

APPENDIX A  
SUPPORTING SPREADSHEETS  
FOR  
INFORMATION COLLECTION REQUEST COSTS  
FOR SECTION 316(b) PHASE II

8-Jan-06

**Exhibit A.1 (approval)**

**Facility Cost and Burden Estimates for NPDES Permit Application Activities for the Last Two Years if Approval Period**

**Exhibit A.1a (approval)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Read and Understand Rule	57	23	0	80	12	12	0	0	0	0	0	1	25	\$1,563	\$0	\$0		2,000	\$125,024	
Mobilization/Planning	57	23	0	80	4	8	0	0	0	0	0	1	13	\$699	\$0	\$0		1,040	\$55,904	
Training	57	23	0	80	2	2	0	0	0	0	0	1	5	\$276	\$0	\$0		400	\$22,064	
<b>Totals</b>	<b>57</b>	<b>23</b>	<b>0</b>	<b>80</b>	<b>18</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>43</b>	<b>\$2,537</b>	<b>\$0</b>	<b>\$0</b>	<b>\$54</b>	<b>\$2,591</b>	<b>3,440</b>	<b>\$207,312</b>

**Exhibit A.1b (approval)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Statement of Compliance Option Selected	117	89	0	206	1	0	0	0	0	0	0	1	2	\$106	\$0	\$0		412	\$21,774	
Source Water Physical Data	117	89	0	206	2	16	40	0	0	0	0	0	58	\$2,225	\$0	\$0		11,948	\$458,350	
Configuration and Location of CWIS	117	89	0	206	2	5	8	0	0	0	0	0	15	\$659	\$0	\$0		3,090	\$135,795	
Facility Water Balance Diagram	117	89	0	206	1	1	1	0	0	0	0	0	3	\$163	\$0	\$0		618	\$33,660	
CWIS Operation Narrative	117	89	0	206	16	40	0	0	0	0	0	0	56	\$3,053	\$0	\$0		11,536	\$628,877	
CWS Operation Narrative	117	89	0	206	16	40	0	0	0	0	0	0	56	\$3,053	\$0	\$0		11,536	\$628,877	
Engineering Calculations	117	89	0	206	8	32	0	0	0	0	0	0	40	\$2,023	\$0	\$0		8,240	\$416,779	
Submit Materials for Review by State	117	89	0	206	0	0	0	0	0	0	0	6	6	\$110	\$0	\$0		1,236	\$22,742	
Recordkeeping	117	89	0	206	2	5	2	0	0	0	0	2	11	\$488	\$0	\$0		2,266	\$100,487	
<b>Totals</b>	<b>117</b>	<b>89</b>	<b>0</b>	<b>206</b>									<b>247</b>	<b>\$11,880</b>	<b>\$0</b>	<b>\$0</b>	<b>\$536</b>	<b>\$12,416</b>	<b>50,882</b>	<b>\$2,557,758</b>

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 (approval)**

**Proposal for Collection of Information for Comprehensive Demonstration Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Description of Historical Studies that will be Used	37	0	0	37	20	40	0	0	0	0	0	2	62	\$3,439	\$0	\$0		2,294	\$127,236	
Description of Proposed and/or Implemented Technologies	37	0	0	37	8	20	0	0	0	0	0	0	28	\$1,526	\$0	\$0		1,036	\$56,477	
Develop Source Water Sampling Plan	37	0	0	37	40	60	8	8	0	0	0	4	120	\$7,133	\$0	\$0		4,440	\$263,914	
Submit Data and Plans for Review	37	0	0	37	0	0	0	0	0	0	0	12	12	\$221	\$0	\$0		444	\$8,170	
Revise Based on State Review	37	0	0	37	8	16	4	0	0	0	0	4	32	\$1,573	\$0	\$0		1,184	\$58,208	
Recordkeeping	37	0	0	37	3	5	1	1	0	0	0	8	18	\$752	\$0	\$0		666	\$27,806	
<b>Totals</b>	<b>37</b>	<b>0</b>	<b>0</b>	<b>37</b>									<b>272</b>	<b>\$14,644</b>	<b>\$0</b>	<b>\$0</b>	<b>\$803</b>	<b>\$15,447</b>	<b>10,064</b>	<b>\$571,521</b>

**Exhibit A.1d (approval)**

**Source Water Body Flow Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Gather Information to Characterize Flow (FW River/Stream)	42	28	0	70	0	32	0	0	0	0	0	0	32	\$1,325	\$0	\$0			2,240	\$92,736
Water Body Thermal Stratification Narrative (Lake/Reservoir)	20	20	0	40	4	40	0	0	0	0	0	0	44	\$2,005	\$0	\$0			1,760	\$80,208
Perform Engineering Calculations	62	48	0	110	8	32	0	0	0	0	0	0	40	\$2,023	\$0	\$0			4,400	\$222,552
Submit Data and Analysis for Review	62	48	0	110	0	0	0	0	0	0	0	16	16	\$294	\$0	\$0			1,760	\$32,384
Recordkeeping	62	48	0	110	1	3	0	0	0	0	0	8	12	\$359	\$0	\$0			1,320	\$39,457
<b>Totals</b>	<b>62</b>	<b>48</b>	<b>0</b>	<b>110</b>									<b>104</b>	<b>\$4,249</b>	<b>\$0</b>	<b>\$0</b>	<b>\$214</b>	<b>\$4,463</b>	<b>11,480</b>	<b>\$490,877</b>

**Exhibit A.1e (approval)**

**Design and Construction Technology 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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Delineate Hydraulic Zone of Influence	97	66	0	163	2	5	8	0	0	0	0	0	15	\$659	\$0	\$0			2,445	\$107,450
Develop Narrative Description of Technologies (Impingement)	97	66	0	163	8	16	0	0	0	0	0	0	24	\$1,361	\$0	\$0			3,912	\$221,810
Perform Engineering Calculations (Impingement)	97	66	0	163	3	12	0	0	0	0	0	0	15	\$759	\$0	\$0			2,445	\$123,668
Develop Narrative Description of Technologies (Entrainment)	37	22	0	59	8	16	0	0	0	0	0	0	24	\$1,361	\$0	\$0			1,416	\$80,287
Perform Engineering Calculations (Entrainment)	37	22	0	59	3	12	0	0	0	0	0	0	15	\$759	\$0	\$0			885	\$44,763
Document that Technologies Are Optimal	97	66	0	163	0	40	0	0	0	0	0	6	46	\$1,766	\$0	\$0			7,498	\$287,923
Submit Data and Analysis for Review	97	66	0	163	0	0	0	0	0	0	0	6	6	\$110	\$0	\$0			978	\$17,995
Recordkeeping	97	66	0	163	1	4	0	0	0	0	0	6	11	\$363	\$0	\$0			1,793	\$59,218
<b>Totals</b>	<b>97</b>	<b>66</b>	<b>0</b>	<b>163</b>									<b>131</b>	<b>\$5,786</b>	<b>\$0</b>	<b>\$0</b>	<b>\$428</b>	<b>\$6,214</b>	<b>21,372</b>	<b>\$1,012,879</b>

**Exhibit A.1f (approval)**

**Impingement Mortality & Entrainment Characterization Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Avg. Burden Per Facility over 3 yrs.	Avg. Labor Cost per Facility for 3 yrs	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.) for ICR period	Total Initial Cost (\$) for ICR period
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Implement Offshore Freshwater Monitoring	95	37	0	95	6	52	0	100	2080	67	2080	34	4419	\$215,126	\$0	\$0			291,654	\$14,198,309
Impingement Monitoring Freshwater	95	37	0	95	3	16	0	60	1040	33	1040	17	2209	\$108,123	\$0	\$0			145,794	\$7,136,144
Entrainment Monitoring Freshwater	95	37	0	95	3	16	0	60	780	33	780	17	1689	\$83,449	\$0	\$0			111,474	\$5,507,660
Biological Study Laboratory Analysis (Freshwater)	95	37	0	95	0	0	0	0	0	0	0	0	0	\$0	\$0	\$83,538	\$5,572	-	\$5,881,260	
Implement Offshore Marine Monitoring	68	29	0	68	10	101	0	160	4056	100	4056	50	8533	\$413,511	\$0	\$0			275,900	\$13,370,183
Impingement Monitoring Marine	68	29	0	68	4	31	0	80	2028	50	2028	25	4246	\$205,861	\$0	\$0			137,287	\$6,656,166
Entrainment Monitoring Marine	68	29	0	68	4	31	0	80	1521	50	1521	25	3232	\$157,747	\$0	\$0			104,501	\$5,100,470
Biological Study Laboratory Analysis (Marine)	68	29	0	68	0	0	0	0	0	0	0	0	0	\$0	\$0	\$162,899	\$13,923	-	\$5,717,245	
Profile of Source Water Biota	37	0	0	37	32	20	0	32	60	0	20	8	172	\$11,177	\$0	\$0			6,364	\$413,556
Identification of Critical Species	37	0	0	37	32	20	0	20	40	0	0	3	115	\$7,979	\$0	\$0			4,255	\$295,216
Description of Additional Stresses	37	0	0	37	16	10	0	16	30	0	10	4	86	\$5,589	\$0	\$0			3,182	\$206,778
Write Study based on Results and Submit for Review by State	97	66	0	163	80	160	0	16	8	8	0	8	280	\$16,345	\$0	\$0			45,640	\$2,664,202
Recordkeeping	97	66	0	163	6	12	0	6	12	3	0	24	63	\$2,948	\$0	\$0			10,269	\$480,540
Finalize study based on State review	97	66	0	163	16	32	0	0	0	0	0	8	56	\$2,869	\$0	\$0			9,128	\$467,614
<b>Totals</b>	<b>97</b>	<b>66</b>	<b>0</b>	<b>163</b>									<b>12,299</b>	<b>\$608,136</b>	<b>\$0</b>	<b>\$116,646</b>	<b>\$9,056</b>	<b>\$733,837</b>	<b>1,145,449</b>	<b>\$68,095,345</b>

