment)	0	3	1	1
Design and Construction Technology Plan (All)	1	3	1	2
Freshwater Baseline Monitoring for Impingement Mortality and/or Entrainment Study	1	1	1	1
Freshwater Monitoring for Impingement Mortality Study	1	1	1	1
Freshwater Monitoring for Entrainment Study	0	0	0	0
Marine Baseline Monitoring for Impingement Mortality and/or Entrainment Study	4	7	7	6
Marine Monitoring for Impingement Mortality Study	4	6	6	5
Marine Monitoring for Entrainment Study	4	7	7	6
Impingement Mortality & Entrainment Characterization Study Initial Analysis	5	3	1	3
Impingement Mortality & Entrainment Characterization Study Final Report	1	3	1	2
Pilot Study Impingement Monitoring (Freshwater)	0	1	0	0
Pilot Study Entrainment Monitoring (Freshwater)	0	1	0	0
Pilot Study Impingement Monitoring (Marine)	1	2	1	1
Pilot Study Entrainment Monitoring (Marine)	1	2	1	1
Pilot Study Entrainment Monitoring (All)	1	3	1	2
Technology Installation and Operation Plan	1	4	1	2
Verification Monitoring Plan	1	4	1	2
Annual Monitoring for Impingement (Freshwater)	0	1	1	1
Annual Monitoring for Impingement (Marine)	0	0	3	1
Annual Monitoring for Entrainment (Freshwater)	0	0	1	0
Annual Monitoring for Entrainment (Marine)	0	0	3	1
Biannual Status Report Activities	0	1	4	2
Verification Study	0	1	4	2
Respondents	7	10	8	8

Directors

	Year 1	Year 2	Year 3	Annual Average ²
	2010	2011	2012	
Director Start-up Activities	46	0	0	15
Director Permit Issuance Activities				
Review Permit Application Information	7	5	1	4
Review Proposal for Collection of Information for Comprehensive Demonstration Study	5	3	1	3
Review Source Water Body Flow Information	1	0	0	0
Review Design and Construction Technology Plan	1	3	1	2
Review Impingement Mortality Monitoring Results	1	3	1	2
Review Entrainment Characterization Monitoring Results	0	3	1	1
Review Baseline Characterization Monitoring Results and Study Findings	1	3	1	2
Review Pilot Study for New Impingement & Entrainment Technology	1	3	1	2
Review Restoration Measures	1	1	0	0
Review Information to Support Site-Specific Determination of BTA	0	3	1	1
Review Technology Installation and Operation Plan & Verification Monitoring Plan	1	4	1	2
Determine Monitoring Frequency	7	5	1	4
Determine Permit Requirements and Issue Permit	7	5	1	4
Verification Study Review	0	0	0	0
Alternative Regulatory Requirements	0	0	0	0
Annual Director Activities				
Review of Biannual Status Report	0	1	4	2
Compliance Tracking	0	1	4	2
Determination on Monitoring Frequency Reduction	0	1	4	2
Record Keeping	0	1	4	2
Respondents	46	10	8	21

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	2010	2011	2012	
Facilities	7	10	8	8
Directors	46	10	8	21
Yearly Total	53	20	16	30

[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.

Exhibit A.200MGD.6

Responses for the ICR Approval Period Year by Year by Activity

Facilities

	Year 1	Year 2	Year 3	Annual Average
	2010	2011	2012	
Start-up Activities	7	5	1	4
Permit Application Activities	7	5	1	4
Proposal for Collection of Information for Comprehensive Demonstration Study	5	3	1	3
FW River/Stream Source Water Body Flow Information	1	0	0	0
FW Lake/Reservoir Source Water Body Flow Information	0	0	0	0
Design and Construction Technology Plan (Impingement)	1	3	1	2
Design and Construction Technology Plan (Entrainment)	0	3	1	1
Design and Construction Technology Plan (All)	1	3	1	2
Freshwater Baseline Monitoring for Impingement Mortality and/or Entrainment Study	1	1	1	1
Freshwater Monitoring for Impingement Mortality Study	1	1	1	1
Freshwater Monitoring for Entrainment Study	0	0	0	0
Marine Baseline Monitoring for Impingement Mortality and/or Entrainment Study	4	7	7	6
Marine Monitoring for Impingement Mortality Study	4	6	6	5
Marine Monitoring for Entrainment Study	4	7	7	6
Impingement Mortality & Entrainment Characterization Study Initial Analysis	5	3	1	3
Impingement Mortality & Entrainment Characterization Study Final Report	1	3	1	2
Pilot Study Impingement Monitoring (Freshwater)	0	1	0	0
Pilot Study Entrainment Monitoring (Freshwater)	0	1	0	0
Pilot Study Impingement Monitoring (Marine)	1	2	1	1
Pilot Study Entrainment Monitoring (Marine)	1	2	1	1
Pilot Study Entrainment Monitoring (All)	1	3	1	2
Technology Installation and Operation Plan	1	4	1	2
Verification Monitoring Plan	1	4	1	2
Annual Monitoring for Impingement (Freshwater)	0	1	1	1
Annual Monitoring for Impingement (Marine)	0	0	3	1
Annual Monitoring for Entrainment (Freshwater)	0	0	1	0
Annual Monitoring for Entrainment (Marine)	0	0	3	1
Biannual Status Report Activities	0	1	4	2
Verification Study	0	1	4	2
Responses	47	76	53	59

Directors

	Year 1	Year 2	Year 3	Annual Average
	2010	2011	2012	
Director Start-up Activities	46	0	0	15
Director Permit Issuance Activities				
Review Permit Application Information	7	5	1	4
Review Proposal for Collection of Information for Comprehensive Demonstration Study	5	3	1	3
Review Source Water Body Flow Information	1	0	0	0
Review Design and Construction Technology Plan	1	3	1	2
Review Impingement Mortality Monitoring Results	1	3	1	2
Review Entrainment Characterization Monitoring Results	0	3	1	1
Review Baseline Characterization Monitoring Results and Study Findings	1	3	1	2
Review Pilot Study for New Impingement & Entrainment Technology	1	3	1	2
Review Restoration Measures	1	1	0	0
Review Information to Support Site-Specific Determination of BTA	0	3	1	1
Review Technology Installation and Operation Plan & Verification Monitoring Plan	1	4	1	2
Determine Monitoring Frequency	7	5	1	4
Determine Permit Requirements and Issue Permit	7	5	1	4
Verification Study Review	0	0	0	0
Alternative Regulatory Requirements	0	0	0	0
Annual Director Activities				
Review of Biannual Status Report	0	1	4	2
Compliance Tracking	0	1	4	2
Determination on Monitoring Frequency Reduction	0	1	4	2
Record Keeping	0	1	4	2
Responses	79	45	27	50

Sum for Facilities and Directors

	Year 1	Year 2	Year 3	Annual Average
	2010	2011	2012	
Facilities	47	76	53	59
Directors	79	45	27	50
Yearly Total	126	121	80	109

Exhibit A.200MGD.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
		2010	2011	2012	
NPDES Permit Application Activities					
Start-up Activities	A.200MGD.1a	301	215	43	186
Permit Application Activities	A.200MGD.1b	1,729	1,235	247	1,070
Proposal for Collection of Information for Comprehensive Demonstration Study	A.200MGD.1c	1,360	816	272	816
FW River/Stream Source Water Body Flow Information	A.200MGD.1d	100	0	0	33
FW Lake/Reservoir Source Water Body Flow Information	A.200MGD.1d	0	0	0	0
Design and Construction Technology Plan (Impingement)	A.200MGD.1e	31	93	31	52
Design and Construction Technology Plan (Entrainment)	A.200MGD.1e	0	93	31	41
Design and Construction Technology Plan (All)	A.200MGD.1e	30	90	30	50
Freshwater Baseline Monitoring for Impingement Mortality and/or Entrainment Study	A.200MGD.1f	2,210	2,210	2,210	2,210
Freshwater Monitoring for Impingement Mortality Study	A.200MGD.1f	1,105	1,105	1,105	1,105
Freshwater Monitoring for Entrainment Study	A.200MGD.1f	0	0	0	0
Marine Baseline Monitoring for Impingement Mortality and/or Entrainment Study	A.200MGD.1f	11,366	19,890	19,890	17,049
Marine Monitoring for Impingement Mortality Study	A.200MGD.1f	5,656	8,484	8,484	7,541
Marine Monitoring for Entrainment Study	A.200MGD.1f	4,305	7,534	7,534	6,458
Impingement Mortality & Entrainment Characterization Study Initial Analysis	A.200MGD.1f	1,865	1,119	373	1,119
Impingement Mortality & Entrainment Characterization Study Final Report	A.200MGD.1f	399	1,197	399	665
Pilot Study Impingement Monitoring (Freshwater) for Pilot Study	A.200MGD.1g	0	661	0	220
Pilot Study Entrainment Monitoring (Freshwater) for Pilot Study	A.200MGD.1g	0	541	0	180
Pilot Study Impingement Monitoring (Marine) for Pilot Study	A.200MGD.1g	831	1,661	831	1,107
Pilot Study Entrainment Monitoring (Marine) for Pilot Study	A.200MGD.1g	675	1,349	675	899
Pilot Study Entrainment Monitoring (All) for Pilot Study	A.200MGD.1g	354	1,062	354	590
Technology Installation and Operation Plan	A.200MGD.1h	52	208	52	104
Verification Monitoring Plan	A.200MGD.1i	128	512	128	256
NPDES Permit Application Activity Total		32,495	50,074	42,687	41,752
Annual Activities					
Annual Monitoring for Impingement (Freshwater)	A.200MGD.2a	0	379	379	253
Annual Monitoring for Impingement (Marine)	A.200MGD.2b	0	0	1,445	482
Annual Monitoring for Entrainment (Freshwater)	A.200MGD.2c	0	0	614	205
Annual Monitoring for Entrainment (Marine)	A.200MGD.2d	0	0	2,328	776
Biannual Status Report Activities	A.200MGD.2e	0	324	1,296	540
Verification Study	A.200MGD.2f	0	118	472	197
Annual Activity Yearly Labor Total		0	821	6,534	2,452
Yearly Labor Total		32,495	50,895	49,221	44,203