**Exhibit A.1g (approval)**

**Pilot Study for New Impingement & Entrainment Technology**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost			
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*							
	A				\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18				E	F				C+D+E+F	A*B	A*(C+D)
	Level of Effort (hrs)																						
Calculate Reduction in Impingement Mortality and Entrainment	13	15	0	28	80	80	8	0	0	0	0	12	180	\$10,794	\$0	\$0			5,040	\$302,243			
Perform Engineering Estimates of Efficacy	13	15	0	28	40	32	0	0	0	0	0	4	76	\$4,890	\$0	\$0			2,128	\$136,931			
Purchase, Installation & Operation of Pilot Study Technology- Freshwater Impingement and Entrainment	2	2	0	4	0	0	0	0	0	0	0	0	0	\$0	\$176,494	\$0			-	\$705,976			
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			
Perform Impingement Monitoring (Freshwater)	2	2	0	4	16	25	0	80	240	40	240	20	661	\$36,236	\$0	\$0			2,644	\$144,943			
Perform Entrainment Monitoring (Freshwater)	2	2	0	4	16	25	0	80	180	40	180	20	541	\$30,542	\$0	\$0			2,164	\$122,167			
Pilot Study Entrainment Laboratory Analysis (Freshwater)	2	2	0	4	0	0	0	0	0	0	0	0	0	\$0	\$0	\$6,426			-	\$25,704			
Purchase, Installation & Operation of Pilot Study Technology- Marine Impingement and Entrainment	10	12	0	22	0	0	0	0	0	0	0	0	0	\$0	\$502,316	\$0			-	\$11,050,952			
Purchase, Installation & Operation of Pilot Study Technology- Marine-Impingement Only	1	1	0	2	0	0	0	0	0	0	0	0	0	\$0	\$259,798	\$0			-	\$519,596			
Perform Impingement Monitoring (Marine)	11	13	0	24	16	33	0	80	312	52	312	26	831	\$44,271	\$0	\$0			19,932	\$1,062,497			
Perform Entrainment Monitoring (Marine)	10	12	0	22	16	33	0	80	234	52	234	26	675	\$36,869	\$0	\$0			14,839	\$811,107			
Pilot Study Entrainment Laboratory Analysis (Marine)	10	12	0	22	0	0	0	0	0	0	0	0	0	\$0	\$0	\$8,354			-	\$183,788			
Submit Data and Analysis for Review	13	15	0	28	8	10	0	8	6	4	0	16	52	\$2,816	\$0	\$0			1,456	\$78,848			
Recordkeeping	13	15	0	28	4	8	0	4	8	2	0	20	46	\$2,039	\$0	\$0			1,288	\$57,092			
<b>Totals</b>	<b>13</b>	<b>15</b>	<b>0</b>	<b>28</b>									<b>1,768</b>	<b>\$96,994</b>	<b>\$0</b>	<b>\$7,482</b>	<b>\$1,071</b>	<b>\$105,547</b>	<b>49,491</b>	<b>\$15,231,833</b>			

**Exhibit A.1h (approval)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost			
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*							
	A				\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18				E	F				C+D+E+F	A*B	A*(C+D)
	Level of Effort (hrs)																						
Develop Verification Monitoring Plan	101	77	0	178	40	60	8	0	0	0	0	4	112	\$6,327	\$0	\$0			19,936	\$1,126,242			
Submit Data and Plans for Review	101	77	0	178	0	0	0	0	0	0	0	2	2	\$37	\$0	\$0			356	\$6,550			
Revise Based on State Review	101	77	0	178	2	4	1	0	0	0	0	1	8	\$393	\$0	\$0			1,424	\$70,007			
Recordkeeping	101	77	0	178	1	1	1	1	0	0	0	2	6	\$301	\$0	\$0			1,068	\$53,560			
<b>Totals</b>	<b>101</b>	<b>77</b>	<b>0</b>	<b>178</b>									<b>128</b>	<b>\$7,058</b>	<b>\$0</b>	<b>\$0</b>	<b>\$428</b>	<b>\$7,486</b>	<b>22,784</b>	<b>\$1,332,544</b>			

**Total Labor Burden, Labor Cost, Capital Costs and O&M Costs for All NPDES Application Activities (approval)**

Activity	Facilities (Respondents)				Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total				Laboratory Analysis	ODCs*			
	Totals											
<b>Totals</b>											<b>1,314,962</b>	<b>\$89,500,069</b>

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

**Exhibit A.1 (renewal)**

**Facility Cost and Burden Estimates for NPDES Permit Application Activities for the First Year of Renewal**

**Exhibit A.1a (renewal)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Read and Understand Rule	37	83	109	229	4	4	0	0	0	0	0	0	8	\$515	\$0	\$0		1,832	\$117,889	
Mobilization/Planning	37	83	109	229	1	2	0	0	0	0	0	0	3	\$170	\$0	\$0		687	\$38,953	
Training	37	83	109	229	1	1	0	0	0	0	0	0	2	\$129	\$0	\$0		458	\$29,472	
<b>Totals</b>	<b>37</b>	<b>83</b>	<b>109</b>	<b>229</b>	<b>6</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>\$814</b>	<b>\$0</b>	<b>\$0</b>	<b>\$54</b>	<b>\$868</b>	<b>2,977</b>	<b>\$198,680</b>

**Exhibit A.1b (renewal)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Statement of Compliance Option Selected	0	0	123	123									0	\$0	\$0	\$0		-	\$0	
Source Water Physical Data	0	0	123	123	1	5	12	0	0	0	0	0	18	\$711	\$0	\$0		2,214	\$87,416	
Configuration and Location of CWIS	0	0	123	123	1	1	1	0	0	0	0	0	3	\$163	\$0	\$0		369	\$20,098	
Facility Water Balance Diagram	0	0	123	123	1	1	1	0	0	0	0	0	3	\$163	\$0	\$0		369	\$20,098	
CWIS Operation Narrative	0	0	123	123	12	30	0	0	0	0	0	0	42	\$2,290	\$0	\$0		5,166	\$281,621	
CWS Operation Narrative	0	0	123	123	12	30	0	0	0	0	0	0	42	\$2,290	\$0	\$0		5,166	\$281,621	
Engineering Calculations	0	0	123	123	6	24	0	0	0	0	0	0	30	\$1,517	\$0	\$0		3,690	\$186,640	
Submit Materials for Review by State	0	0	123	123	0	0	0	0	0	0	0	3	3	\$55	\$0	\$0		369	\$6,790	
Recordkeeping	0	0	123	123	1	3	1	0	0	0	0	1	6	\$265	\$0	\$0		738	\$32,546	
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>123</b>	<b>123</b>									<b>147</b>	<b>\$7,454</b>	<b>\$0</b>	<b>\$0</b>	<b>\$268</b>	<b>\$7,722</b>	<b>18,081</b>	<b>\$949,794</b>