Exhibit A.200MGD.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
		2010	2011	2012	
Director Start-up Activities	A.200MGD.3a	4,600	0	0	1,533
Director Permit Issuance Activities	A.200MGD.3b	1,773	5,645	1,763	3,060
Verification Study Review	A.200MGD.3c	0	0	0	0
Alternative Regulatory Requirements	A.200MGD.3d	0	0	0	0
Annual Director Activities	A.200MGD.3e	0	50	200	83
Yearly Total		6,373	5,695	1,963	4,677

Federal Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
Federal Permit Program Oversight Activities	A.200MGD.4a	163	229	63	152
Yearly Total		163	229	63	152

Exhibit A.200MGD.9
Costs for the ICR Approval Period Year by Year
for Facilities

Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
NPDES Permit Application Activities					
Start-up Activities	A.200MGD.1a	\$14,848	\$10,606	\$2,121	\$9,191
Permit Application Activities	A.200MGD.1b	\$69,660	\$49,757	\$9,951	\$43,123
Proposal for Collection of Information for Comprehensive Demonstration Study	A.200MGD.1c	\$61,719	\$37,031	\$12,344	\$37,031
FW River/Stream Source Water Body Flow Information	A.200MGD.1d	\$3,381	\$0	\$0	\$1,127
FW Lake/Reservoir Source Water Body Flow Information	A.200MGD.1d	\$0	\$0	\$0	\$0
Design and Construction Technology Plan (Impingement)	A.200MGD.1e	1,368	4,103	1,368	2,279
Design and Construction Technology Plan (Entrainment)	A.200MGD.1e	0	4,103	1,368	1,823
Design and Construction Technology Plan (All)	A.200MGD.1e	922	2,766	922	1,537
Freshwater Baseline Monitoring for Impingement Mortality and/or Entrainment Study	A.200MGD.1f	102,549	102,549	102,549	102,549
Freshwater Monitoring for Impingement Mortality Study	A.200MGD.1f	51,544	51,544	51,544	51,544
Freshwater Monitoring for Entrainment Study	A.200MGD.1f	0	0	0	0
Marine Baseline Monitoring for Impingement Mortality and/or Entrainment Study	A.200MGD.1f	525,401	919,452	919,452	788,102
Marine Monitoring for Impingement Mortality Study	A.200MGD.1f	261,720	392,580	392,580	348,960
Marine Monitoring for Entrainment Study	A.200MGD.1f	200,333	350,583	350,583	300,500
Impingement Mortality & Entrainment Characterization Study Initial Analysis	A.200MGD.1f	110,209	66,125	22,042	66,125
Impingement Mortality & Entrainment Characterization Study Final Report	A.200MGD.1f	18,875	56,626	18,875	31,459
Pilot Study Impingement Monitoring (Freshwater) for Pilot Study	A.200MGD.1g	0	33,927	0	11,309
Pilot Study Entrainment Monitoring (Freshwater) for Pilot Study	A.200MGD.1g	0	28,473	0	9,491
Pilot Study Impingement Monitoring (Marine) for Pilot Study	A.200MGD.1g	41,572	83,145	41,572	55,430
Pilot Study Entrainment Monitoring (Marine) for Pilot Study	A.200MGD.1g	34,482	68,964	34,482	45,976
Pilot Study Entrainment Monitoring (All) for Pilot Study	A.200MGD.1g	17,487	52,460	17,487	29,145
Technology Installation and Operation Plan	A.200MGD.1h	\$2,372	\$9,490	\$2,372	4,745
Verification Monitoring Plan	A.200MGD.1i	\$5,918	\$23,672	\$5,918	\$11,836
NPDES Permit Application Activity Total		\$1,524,360	\$2,347,957	\$1,987,531	\$1,953,282
Annual Activities					
Marine Monitoring for Impingement Mortality Study	A.200MGD.2a	\$0	\$18,504	\$18,504	\$12,336
Impingement Mortality & Entrainment Characterization Study Initial Analysis	A.200MGD.2b	\$0	\$0	\$70,691	\$23,564
Impingement Mortality & Entrainment Characterization Study Final Report	A.200MGD.2c	\$0	\$0	\$30,376	\$10,125
Pilot Study Impingement Monitoring (Freshwater)	A.200MGD.2d	\$0	\$0	\$114,206	\$38,069
Biannual Status Report Activities	A.200MGD.2e	\$0	\$16,618	\$66,472	\$27,697
Verification Study	A.200MGD.2f	\$0	\$6,772	\$27,089	\$11,287
Annual Activity Yearly Labor Total		\$0	\$41,894	\$327,336	\$123,077
Yearly Labor Total		\$1,524,360	\$2,389,851	\$2,314,867	\$2,076,359

Facility O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
NPDES Application					
Purchase, Installation & Operation of Pilot Study Technology-Freshwater	A.200MGD.1i	\$0	\$804,252	\$0	\$268,084
Purchase, Installation & Operation of Pilot Study Technology-Freshwater-Impingement Only	A.200MGD.1i	\$0	\$0	\$0	\$0
Purchase, Installation & Operation of Pilot Study Technology-Marine	A.200MGD.1i	\$183,241	\$366,482	\$183,241	\$244,321
Purchase, Installation & Operation of Pilot Study Technology-Marine- Impingement Only	A.200MGD.1i	\$0	\$0	\$0	\$0
Biological Study Laboratory Analysis (Freshwater)	A.200MGD.1i	\$0	\$0	\$0	\$0
Biological Study Laboratory Analysis (Marine)	A.200MGD.1i	\$202,800	\$354,900	\$354,900	\$304,200
Pilot Study Entrainment Laboratory Analysis (Freshwater)	A.200MGD.1i	\$0	\$6,000	\$0	\$2,000
Pilot Study Entrainment Laboratory Analysis (Marine)	A.200MGD.1i	\$7,800	\$15,600	\$7,800	\$10,400
Other Direct Costs	A.200MGD.1a-l	\$27,597	\$40,362	\$31,084	\$33,014
Annual					
Identify & Enumerate Entrained Freshwater Biota	A.200MGD.2g	\$0	\$0	\$7,800	\$2,600
Identify & Enumerate Entrained Marine Biota	A.200MGD.2g	\$0	\$0	\$30,420	\$10,140
Other Direct Costs	A.200MGD.2a-g	\$0	\$1,790	\$10,100	\$3,963
Equipment Cost Subtotal		\$183,241	\$1,170,733	\$183,241	\$512,405
Laboratory Analysis Subtotal		\$210,600	\$376,500	\$400,920	\$329,340
Other Direct Costs Subtotal		\$27,597	\$42,152	\$41,184	\$36,978
Yearly O&M Total		\$421,438	\$1,589,385	\$625,345	\$878,723

Exhibit A.200MGD.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
		2010	2011	2012	
Director Start-up Activities	A.200MGD.3a	\$179,124	\$0	\$0	\$59,708
Director Permit Issuance Activities	A.200MGD.3b	\$73,821	\$254,514	\$80,082	\$136,139
Verification Study Review	A.200MGD.3c	\$0	\$0	\$0	\$0
Alternative Regulatory Requirements	A.200MGD.3d	\$0	\$0	\$0	\$0
Annual Director Activities	A.200MGD.3e	\$0	\$1,851	\$7,405	\$3,086
Yearly Total		\$252,945	\$256,365	\$87,487	\$198,932