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 (renewal)**

**Proposal for Collection of Information for Comprehensive Demonstration Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	A				Level of Effort (hrs)															
	B	C	D	C+D+E+F		A*B	A*(C+D)													
Description of Historical Studies that will be Used	37	83	71	191	6	12	0	0	0	0	0	1	19	\$1,039	\$0	\$0		3,629	\$198,449	
Description of Proposed and/or Implemented Technologies	37	83	71	191	2	6	0	0	0	0	0	0	8	\$423	\$0	\$0		1,528	\$80,793	
Develop Source Water Sampling Plan	37	83	71	191	12	18	2.4	0	0	0	0	1	33	\$1,894	\$0	\$0		6,379	\$361,846	
Submit Data and Plans for Review	37	83	71	191	0	0	0	0	0	0	0	4	4	\$74	\$0	\$0		764	\$14,058	
Revise Based on State Review	37	83	71	191	2	4.8	1.2	0	0	0	0	1	9	\$433	\$0	\$0		1,719	\$82,772	
Recordkeeping	37	83	71	191	1	2	0	0	0	0	0	2	5	\$207	\$0	\$0		955	\$39,518	
<b>Totals</b>	<b>37</b>	<b>83</b>	<b>71</b>	<b>191</b>									<b>78</b>	<b>\$4,070</b>	<b>\$0</b>	<b>\$0</b>	<b>\$214</b>	<b>\$4,284</b>	<b>14,974</b>	<b>\$818,309</b>

**Exhibit A.1d (renewal)**

**Source Water Body Flow Information**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Gather Information to Characterize Flow (FW River/Stream)	0	0	44	44	0	9.6	0	0	0	0	0	0	10	\$397	\$0	\$0	\$0		422	\$17,487
Water Body Thermal Stratification Narrative (Lake/Reservoir)	0	0	17	17	1.2	12	0	0	0	0	0	0	13	\$602	\$0	\$0	\$0		224	\$10,227
Perform Engineering Calculations	0	0	61	61	2.4	9.6	0	0	0	0	0	0	12	\$607	\$0	\$0	\$0		732	\$37,025
Submit Data and Analysis for Review	0	0	61	61	0	0	0	0	0	0	0	4.8	5	\$88	\$0	\$0	\$0		293	\$5,388
Recordkeeping	0	0	61	61	0	1	0	0	0	0	0	2.4	4	\$108	\$0	\$0	\$0		220	\$6,564
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>61</b>	<b>61</b>									<b>31</b>	<b>\$1,257</b>	<b>\$0</b>	<b>\$0</b>	<b>\$107</b>	<b>\$1,364</b>	<b>1,891</b>	<b>\$83,217</b>

**Exhibit A.1e (renewal)**

**Design and Construction Technology 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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Delineate Hydraulic Zone of Influence	0	0	85	85	1	3	4	0	0	0	0	0	8	\$350	\$0	\$0	\$0		680	\$29,776
Develop Narrative Description of Technologies (Impingement)	0	0	85	85	4	8	0	0	0	0	0	0	12	\$680	\$0	\$0	\$0		1,020	\$57,834
Perform Engineering Calculations (Impingement)	0	0	85	85	2	6	0	0	0	0	0	0	8	\$423	\$0	\$0	\$0		680	\$35,955
Develop Narrative Description of Technologies (Entrainment)	0	0	37	37	4	8	0	0	0	0	0	0	12	\$680	\$0	\$0	\$0		444	\$25,175
Perform Engineering Calculations (Entrainment)	0	0	37	37	2	6	0	0	0	0	0	0	8	\$423	\$0	\$0	\$0		296	\$15,651
Document that Technologies Are Optimal	0	0	85	85	0	20	0	0	0	0	0	3	23	\$883	\$0	\$0	\$0		1,955	\$75,072
Submit Data and Analysis for Review	0	0	85	85	0	0	0	0	0	0	0	3	3	\$55	\$0	\$0	\$0		255	\$4,692
Recordkeeping	0	0	85	85	1	2	0	0	0	0	0	3	6	\$225	\$0	\$0	\$0		510	\$19,151
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>85</b>	<b>85</b>									<b>69</b>	<b>\$3,098</b>	<b>\$0</b>	<b>\$0</b>	<b>\$161</b>	<b>\$3,259</b>	<b>5,840</b>	<b>\$276,990</b>

**Exhibit A.1f (renewal)**

**Impingement Mortality & Entrainment Characterization Study**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Avg. Burden Per Facility over 3 yrs.	Avg. Labor Cost per Facility for 3 yrs	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.) for ICR period	Total Initial Cost (\$) for ICR period
					Assumed Loaded Hourly Rate											Laboratory Analysis	ODCs*			
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18	B	C	D	E	F	C+D+E+F	A*B	A*(C+D)
	A				Level of Effort (hrs)								E		F					
Implement Offshore Freshwater Monitoring	0	48	94	94	2	16	0	60	1248	40	1248	10	2624	\$128,102	\$0	\$0	\$0		186,304	\$9,095,256
Impingement Monitoring Freshwater	0	48	94	94	1	5	0	0	0	0	0	5	31	\$1,688	\$0	\$0	\$0		2,201	\$119,869
Entrainment Monitoring Freshwater	0	48	94	94	1	5	0	0	0	0	0	5	31	\$1,688	\$0	\$0	\$0		2,201	\$119,869
Biological Study Laboratory Analysis (Freshwater)	0	48	94	94	0	0	0	0	0	0	0	0	0	\$0	\$0	\$33,415	\$0		-	\$2,372,465
Implement Offshore Marine Monitoring	37	72	97	97	3	30	0	96	2434	60	2434	15	5072	\$246,340	\$0	\$0	\$0		348,277	\$16,915,326
Impingement Monitoring Marine	37	72	97	97	1	9	0	0	0	30	0	8	48	\$2,560	\$0	\$0	\$0		3,296	\$175,794
Entrainment Monitoring Marine	37	72	97	97	1	9	0	0	0	30	0	8	48	\$2,560	\$0	\$0	\$0		3,296	\$175,794
Biological Study Laboratory Analysis (Marine)	37	72	97	97	0	0	0	0	0	0	0	0	0	\$0	\$0	\$65,160	\$0		-	\$4,474,320
Profile of Source Water Biota	37	83	71	191	10	6	0	10	18	0	6	2	52	\$3,421	\$0	\$0	\$0		9,932	\$653,411
Identification of Critical Species	37	83	71	191	10	6	0	6	12	0	0	1	35	\$2,430	\$0	\$0	\$0		6,685	\$464,206
Description of Additional Stresses	37	83	71	191	5	3	0	5	9	0	3	1	26	\$1,711	\$0	\$0	\$0		4,966	\$326,706
Write Study based on Results and Submit for Review by State	0	0	85	85	24	48	0	5	2	2	0	2	83	\$4,867	\$0	\$0	\$0		7,055	\$413,721
Recordkeeping	0	0	85	85	2	4	0	2	4	1	0	7	20	\$964	\$0	\$0	\$0		1,700	\$81,966
Finalize study based on State review	0	0	85	85	5	10	0	0	0	0	0	2	17	\$887	\$0	\$0	\$0		1,445	\$75,421
<b>Totals</b>	<b>37</b>	<b>83</b>	<b>97</b>	<b>191</b>									<b>4,113</b>	<b>\$202,964</b>	<b>\$0</b>	<b>\$49,537</b>	<b>\$0</b>	<b>\$252,500</b>	<b>577,358</b>	<b>\$35,464,122</b>

**Exhibit A.1g (renewal)**

**Pilot Study for New Impingement & Entrainment Technology**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	CAD Operator	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Burden Per Facility	Labor Cost per Facility	Capital Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost	
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*					
	A				\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18				B	C				D
Calculate Reduction in Impingement Mortality and Entrainment	0	0	0	0	Level of Effort (hrs)							0	\$0	\$0	\$0	\$0				-	\$0
Perform Engineering Estimates of Efficacy	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Purchase, Installation & Operation of Pilot Study Technology- Freshwater Impingement and Entrainment	0	0	0	0								0	\$0	\$264,882	\$0	\$0				-	\$0
Purchase, Installation & Operation of Pilot Study Technology- Freshwater-Impingement Only	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Perform Impingement Monitoring (Freshwater)	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Perform Entrainment Monitoring (Freshwater)	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Pilot Study Entrainment Laboratory Analysis (Freshwater)	0	0	0	0								0	\$0	\$0	\$0	\$6,426				-	\$0
Purchase, Installation & Operation of Pilot Study Technology- Marine Impingement and Entrainment	0	0	0	0								0	\$0	\$605,066	\$0	\$0				-	\$0
Purchase, Installation & Operation of Pilot Study Technology- Marine-Impingement Only	0	0	0	0								0	\$0	\$325,679	\$0	\$0				-	\$0
Perform Impingement Monitoring (Marine)	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Perform Entrainment Monitoring (Marine)	0	0	0	0								0	\$0	\$0	\$0	\$0				-	\$0
Pilot Study Entrainment Laboratory Analysis (Marine)	0	0	0	0								0	\$0	\$0	\$0	\$8,354				-	\$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
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>								<b>-</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>-</b>	<b>\$0</b>