Director O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
Start-Up & NPDES Application					
Annual Other Direct Costs	A.200MGD.3a-b	\$4,470	\$1,550	\$310	\$2,110
Other Direct Costs	A.200MGD.3c-d	\$0	\$30	\$120	\$50
Yearly O&M Cost Total		\$4,470	\$1,580	\$430	\$2,160

Federal Labor Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
Federal Permit Program Oversight Activities	A.200MGD.4a	5,966	8,435	2,331	\$5,577
Yearly Total		\$5,966	\$8,435	\$2,331	\$5,577

Federal O&M

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		2010	2011	2012	
Federal Permit Program Oversight ODCs	A.200MGD.4a	\$350	\$250	\$50	\$217
Yearly Total		\$350	\$250	\$50	\$217

Exhibit A.200MGD.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 ¹
		2010	2011	2012		
Burden (hours)	A.200MGD.7	32,495	50,895	49,221	44,203	132,610
Respondents (number)	A.200MGD.5	7	10	8	8	13
Responses (number)	A.200MGD.6	47	76	53	59	176
Costs (labor)	A.200MGD.9	\$1,524,360	\$2,389,851	\$2,314,867	\$2,076,359	\$6,229,078
Costs (Equipment)	A.200MGD.9	\$183,241	\$1,170,733	\$183,241	\$512,405	\$1,537,215
Costs (Lab Analysis)	A.200MGD.9	\$210,600	\$376,500	\$400,920	\$329,340	\$988,020
Costs (Other Direct Costs)	A.200MGD.9	\$27,597	\$42,152	\$41,184	\$36,978	\$110,933
Total Costs		\$1,945,798	\$3,979,236	\$2,940,212	\$2,955,082	\$8,865,246

[1] Each facility is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of facilities that must perform one or more activities during the ICR approval period.

Directors

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total ¹
		2010	2011	2012		
Burden (hours)	A.200MGD.8	6,373	5,695	1,963	4,677	14,031
Respondents (number)	A.200MGD.5	46	10	8	21	46
Responses (number)	A.200MGD.6	79	45	27	50	150
Costs(labor)	A.200MGD.10	\$252,945	\$256,365	\$87,487	\$198,932	\$596,797
Costs (Other Direct Costs)	A.200MGD.10	\$4,470	\$1,580	\$430	\$2,160	\$6,480
Total Costs		\$257,415	\$257,945	\$87,917	\$201,092	\$603,277

[1] Each director is one respondent. One respondent may perform activities in more than one year. So to avoid double-counting, the respondent 3 year total, is the total number of directors that must perform one or more activities during the ICR approval period.

Federal Government

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total
		2010	2011	2012		
Burden (hours)	A.200MGD.8	163	229	63	152	455
Costs(labor)	A.200MGD.10	\$5,966	\$8,435	\$2,331	\$5,577	\$16,732
Costs (O&M)	A.200MGD.10	\$350	\$250	\$50	\$217	\$650
Total Costs		\$6,316	\$8,685	\$2,381	\$5,794	\$17,382

Totals for Respondents (Facilities and Directors)*

	Annual Average	Three Year Total
Total Respondent Burden (hours)	48,880	146,641
Total Respondents (number)	29	59
Total Respondent Labor Costs	\$2,275,292	\$6,825,875
Total Respondent Capital and O&M Costs	\$880,883	\$2,642,648
Total Respondent Cost for All Activities	\$3,156,174	\$9,468,523

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

Exhibit A.200MGD.12

Facility Cost and Burden Estimates for NPDES Permit Renewal Activities

Exhibit A.200MGD.12a

Start-up Activities

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)											
Read and Understand Rule	4	4	0	0	0	0	0	0	8	\$429		
Mobilization/Planning	1	2	0	0	0	0	0	0	3	\$141		
Training	1	1	0	0	0	0	0	0	2	\$107		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$50	
Totals	6	7	0	0	0	0	0	0	13	\$677		\$727