**Exhibit A.1h (renewal)**

**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 Cost per Facility	O&M Cost per Facility		Total Cost Per Facility	Total Burden (hrs.)	Total Initial Cost	
	Year 1	Year 2	Year 3	Total	Assumed Loaded Hourly Rate							Laboratory Analysis				ODCs*					
	A				\$87	\$41	\$35	\$101	\$57	\$65	\$38	\$18				B	C				D
Develop Verification Monitoring Plan	0	0	98	98	Level of Effort (hrs)							0	\$0	\$0	\$0	\$0				-	\$0
Submit Data and Plans for Review	0	0	98	98								0	\$0	\$0	\$0	\$0				-	\$0
Revise Based on State Review	0	0	98	98								0	\$0	\$0	\$0	\$0				-	\$0
Recordkeeping	0	0	98	98								0	\$0	\$0	\$0	\$0				-	\$0
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>98</b>	<b>98</b>								<b>0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>-</b>	<b>\$0</b>

**Total Labor Burden, Labor Cost, Capital Costs and O&M Costs for All NPDES Application Activities (renewal)**

	Facilities (Respondents)				Total Burden (hrs.)	Total Initial Cost
	Year 1	Year 2	Year 3	Total		
<b>Totals</b>					<b>621,122</b>	<b>\$37,791,112</b>

\* 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  
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	O & M Costs
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$101	\$57	\$65	\$38	\$18	B	C	D	E			C+D+E
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D)
Monthly Sample Collection	180	242	290	290	2	0	4	72	0	72	0	150	\$7,410				106,800	\$5,276,062
Onsite Analysis of Samples	180	242	290	290	4	0	12	72	0	72	0	160	\$8,390				113,920	\$5,973,965
Perform Statistical Analysis	180	242	290	290	8	4	0	0	32	0	0	44	\$2,947				31,328	\$2,098,406
Record Keeping	180	242	290	290	2	1	1	4	1	0	16	25	\$905				17,800	\$644,360
<b>Totals</b>	<b>180</b>	<b>242</b>	<b>290</b>	<b>290</b>	<b>16</b>	<b>5</b>	<b>17</b>	<b>148</b>	<b>33</b>	<b>144</b>	<b>16</b>	<b>379</b>	<b>\$19,653</b>	<b>\$0</b>	<b>\$536</b>	<b>\$20,189</b>	<b>269,848</b>	<b>\$14,374,426</b>

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**Exhibit A.2b  
Biological Monitoring for Impingement (Marine)**

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	O & M Costs
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$101	\$57	\$65	\$38	\$18	B	C	D	E			C+D+E
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D)
Monthly Sample Collection	97	136	165	165	2	0	5	94	0	94	0	194	\$9,581				77,371	\$3,813,190
Onsite Analysis of Samples	97	136	165	165	4	0	16	94	0	94	0	207	\$10,803				82,306	\$4,299,498
Perform Statistical Analysis	97	136	165	165	8	4	0	0	42	0	0	54	\$3,572				21,333	\$1,421,720
Record Keeping	97	136	165	165	2	1	1	5	1	0	16	27	\$1,023				10,666	\$407,305
<b>Totals</b>	<b>97</b>	<b>136</b>	<b>165</b>	<b>165</b>	<b>16</b>	<b>5</b>	<b>22</b>	<b>192</b>	<b>43</b>	<b>187</b>	<b>16</b>	<b>482</b>	<b>\$24,979</b>	<b>\$0</b>	<b>\$696</b>	<b>\$25,675</b>	<b>191,677</b>	<b>\$10,218,722</b>

**Exhibit A.2c  
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	
												Assumed Loaded Hourly Rate				Burden (hrs)	Labor Cost	O & M Costs
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$101	\$57	\$65	\$38	\$18	B	C	D	E			C+D+E
	A				Level of Effort (hrs)							B	C	D	E	C+D+E	A*B	A*(C+D)
Biweekly Sample Collection	180	242	290	290	4	0	12	156	0	156	0	328	\$16,362				233,536	\$11,649,744
Handling and Preparation of Samples	180	242	290	290	4	0	12	78	0	78	0	172	\$8,960				122,464	\$6,379,378
Laboratory Analysis to Identify & Enumerate Entrained Freshwater Biota	180	242	290	290	0	0	0	0	0	0	0	0	\$0	\$8,354			-	\$5,948,048
Perform Statistical Analysis	180	242	290	290	16	4	0	0	64	0	0	84	\$5,729				59,808	\$4,078,906
Recordkeeping	180	242	290	290	2	1	1	8	2	0	16	30	\$1,199				21,360	\$853,617
<b>Totals</b>	<b>180</b>	<b>242</b>	<b>290</b>	<b>290</b>	<b>26</b>	<b>5</b>	<b>25</b>	<b>242</b>	<b>66</b>	<b>234</b>	<b>16</b>	<b>614</b>	<b>\$32,250</b>	<b>\$8,354</b>	<b>\$1,071</b>	<b>\$33,321</b>	<b>437,168</b>	<b>\$29,672,244</b>



**Exhibit A.2d  
Biological Monitoring for Entrainment (Marine)**

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	\$87	\$41	\$101	\$57	\$65	\$38	\$18	Burden (hrs)	Labor Cost	O & M Costs		Total Costs**	Burden (hrs.)	Total Cost (\$)
	Assumed Loaded Hourly Rate													Laboratory Analyses	ODCs*			
	Level of Effort (hrs)											B	C	D	E	C+D+E	A*B	A*(C+D)
Biweekly Sample Collection	97	136	165	165	4	0	12	203	0	203	0	422	\$20,822				167,956	\$8,287,275
Handling and Preparation of Samples	97	136	165	165	4	0	12	101	0	101	0	218	\$11,143				86,764	\$4,434,715
Laboratory Analysis to Identify & Enumerate Entrained Marine Biota	97	136	165	165	0	0	0	0	0	0	0	0	\$0	\$10,860			-	\$4,322,280
Perform Statistical Analysis	97	136	165	165	16	4	0	0	83	0	0	103	\$6,966				40,994	\$2,772,349
Recordkeeping	97	136	165	165	2	1	1	10	3	0	16	33	\$1,378				13,134	\$548,603
<b>Totals</b>	<b>97</b>	<b>136</b>	<b>165</b>	<b>165</b>	<b>26</b>	<b>5</b>	<b>25</b>	<b>314</b>	<b>86</b>	<b>304</b>	<b>16</b>	<b>776</b>	<b>\$40,309</b>	<b>\$10,860</b>	<b>\$1,232</b>	<b>\$41,541</b>	<b>308,848</b>	<b>\$20,855,558</b>

**Exhibit A.2e  
Bi-Annual Status Report Activities**

Activity	Facilities (Respondents)				Facility Manager	Junior Technical	Contracted Manager	Biologist	Statistician	Biological Technician	Clerical	Totals Per Facility for the ICR Approval Period					Total for All Facilities in the ICR Approval Period	
	Year 1	Year 2	Year 3	Total	\$87	\$41	\$101	\$57	\$65	\$38	\$18	Burden (hrs)	Labor Cost	O & M Costs		Total Costs**	Burden (hrs.)	Total Cost (\$)
	Assumed Loaded Hourly Rate													Laboratory Analyses	ODCs*			
	Level of Effort (hrs)											B	C	D	E	C+D+E	A*B	A*(C+D)
Report on Inspection and Maintenance	277	378	455	455	16	16	0	0	0	0	0	32	\$2,059				35,520	\$2,285,712
Detail Biological Monitoring Results	277	378	455	455	24	32	4	4	24	0	0	88	\$5,614				97,680	\$6,231,540
Compile and Submit Report	139	189	228	228	80	80	0	0	0	0	16	176	\$10,590				97,856	\$5,888,262
Recordkeeping	277	378	455	455	8	12	0	0	0	0	8	28	\$1,342				31,080	\$1,490,064
<b>Totals</b>	<b>277</b>	<b>378</b>	<b>455</b>	<b>455</b>	<b>128</b>	<b>140</b>	<b>4</b>	<b>4</b>	<b>24</b>	<b>0</b>	<b>24</b>	<b>236</b>	<b>\$19,606</b>	<b>\$0</b>	<b>\$803</b>	<b>\$20,409</b>	<b>262,136</b>	<b>\$16,786,908</b>

**Exhibit A.2f  
Verification Study**

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	\$87	\$41	\$101	\$57	\$65	\$38	\$18	Burden (hrs)	Labor Cost	O & M Costs		Total Costs**	Burden (hrs.)	Total Cost (\$)
	Assumed Loaded Hourly Rate													Laboratory Analyses	ODCs*			
	Level of Effort (hrs)											B	C	D	E	C+D+E	A*B	A*(C+D)
Perform Statistical Analysis	179	188	178	188	25	30	15	15	25	0	1	111	\$7,439				60,495	\$4,054,201
Submit Monitoring Results & Study Analysis	98	146	194	438	0	0	0	0	0	0	4	4	\$74				1,752	\$32,237
Record Keeping	179	188	178	188	1	2	0	0	0	0	4	7	\$244				3,815	\$132,817
<b>Totals</b>	<b>179</b>	<b>188</b>	<b>194</b>	<b>188</b>	<b>26</b>	<b>32</b>	<b>15</b>	<b>15</b>	<b>25</b>	<b>0</b>	<b>9</b>	<b>122</b>	<b>\$7,756</b>	<b>\$0</b>	<b>\$536</b>	<b>\$8,292</b>	<b>66,062</b>	<b>\$4,519,950</b>

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

Facilities (Respondents)				Total Burden (hrs.)	Total Cost (\$)
Year 1	Year 2	Year 3	Total		
<b>Totals</b>				<b>1,535,739</b>	<b>\$96,427,808</b>

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

\*\* There were no estimated Capital costs for any annual activities performed by facilities.

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

**Exhibit A.3a (States)  
States Director Permit Issuance Activities (approval)**

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technical							
		Assumed Loaded Hourly Rate								
A	\$54	\$32	\$25	B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	199	2	6	0	8	\$302			1,592	\$60,018
Review CWIS Data	199	6	18	0	24	\$905			4,776	\$180,055
Review CWS Operation Narrative	199	6	18	0	24	\$905			4,776	\$180,055
Review Proposal for Collection of Information for Comprehensive Demonstration	37	16	16	0	32	\$1,376			1,184	\$50,912
Review Source Water Body Flow Information	109	2	6	0	8	\$302			872	\$32,874
Review Design and Construction Technology Plan	156	24	8	0	32	\$1,546			4,992	\$241,114
Review Impingement Mortality & Entrainment Characterization Study	156	400	50	0	450	\$23,060			70,200	\$3,597,360
Review Pilot Study for New Impingement & Entrainment Technology	26	16	16	0	32	\$1,376			832	\$35,776
Review Restoration Measures	20	400	100	0	500	\$24,680			9,950	\$491,132
Review Information to Support Site-Specific Determination of BTA	54	800	200	0	1,000	\$49,360			54,000	\$2,665,440
Determine Monitoring Frequency	199	2	6	0	8	\$302			1,592	\$60,018
Determine Record keeping and Reporting Frequency	199	2	6	0	8	\$302			1,592	\$60,018
Establish Requirements for Site-Specific Technology	54	8	24	0	32	\$1,206			1,728	\$65,146
Considering Public Comments	199	16	16	0	32	\$1,376			6,368	\$273,824
Issuing Permit	199	1	6	1	8	\$273			1,592	\$54,287
Permit Record Keeping	199	1	1	2	4	\$136			796	\$26,984
<b>Totals</b>	<b>199</b>	<b>1702</b>	<b>497</b>	<b>3</b>	<b>838</b>	<b>\$40,109</b>	<b>\$321</b>	<b>\$40,430</b>	<b>166,842</b>	<b>\$8,138,894</b>

**Exhibit A.3b (States)  
States Director Permit Issuance Activities (renewal)**

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technical							
		Assumed Loaded Hourly Rate								
A	\$54	\$32	\$25	B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	120	1	2	0	3	\$118			360	\$14,208
Review CWIS Data	120	2	5	0	7	\$269			840	\$32,304
Review CWS Operation Narrative	120	2	5	0	7	\$269			840	\$32,304
Review Proposal for Collection of Information for Comprehensive Demonstration	184	5	5	0	10	\$430			1,840	\$79,120
Review Source Water Body Flow Information	59	1	2	0	3	\$118			177	\$6,986
Review Design and Construction Technology Plan	82	7	2	0	9	\$440			738	\$36,080
Review Impingement Mortality & Entrainment Characterization Study	82	120	15	0	135	\$6,918			11,070	\$567,276
Review Pilot Study for New Impingement & Entrainment Technology	-	5	5	0	10	\$430			-	\$0
Review Restoration Measures	12	120	30	0	150	\$7,404			1,800	\$88,848
Review Information to Support Site-Specific Determination of BTA	34	240	60	0	300	\$14,808			10,200	\$503,472
Determine Monitoring Frequency	120	1	2	0	3	\$118			360	\$14,208
Determine Record keeping and Reporting Frequency	120	1	2	0	3	\$118			360	\$14,208
Establish Requirements for Site-Specific Technology	34	2	7	0	9	\$334			306	\$11,356
Considering Public Comments	120	5	5	0	10	\$430			1,200	\$51,600
Issuing Permit	120	0	2	0	2	\$65			240	\$7,776
Permit Record Keeping	120	0	0	1	1	\$25			120	\$2,976
<b>Totals</b>	<b>184</b>	<b>512</b>	<b>149</b>	<b>1</b>	<b>175</b>	<b>\$8,189</b>	<b>\$321</b>	<b>\$8,510</b>	<b>30,451</b>	<b>\$1,501,242</b>

**Exhibit A.3c (States)**

**Verification Study Review**

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost
		Assumed Loaded Hourly Rate								
		\$54	\$32	\$25						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review of Verification Studies	424	2	4	0	6	\$237			2,544	\$100,403
Permit Modification Due to Unfavorable Results	424	4	10	0	14	\$538			5,936	\$228,282
Record Keeping	424	0	0	1	1	\$25			424	\$10,515
<b>Totals</b>	<b>424</b>	<b>6</b>	<b>14</b>	<b>1</b>	<b>21</b>	<b>\$800</b>	<b>\$11</b>	<b>\$811</b>	<b>8,904</b>	<b>\$343,864</b>

**Exhibit A.3d (States)**

**Annual States Director Activities**

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	O&M Costs*	Total Cost Per Director**	Total Annual Cost
		Assumed Loaded Hourly Rate								
		\$54	\$32	\$25						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review of Bi-Annual Status Report	537	6	12	0	18	\$710			9,666	\$381,485
Compliance Tracking	1,072	4	12	0	16	\$603			17,152	\$646,630
Determination on Monitoring Frequency Reduction	1,072	4	8	0	12	\$474			12,864	\$507,699
Record Keeping	1,072	1	2	1	4	\$143			4,288	\$153,510
<b>Totals</b>	<b>1,072</b>	<b>15</b>	<b>34</b>	<b>1</b>	<b>41</b>	<b>\$1,930</b>	<b>\$27</b>	<b>\$1,957</b>	<b>43,970</b>	<b>\$1,718,269</b>

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

				Total Burden (hrs.)	Total Initial Cost
<b>Totals</b>				<b>250,167</b>	<b>11,702,269</b>

\* The O&M costs incurred by directors are all ODCs. The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

\*\* There were no estimated Capital costs for any activities performed by directors.

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

**Exhibit A.3a (Federal)  
Federal Director Permit Issuance Activities (approval)**

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technical							
		Assumed Loaded Hourly Rate								
A	\$54	\$32	\$25	B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	7	2	6	0	8	\$302			56	\$2,111
Review CWIS Data	7	6	18	0	24	\$905			168	\$6,334
Review CWS Operation Narrative	7	6	18	0	24	\$905			168	\$6,334
Review Proposal for Collection of Information for Comprehensive Demonstration	-	16	16	0	32	\$1,376			-	\$0
Review Source Water Body Flow Information	1	2	6	0	8	\$302			8	\$302
Review Design and Construction Technology Plan	7	24	8	0	32	\$1,546			224	\$10,819
Review Impingement Mortality & Entrainment Characterization Study	7	400	50	0	450	\$23,060			3,150	\$161,420
Review Pilot Study for New Impingement & Entrainment Technology	2	16	16	0	32	\$1,376			64	\$2,752
Review Restoration Measures	1	400	100	0	500	\$24,680			350	\$17,276
Review Information to Support Site-Specific Determination of BTA	5	800	200	0	1,000	\$49,360			5,000	\$246,800
Determine Monitoring Frequency	7	2	6	0	8	\$302			56	\$2,111
Determine Record keeping and Reporting Frequency	7	2	6	0	8	\$302			56	\$2,111
Establish Requirements for Site-Specific Technology	5	8	24	0	32	\$1,206			160	\$6,032
Considering Public Comments	7	16	16	0	32	\$1,376			224	\$9,632
Issuing Permit	7	1	6	1	8	\$273			56	\$1,910
Permit Record Keeping	7	1	1	2	4	\$136			28	\$949
<b>Totals</b>	<b>7</b>	<b>1702</b>	<b>497</b>	<b>3</b>	<b>1,387</b>	<b>\$67,380</b>	<b>\$321</b>	<b>\$67,701</b>	<b>9,768</b>	<b>\$479,139</b>