Exhibit A.200MGD.12b

Permit Application Activities

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)											
Source Water Physical Data	1	5	12	0	0	0	0	0	18	\$607		
Configuration and Location of CWIS	1	1	1	0	0	0	0	0	3	\$138		
Facility Water Balance Diagram	1	1	1	0	0	0	0	0	3	\$138		
CWIS Operation Narrative	12	30	0	0	0	0	0	0	42	\$1,898		
CWS Operation Narrative	12	30	0	0	0	0	0	0	42	\$1,898		
Engineering Calculations	6	24	0	0	0	0	0	0	30	\$1,255		
Submit Materials for Review by State	0	0	0	0	0	0	0	3	3	\$56		
Recordkeeping	1	3	1	0	0	0	0	1	6	\$224		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$255	
Totals	34	94	15	0	0	0	0	4	147	\$6,213		\$6,468

Exhibit A.200MGD.12c

Proposal for Collection of Information for Comprehensive Demonstration Study

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Description of Historical Studies that will be Used	6	12	0	0	0	0	0	1	19	\$866		
Description of Proposed and/or Implemented Technologies	2	6	0	0	0	0	0	0	8	\$350		
Develop Source Water Sampling Plan	12	18	2	0	0	0	0	1	33	\$1,582		
Submit Data and Plans for Review	0	0	0	0	0	0	0	4	4	\$74		
Revise Based on State Review	2	5	1	0	0	0	0	1	9	\$364		
Recordkeeping	1	2	0	0	0	0	0	2	5	\$178		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$200	
Totals	23	43	3.6	0	0	0	0	9	78	\$3,414		\$3,614

Exhibit A.200MGD.12d

Source Water Body Flow Information

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Gather Information to Characterize Flow (FW River/Stream)	0	10	0	0	0	0	0	0	10	\$326		
Water Body Thermal Stratification Narrative (Lake/Reservoir)	1.2	12	0	0	0	0	0	0	13	\$496		
Perform Engineering Calculations	2.4	10	0	0	0	0	0	0	12	\$502		
Submit Data and Analysis for Review	0	0	0	0	0	0	0	5	5	\$89		
Recordkeeping	0.3	0.9	0	0	0	0	0	2.4	4	\$97		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$100	
Totals	4	32	0	0	0	0	0	7	43	\$1,510		\$1,610

Exhibit A.200MGD.12e

Design and Construction Technology Plan

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Delineate Hydraulic Zone of Influence	1	3	4	0	0	0	0	0	8	\$296		
Develop Narrative Description of Technologies (Impingement)	3	6	0	0	0	0	0	0	9	\$424		
Perform Engineering Calculations (Impingement)	2	6	0	0	0	0	0	0	8	\$350		
Develop Narrative Description of Technologies (Entrainment)	3	6	0	0	0	0	0	0	9	\$424		
Perform Engineering Calculations (Entrainment)	2	6	0	0	0	0	0	0	8	\$350		
Submit Data and Analysis for Review	0	0	0	0	0	0	0	3	3	\$56		
Recordkeeping	1	1	0	0	0	0	0	3	5	\$163		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$150	
Totals	12	28	4	0	0	0	0	6	50	\$2,063		\$2,213

Exhibit A.200MGD.12f

Impingement Mortality Study and/or Entrainment Characterization Study

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	3 Year Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Implement Offshore Freshwater Sampling	2	16	0	60	1248	40	1248	10	2624	\$122,221	\$1,846	
Impingement Monitoring Freshwater	1	5	0	0	0	20	0	5	31	\$1,560	\$928	
Entrainment Monitoring Freshwater	1	5	0	0	0	20	0	5	31	\$1,560	\$715	
Implement Offshore Marine Sampling	3	30	0	96	2434	60	2434	15	5072	\$235,166	\$3,550	
Impingement Monitoring Marine	1	9	0	0	0	30	0	8	48	\$2,363	\$1,768	
Entrainment Monitoring Marine	1	9	0	0	0	30	0	8	48	\$2,363	\$1,354	
Biological Study Laboratory Analysis (Freshwater)	0	0	0	0	0	0	0	0	0	\$31,200		
Biological Study Laboratory Analysis (Marine)	0	0	0	0	0	0	0	0	0	\$60,840		
Profile of Source Water Biota	10	6	0	10	18	0	6	2	52	\$3,063		
Identification of Critical Species	10	6	0	6	12	0	0	1	35	\$2,136		
Description of Additional Stresses	5	3	0	5	9	0	3	1	26	\$1,532		
Write Study based on Results and Submit for Review by State	24	48	0	5	2	2	0	2	83	\$4,109		
Recordkeeping	2	4	0	2	4	1	0	7	20	\$867		
Finalize study based on State review	5	10	0	0	0	0	0	2	17	\$743		
Freshwater Totals	60	103	0	88	1293	83	1257	35	2919	\$137,790	\$3,489	\$141,278
Marine Totals	61	125	0	124	2479	123	2443	46	5401	\$344,382	\$6,672	\$351,054