**Exhibit A.3b (Federal)  
Federal Director Permit Issuance Activities (renewal)**

Activity	Directors (Responses)	Senior	Junior	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost*
		Technical	Technical							
		Assumed Loaded Hourly Rate								
A	\$54	\$32	\$25	B	C	D	C+D	A*B	A*(C+D)	
Review Source Water Physical Data	3	1	2	0	3	\$118			9	\$355
Review CWIS Data	3	2	5	0	7	\$269			21	\$808
Review CWS Operation Narrative	3	2	5	0	7	\$269			21	\$808
Review Proposal for Collection of Information for Comprehensive Demonstration	7	5	5	0	10	\$430			70	\$3,010
Review Source Water Body Flow Information	2	1	2	0	3	\$118			6	\$237
Review Design and Construction Technology Plan	3	7	2	0	9	\$440			27	\$1,320
Review Impingement Mortality & Entrainment Characterization Study	3	120	15	0	135	\$6,918			405	\$20,754
Review Pilot Study for New Impingement & Entrainment Technology	-	5	5	0	10	\$430			-	\$0
Review Restoration Measures	0	120	30	0	150	\$7,404			45	\$2,221
Review Information to Support Site-Specific Determination of BTA	3	240	60	0	300	\$14,808			900	\$44,424
Determine Monitoring Frequency	3	1	2	0	3	\$118			9	\$355
Determine Record keeping and Reporting Frequency	3	1	2	0	3	\$118			9	\$355
Establish Requirements for Site-Specific Technology	3	2	7	0	9	\$334			27	\$1,002
Considering Public Comments	3	5	5	0	10	\$430			30	\$1,290
Issuing Permit	3	0	2	0	2	\$65			6	\$194
Permit Record Keeping	3	0	0	1	1	\$25			3	\$74
<b>Totals</b>	<b>7</b>	<b>512</b>	<b>149</b>	<b>1</b>	<b>244</b>	<b>\$11,643</b>	<b>\$321</b>	<b>\$11,964</b>	<b>1,588</b>	<b>\$78,171</b>

**Exhibit A.3c (Federal)  
Verification Study Review**

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	O&M Costs*	Total Cost Per Director**	Total Burden (hrs.)	Total Initial Cost
		Assumed Loaded Hourly Rate								
		\$54	\$32	\$25						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review of Verification Studies	14	2	4	0	6	\$237			84	\$3,315
Permit Modification Due to Unfavorable Results	14	4	10	0	14	\$538			196	\$7,538
Record Keeping	14	0	0	1	1	\$25			14	\$347
<b>Totals</b>	<b>14</b>	<b>6</b>	<b>14</b>	<b>1</b>	<b>21</b>	<b>\$800</b>	<b>\$11</b>	<b>\$811</b>	<b>294</b>	<b>\$11,354</b>

**Exhibit A.3d (Federal)  
Annual States Director Activities**

Activity	Directors (Responses)	Senior Technical	Junior Technical	Clerical	Burden Per Permit	Labor Cost per Permit	ODCs lump sum*	O&M Costs*	Total Cost Per Director**	Total Annual Cost
		Assumed Loaded Hourly Rate								
		\$54	\$32	\$25						
A	Level of Effort (hrs)			B	C	D	C+D	A*B	A*(C+D)	
Review of Bi-Annual Status Reports	20	6	12	0	18	\$710			360	\$14,208
Compliance Tracking	38	4	12	0	16	\$603			608	\$22,922
Determination on Monitoring Frequency Reduction	38	4	8	0	12	\$474			456	\$17,997
Record Keeping	38	1	2	1	4	\$143			152	\$5,442
<b>Totals</b>	<b>38</b>	<b>15</b>	<b>34</b>	<b>1</b>	<b>41</b>	<b>\$1,930</b>	<b>\$27</b>	<b>\$1,957</b>	<b>1,576</b>	<b>\$61,594</b>

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

				Total Burden (hrs.)	Total Initial Cost
<b>Totals</b>				<b>13,226</b>	<b>630,258</b>

\* The O&M costs incurred by directors are all ODCs. The ODC estimate was not estimated for each activity, but rather as a lump sum for each provision of the rule.

\*\* There were no estimated Capital costs for any activities performed by directors.

**Exhibit A.4**  
**[Exhibit A.4 is reserved for future use]**

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

**Facilities (approval and renewal)**

	Year 1	Year 2	Year 3	Annual Average <sup>1</sup>
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Start-up Activities	94	106	109	103
Permit Application Activities	117	89	123	110
Proposal for Collection of Information for Comprehensive Demonstration Study	74	83	71	76
FW River/Stream Source Water Body Flow Information	42	28	44	38
FW Lake/Reservoir Source Water Body Flow Information	20	20	17	19
Design and Construction Technology Plan (Impingement Only)	60	44	48	51
Design and Construction Technology Plan (Impingement & Entrainment)	37	22	37	32
Freshwater Monitoring for Impingement Mortality & Entrainment Characterization Study	95	85	94	91
Marine Monitoring for Impingement Mortality & Entrainment Characterization Study	105	101	97	101
Impingement Mortality & Entrainment Characterization Study Initial Analysis	74	83	71	76
Impingement Mortality & Entrainment Characterization Study Final Report	97	66	85	83
Pilot Study Impingement Monitoring Only (Freshwater)	0	0	0	0
Pilot Study Impingement & Entrainment Monitoring (Freshwater)	2	2	0	1
Pilot Study Impingement Monitoring Only (Marine)	1	1	0	1
Pilot Study Impingement & Entrainment Monitoring (Marine)	10	12	0	7
Verification Monitoring Plan	101	77	98	92
Biological Monitoring for Impingement (Freshwater)	180	242	290	237
Biological Monitoring for Impingement (Marine)	97	136	165	133
Biological Monitoring for Entrainment (Freshwater)	180	242	290	237
Biological Monitoring for Entrainment (Marine)	97	136	165	133
Bi-Annual Status Report Activities	277	378	455	370
Verification Study	179	188	194	187
<b>Respondents</b>	<b>293</b>	<b>390</b>	<b>480</b>	<b>388</b>

**State Directors (approval and renewal)**

	Year 1	Year 2	Year 3	Annual Average <sup>2</sup>
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	0	0	0	0
Director Permit Issuance Activities				
Review Permit Application Information	113	86	120	106
Review Proposal for Collection of Information for Comprehensive Demonstration Study	73	78	70	74
Review Source Water Body Flow Information	61	48	59	56
Review Design and Construction Technology Plan	93	63	82	79
Review Impingement Mortality & Entrainment Characterization Study	93	63	82	79
Review Pilot Study for New Impingement & Entrainment Technology	12	14	0	9
Review Restoration Measures	11	9	12	11
Review Information to Support Site-Specific Determination of BTA	34	20	34	29
Determine Monitoring Frequency	113	86	120	106
Determine Permit Requirements and Issue Permit	113	86	120	106
Verification Study Review	95	142	187	141
Alternative Regulatory Requirements	0	0	0	0
Annual Director Activities				
Review of Yearly Status Report	268	365	439	357
Compliance Tracking	268	365	439	357
Determination on Monitoring Frequency Reduction	268	365	439	357
Record Keeping	268	365	439	357
<b>Respondents</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>

**Sum for Facilities and Directors (approval and renewal)**

	Year 1	Year 2	Year 3	Annual Average
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>Facilities</b>	<b>293</b>	<b>390</b>	<b>480</b>	<b>388</b>
<b>State Directors</b>	<b>41</b>	<b>41</b>	<b>41</b>	<b>41</b>
<b>Yearly Total</b>	<b>334</b>	<b>431</b>	<b>521</b>	<b>429</b>

[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.6**  
**Responses for the ICR Period Year by Year by Activity**

**Facilities**

	Year 1	Year 2	Year 3	Annual Average
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Start-up Activities	94	106	109	103
Permit Application Activities	117	89	123	110
Proposal for Collection of Information for Comprehensive Demonstration Study	74	83	71	76
FW River/Stream Source Water Body Flow Information	42	28	44	38
FW Lake/Reservoir Source Water Body Flow Information	20	20	17	19
Design and Construction Technology Plan (Impingement Only)	60	44	48	51
Design and Construction Technology Plan (Impingement & Entrainment)	37	22	37	32
Freshwater Monitoring for Impingement Mortality & Entrainment Characterization Study	95	85	94	91
Marine Monitoring for Impingement Mortality & Entrainment Characterization Study	105	101	97	101
Impingement Mortality & Entrainment Characterization Study Initial Analysis	74	83	71	76
Impingement Mortality & Entrainment Characterization Study Final Report	97	66	85	83
Pilot Study Impingement Monitoring Only (Freshwater)	0	0	0	0
Pilot Study Impingement & Entrainment Monitoring (Freshwater)	2	2	0	1
Pilot Study Impingement Monitoring Only (Marine)	1	1	0	1
Pilot Study Impingement & Entrainment Monitoring (Marine)	10	12	0	7
Information to Support Site-Specific Determination of BTA	37	22	37	32
Site-Specific Technology Plan	37	22	37	32
Verification Monitoring Plan	101	77	98	92
Biological Monitoring for Impingement (Freshwater)	180	242	290	237
Biological Monitoring for Impingement (Marine)	97	136	165	133
Biological Monitoring for Entrainment (Freshwater)	180	242	290	237
Biological Monitoring for Entrainment (Marine)	97	136	165	133
Bi-Annual Status Report Activities	277	378	455	370
Verification Study	179	188	194	187
<b>Responses</b>	<b>2,013</b>	<b>2,185</b>	<b>2,527</b>	<b>2,242</b>