Exhibit A.200MGD.12g

Information to Support Site-Specific Determination of BTA

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Perform Comprehensive Cost Evaluation Study	0	0	0	0	0	0	0	0	0	\$0		
Perform Valuation of Monetized Benefits	0	0	0	0	0	0	0	0	0	\$0		
Evaluate Detailed Mortality Data	0	0	0	0	0	0	0	0	0	\$0		
Perform Engineering Calculations	0	0	0	0	0	0	0	0	0	\$0		
Submit Data and Analysis for Review	0	0	0	0	0	0	0	0	0	\$0		
Recordkeeping	0	0	0	0	0	0	0	0	0	\$0		
Totals	-	-	0	0	0	0	0	-	0	\$0	\$0	\$0

Exhibit A.200MGD.12h

Site-Specific Technology Plan

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Develop Narrative Description of Technologies	0	0	0	0	0	0	0	0	0	\$0		
Document that Technologies Are Optimal	0	0	0	0	0	0	0	0	0	\$0		
Develop Design Calculations, Drawings, & Estimates	0	0	0	0	0	0	0	0	0	\$0		
Perform Engineering Calculations	0	0	0	0	0	0	0	0	0	\$0		
Submit Data and Analysis for Review	0	0	0	0	0	0	0	0	0	\$0		
Recordkeeping	0	0	0	0	0	0	0	0	0	\$0		
Totals	-	-	0	0	0	0	0	-	0	\$0	\$0	\$0

Exhibit A.200MGD.12i

Technology Installation and Operation Plan

Activity	Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	O&M Costs*	Total Cost Per Facility
	Assumed Loaded Hourly Rate											
	\$73	\$34	\$30	\$91	\$53	\$61	\$38	\$19				
	Level of Effort (hrs)								B	C	D	C+D
Installation & Maintenance Schedule	5	10	0	0	0	0	0	0	15	\$706		
Description of Proposed Monitoring Parameters	1	4	0	0	0	0	0	0	5	\$209		
List of Technology Assessment Activities	1	2	0	0	0	0	0	0	3	\$141		
Schedule & Methodology of Assessment Activities	2	2	0	0	0	0	0	0	4	\$214		
Submit Plan for Review	0	0	0	0	0	0	0	1	1	\$19		
Recordkeeping	1	1	0	0	0	0	0	1	3	\$126		
Other Direct Costs	0	0	0	0	0	0	0	0	0	\$0	\$48	
Totals									31	\$1,415	\$48	\$1,463

Exhibit A.200MGD.13

Director Burden and Cost Estimates for Permit Renewal

Exhibit A.200MGD.13a

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						
	\$50	\$32	\$24				
	Level of Effort (hrs)						
Review Source Water Physical Data	1	2	0	3	\$113		
Review CWIS Data	2	5	0	7	\$259		
Review CWS Operation Narrative	2	5	0	7	\$259		
Review Proposal for Collection of Information for Comprehensive Demonstration Study	5	5	0	10	\$407		
Review Source Water Body Flow Information	1	2	0	3	\$113		
Review Design and Construction Technology Plan	7	2	0	9	\$410		
Review Impingement Mortality Monitoring Results	24	3	0	27	\$1,284		
Review Entrainment Characterization Monitoring Results	24	3	0	27	\$1,284		
Review Baseline Characterization Monitoring Results and Study Findings	72	8	0	80	\$3,819		
Review Restoration Measures	120	30	0	150	\$6,897		
Review Information to Support Site-Specific Determination of BTA	240	60	0	300	\$13,794		
Review Technology Installation and Operation Plan	5	2	0	7	\$311		
Determine Monitoring Frequency	1	2	0	3	\$113		
Determine Record keeping and Reporting Frequency	1	2	0	3	\$113		
Establish Requirements for Site-Specific Technology	2	7	0	9	\$322		
Considering Public Comments	5	5	0	10	\$407		
Issuing Permit	0	2	0	2	\$64		
Permit Record Keeping	0	0	1	1	\$24		
Totals	512	145	1	658	\$29,994	\$310	\$30,304