**State Directors**

	Year 1	Year 2	Year 3	Annual Average
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	0	0	0	0
Director Permit Issuance Activities				
Review Permit Application Information	113	86	120	106
Review Proposal for Collection of Information for Comprehensive Demonstration Study	73	78	70	74
Review Source Water Body Flow Information	61	48	59	56
Review Design and Construction Technology Plan	93	63	82	79
Review Impingement Mortality & Entrainment Characterization Study	93	63	82	79
Review Pilot Study for New Impingement & Entrainment Technology	12	14	0	9
Review Restoration Measures	11	9	12	11
Review Information to Support Site-Specific Determination of BTA	34	20	34	29
Determine Monitoring Frequency	113	86	120	106
Determine Permit Requirements and Issue Permit	113	86	120	106
Verification Study Review	95	142	187	141
Alternative Regulatory Requirements	0	0	0	0
Annual Director Activities				
Review of Bi-Annual Status Report	268	365	439	357
Compliance Tracking	268	365	439	357
Determination on Monitoring Frequency Reduction	268	365	439	357
Record Keeping	268	365	439	357
<b>Responses</b>	<b>1,883</b>	<b>2,155</b>	<b>2,642</b>	<b>2,227</b>

**Sum for Facilities and Directors**

	Year 1	Year 2	Year 3	Annual Average
	Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>Facilities</b>	<b>2,013</b>	<b>2,185</b>	<b>2,527</b>	<b>2,242</b>
<b>State Directors</b>	<b>1,883</b>	<b>2,155</b>	<b>2,642</b>	<b>2,227</b>
<b>Yearly Total</b>	<b>3,896</b>	<b>4,340</b>	<b>5,169</b>	<b>4,468</b>



## Exhibit A.7

### Hourly Burden for the ICR Period Year by Year for Facilities

#### Facility Activities

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>NPDES Permit Application Activities</b>					
Start-up Activities	A1a	2,932	2,068	1,417	2,139
Permit Application Activities	A1b	28,899	21,983	18,081	22,988
Proposal for Collection of Information for Comprehensive Demonstration Study	A1c	12,965	6,507	5,566	8,346
FW River/Stream Source Water Body Flow Information	A1d	4,200	2,800	1,320	2,773
FW Lake/Reservoir Source Water Body Flow Information	A1d	2,240	2,240	571	1,684
Design and Construction Technology Plan (Impingement Only)	A1e	7,020	5,148	2,880	5,016
Design and Construction Technology Plan (Impingement & Entrainment)	A1e	5,772	3,432	2,960	4,055
Freshwater Monitoring for Impingement Mortality & Entrainment Characterization Study	A1f	395,058	218,329	126,242	246,543
Marine Monitoring for Impingement Mortality & Entrainment Characterization Study	A1f	426,655	278,805	167,099	290,853
Impingement Mortality & Entrainment Characterization Study Initial Analysis	A1f	17,982	9,379	8,023	11,795
Impingement Mortality & Entrainment Characterization Study Final Report	A1f	38,703	26,334	10,200	25,079
Pilot Study Impingement Monitoring Only (Freshwater) for Pilot Study	A1g	0	0	0	0
Pilot Study Impingement & Entrainment Monitoring (Freshwater) for Pilot Study	A1g	3,112	3,112	0	2,075
Pilot Study Impingement Monitoring Only (Marine) for Pilot Study	A1g	1,185	1,185	0	790
Pilot Study Impingement & Entrainment Monitoring (Marine) for Pilot Study	A1g	18,590	22,308	0	13,633
Verification Monitoring Plan	A1h	12,928	9,856	0	7,595
<b>NPDES Permit Application Activity Total</b>		<b>978,239</b>	<b>613,485</b>	<b>344,359</b>	<b>645,361</b>
<b>Annual Activities</b>					
Biological Monitoring for Impingement (Freshwater)	A2a	68,220	91,718	109,910	89,949
Biological Monitoring for Impingement (Marine)	A2b	46,715	65,498	79,464	63,892
Biological Monitoring for Entrainment (Freshwater)	A2c	110,520	148,588	178,060	145,723
Biological Monitoring for Entrainment (Marine)	A2d	75,272	105,536	128,040	102,949
Bi-Annual Status Report Activities	A2e	65,372	89,208	107,380	87,320
Verification Study	A2f	21,514	22,768	21,780	22,021
<b>Annual Activity Yearly Labor Total</b>		<b>387,613</b>	<b>523,316</b>	<b>624,634</b>	<b>511,854</b>
<b>Yearly Labor Total</b>		<b>1,365,853</b>	<b>1,136,801</b>	<b>968,993</b>	<b>1,157,216</b>

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

**State Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	A3a (state)	0	0	0	0
Director Permit Issuance Activities	A3b (state)	101,088	66,894	29,311	65,764
Verification Study Review	A3c (state)	1,995	2,982	3,927	2,968
Alternative Regulatory Requirements	A3d (state)	0	0	0	0
Annual Director Activities	A3e (state)	10,988	14,965	17,999	14,651
<b>Yearly Total</b>		<b>114,071</b>	<b>84,841</b>	<b>51,237</b>	<b>83,383</b>

**Federal Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	A3a (federal)	0	0	0	0
Director Permit Issuance Activities	A3b (federal)	5,738	4,090	1,528	91,931
Verification Study Review	A3c (federal)	63	84	147	3,066
Alternative Regulatory Requirements	A3d (federal)	0	0	0	0
Annual Director Activities	A3e (federal)	369	533	656	18,500
<b>Yearly Total</b>		<b>6,170</b>	<b>4,707</b>	<b>2,331</b>	<b>4,403</b>

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

**Facility Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>NPDES Permit Application Activities</b>					
Start-up Activities	A1a	\$174,735	\$125,889	\$88,682	\$129,769
Permit Application Activities	A1b	\$1,389,995	\$1,057,347	\$916,830	\$1,121,391
Proposal for Collection of Information for Comprehensive Demonstration Study	A1c	\$692,412	\$337,838	\$288,994	\$439,748
FW River/Stream Source Water Body Flow Information	A1d	\$168,046	\$112,031	\$52,815	\$110,964
FW Lake/Reservoir Source Water Body Flow Information	A1d	\$93,630	\$93,630	\$23,876	\$70,379
Design and Construction Technology Plan (Impingement Only)	A1e	\$301,128	\$220,827	\$125,635	\$215,863
Design and Construction Technology Plan (Impingement & Entrainment)	A1e	\$264,117	\$157,043	\$137,670	\$186,276
Freshwater Monitoring for Impingement Mortality & Entrainment Characterization Study	A1f	\$19,318,188	\$10,679,417	\$6,179,504	\$12,059,036
Marine Monitoring for Impingement Mortality & Entrainment Characterization Study	A1f	\$20,716,016	\$13,547,179	\$8,130,537	\$14,131,244
Impingement Mortality & Entrainment Characterization Study Initial Analysis	A1f	\$1,195,341	\$627,638	\$536,895	\$786,624
Impingement Mortality & Entrainment Characterization Study Final Report	A1f	\$2,149,685	\$1,462,672	\$571,107	\$1,394,488
Pilot Study Impingement Monitoring Only (Freshwater) for Pilot Study	A1g	\$0	\$0	\$0	\$0
Pilot Study Impingement & Entrainment Monitoring (Freshwater) for Pilot Study	A1g	\$174,635	\$174,635	\$0	\$116,423
Pilot Study Impingement Monitoring Only (Marine) for Pilot Study	A1g	\$64,811	\$64,811	\$0	\$43,207
Pilot Study Impingement & Entrainment Monitoring (Marine) for Pilot Study	A1g	\$1,016,790	\$1,220,148	\$0	\$745,646
Verification Monitoring Plan	A1h	\$712,878	\$543,481	\$0	\$418,787
<b>NPDES Permit Application Activity Total</b>		<b>\$48,432,406</b>	<b>\$30,424,586</b>	<b>\$17,052,543</b>	<b>\$31,969,845</b>
<b>Annual Activities</b>					
Biological Monitoring for Impingement (Freshwater)	A2a	\$3,537,504	\$4,755,978	\$5,699,312	\$4,664,265
Biological Monitoring for Impingement (Marine)	A2b	\$2,422,980	\$3,397,168	\$4,121,565	\$3,313,905
Biological Monitoring for Entrainment (Freshwater)	A2c	\$5,804,910	\$7,804,379	\$9,352,355	\$7,653,881
Biological Monitoring for Entrainment (Marine)	A2d	\$3,909,963	\$5,482,010	\$6,650,969	\$5,347,647
Bi-Annual Status Report Activities	A2e	\$5,430,862	\$7,411,068	\$8,920,730	\$7,254,220
Verification Study	A2f	\$1,382,398	\$1,455,074	\$1,381,781	\$1,406,418
<b>Annual Activity Yearly Labor Total</b>		<b>\$22,488,618</b>	<b>\$30,305,678</b>	<b>\$36,126,711</b>	<b>\$29,640,336</b>
<b>Yearly Labor Total</b>		<b>\$70,921,024</b>	<b>\$60,730,263</b>	<b>\$53,179,254</b>	<b>\$61,610,181</b>

**Facility O&M**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>NPDES Application</b>					
Purchase, Installation & Operation of Pilot Study Technology-Freshwater Impingement and Entrainment	A1g	\$352,988	\$352,988	\$0	\$235,325
Purchase, Installation & Operation of Pilot Study Technology-Freshwater-Impingement Only	A1g	\$0	\$0	\$0	\$0
Purchase, Installation & Operation of Pilot Study Technology-Marine Impingement and Entrainment	A1g	\$5,023,160	\$6,027,792	\$0	\$3,683,651
Purchase, Installation & Operation of Pilot Study Technology-Marine- Impingement Only	A1g	\$259,798	\$259,798	\$0	\$173,199
Biological Study Laboratory Analysis (Freshwater)	A1f	\$3,968,055	\$2,347,413	\$1,570,505	\$2,628,658
Biological Study Laboratory Analysis (Marine)	A1f	\$4,496,017	\$3,138,530	\$2,106,840	\$3,247,129
Pilot Study Entrainment Laboratory Analysis (Freshwater)	A1g	\$12,852	\$12,852	\$0	\$8,568
Pilot Study Entrainment Laboratory Analysis (Marine)	A1g	\$83,540	\$100,248	\$0	\$61,263
Other Direct Costs	A.1a-h	\$797,610	\$396,402	\$74,256	\$422,756
<b>Annual</b>					
Laboratory Analysis to Identify & Enumerate Entrained Freshwater Biota	A2c	\$1,503,720	\$2,021,668	\$2,422,660	\$1,982,683
Laboratory Analysis to Identify & Enumerate Entrained Marine Biota	A2d	\$1,053,420	\$1,476,960	\$1,791,900	\$1,440,760
Other Direct Costs	A.2a-f	\$794,651	\$1,055,404	\$1,253,499	\$1,034,518
<b>Equipment Cost Subtotal</b>		<b>\$5,635,946</b>	<b>\$6,640,578</b>	<b>\$0</b>	<b>\$4,092,175</b>
<b>Laboratory Analysis Subtotal</b>		<b>\$11,117,604</b>	<b>\$9,097,671</b>	<b>\$7,891,905</b>	<b>\$9,369,060</b>
<b>Other Direct Costs Subtotal</b>		<b>\$1,592,261</b>	<b>\$1,451,806</b>	<b>\$1,327,755</b>	<b>\$1,457,274</b>
<b>Yearly O&amp;M Total</b>		<b>\$18,345,811</b>	<b>\$17,190,055</b>	<b>\$9,219,660</b>	<b>\$14,918,509</b>

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

**State Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	A3a (state)	\$0	\$0	\$0	\$0
Director Permit Issuance Activities	A3b (state)	\$4,896,128	\$3,227,906	\$1,413,702	\$3,179,245
Verification Study Review	A3c (state)	\$76,000	\$113,600	\$149,600	\$113,067
Alternative Regulatory Requirements	A3d (state)	\$0	\$0	\$0	\$0
Annual Director Activities	A3e (state)	\$517,347	\$704,596	\$847,446	\$689,796
<b>Yearly Total</b>		<b>\$5,489,476</b>	<b>\$4,046,102</b>	<b>\$2,410,747</b>	<b>\$3,982,108</b>

**State Director O&M**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>Start-Up &amp; NPDES Application</b>					
Annual Other Direct Costs	A3a-d (state)	\$37,318	\$29,168	\$40,577	\$35,688
Other Direct Costs	A3e (state)	\$7,236	\$9,855	\$11,853	\$9,648
<b>Yearly O&amp;M Cost Total</b>		<b>\$44,554</b>	<b>\$39,023</b>	<b>\$52,430</b>	<b>\$45,336</b>

**Federal Director Activities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
Director Start-up Activities	A3a (federal)	\$0	\$0	\$0	\$0
Director Permit Issuance Activities	A3b (federal)	\$280,096	\$199,376	\$74,628	\$184,700
Verification Study Review	A3c (federal)	\$2,400	\$3,200	\$5,600	\$3,733
Alternative Regulatory Requirements	A3d (federal)	\$0	\$0	\$0	\$0
Annual Director Activities	A3e (federal)	\$17,374	\$25,095	\$30,886	\$24,452
<b>Yearly Total</b>		<b>\$299,870</b>	<b>\$227,671</b>	<b>\$111,114</b>	<b>\$212,885</b>

**Federal Director O&M**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010	
<b>Start-Up &amp; NPDES Application</b>					
Annual Other Direct Costs	A3a-d (federal)	\$1,317	\$1,007	\$1,040	\$1,121
Other Direct Costs	A3e (federal)	\$243	\$351	\$432	\$342
<b>Yearly O&amp;M Cost Total</b>		<b>\$1,560</b>	<b>\$1,358</b>	<b>\$1,472</b>	<b>\$1,463</b>

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

**Facilities**

	Source (Exhibit)	Year 1	Year 2	Year 3	Annual Average	Three Year Total <sup>1</sup>
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010		
Burden (hours)	A7	1,365,853	1,136,801	968,993	1,157,216	3,471,647
Respondents (number)	A5	293	390	480	388	508
Responses (number)	A6	2,013	2,185	2,527	2,242	6,725
Costs (labor)	A9	\$70,921,024	\$60,730,263	\$53,179,254	\$61,610,181	\$184,830,542
Costs (Equipment)	A9	\$5,635,946	\$6,640,578	\$0	\$4,092,175	\$12,276,524
Costs (Lab Analysis)	A9	\$11,117,604	\$9,097,671	\$7,891,905	\$9,369,060	\$28,107,181
Costs (Other Direct Costs)	A9	\$1,592,261	\$1,451,806	\$1,327,755	\$1,457,274	\$4,371,822
<b>Total Costs</b>		<b>\$89,266,836</b>	<b>\$77,920,319</b>	<b>\$62,398,914</b>	<b>\$76,528,690</b>	<b>\$229,586,069</b>

[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 <sup>1</sup>
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010		
Burden (hours)	A8	114,071	84,841	51,237	83,383	250,149
Respondents (number)	A5	41	41	41	41	41
Responses (number)	A6	1,883	2,155	2,642	2,227	6,680
Costs(labor)	A10	\$5,489,476	\$4,046,102	\$2,410,747	\$3,982,108	\$11,946,325
Costs (Other Direct Costs)	A10	\$44,554	\$39,023	\$52,430	\$45,336	\$136,007
<b>Total Costs</b>		<b>\$5,534,030</b>	<b>\$4,085,125</b>	<b>\$2,463,177</b>	<b>\$4,027,444</b>	<b>\$12,082,332</b>

[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
		Mar. 2007 - Feb. 2008	Mar. 2008 - Feb. 2009	Mar. 2009 - Feb. 2010		
Burden (hours)	A8	6,170	4,707	2,331	4,403	13,208
Costs(labor)	A10	\$299,870	\$227,671	\$111,114	212,885	638,655
Costs (O&M)	A10	\$1,560	\$1,358	\$1,472	1,463	4,390
<b>Total Costs</b>		<b>\$301,430</b>	<b>\$229,029</b>	<b>\$112,586</b>	<b>\$214,348</b>	<b>\$643,045</b>

**Totals for Respondents (Facilities and Directors)\***

	Annual Average	Three Year Total
<b>Total Respondent Burden (hours)</b>	<b>1,240,599</b>	<b>3,721,796</b>
<b>Total Respondents (number)</b>	<b>429</b>	<b>549</b>
<b>Total Respondent Labor Costs</b>	<b>\$65,592,289</b>	<b>\$196,776,867</b>
<b>Total Respondent Capital and O&amp;M Costs</b>	<b>\$14,963,845</b>	<b>\$44,891,534</b>
<b>Total Respondent Cost for All Activities</b>	<b>\$80,556,134</b>	<b>\$241,668,401</b>

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