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**From:** Halter, Amanda (OC)  
**Sent:** Thursday, February 26, 2009 9:41 AM  
**To:** 'PWyels@waterboards.ca.gov'; 'DWoodward@waterboards.ca.gov'; 'CHagan@waterboards.ca.gov'  
**Cc:** pmaclaggan@poseidon1.com; 'dmayer@tenera.com'; Garrett, Christopher (SD)  
**Subject:** Poseidon: Prorated Calculations

**Attachments:** 2-26-09 response to Dr Woodward.pdf; poseidon\_impingement data\_letter to woodward\_attachments(998866\_1\_OC).PDF

All,

In preparation for today's teleconference at noon, attached please find Poseidon's prorated impingement calculations. We understand Dave and Debbie had an opportunity to speak yesterday afternoon regarding staff's information requests, and we believe the attached information is responsive to those requests as modified by their conversation.

We submit this information with the caveat that it has been generated in a very short time frame and no one has had an opportunity to fully review it yet. We submit it for the purpose of receiving real-time feedback and in an effort to quickly meet staff's needs. We look forward to today's discussion as we work toward finalizing these matters.

Best regards,  
Amanda

**Amanda Halter**

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Letter response



2-26-09 response  
to Dr Woodwar...

Attachments



poseidon\_impingem  
ent data lett...



# ATTACHMENT



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## LATHAM & WATKINS LLP

February 26, 2009

Dr. Deborah Woodward  
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File No. 036182-0011

Re: CDP Impingement Data

Dr. Woodward:

The following information is intended to respond to staff's information requests as articulated in yesterday morning's teleconference and as modified during your conversation yesterday afternoon with Dr. Mayer, and is supplementary to the February 18, 2009 submittal.<sup>1</sup> This response is preliminary and given the timeframe has not been fully reviewed. We understand that revisions or clarifications may be necessary, but in an effort to continue a productive dialogue and move toward finalization, this letter is being submitted as soon as possible.

In particular, we understand that you requested from Poseidon prorated estimates of the Carlsbad Desalination Project's (CDP) impingement impacts associated with stand-alone operations, and that you asked Poseidon to perform the following calculation for each category of organism (i.e., fishes, invertebrates, sharks + rays):

1. For every million gallons of water withdrawn by the Encina Power Station (EPS) during the 2004/2005 sampling survey, calculate the concentration of impinged organisms (i.e., fishes, invertebrates, sharks + rays) in terms of both:
  - a. number (of individual organisms); and

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<sup>1</sup> Please note that at or about the time of your conversation with Dr. Mayer (approximately 3:45 pm), Ms. Catherine Hagan sent Poseidon and its counsel a summary of the points discussed during the morning teleconference. This summary appears to instruct Poseidon to deliver information in a format that is somewhat different than the format that you discussed with Dr. Mayer yesterday afternoon. This response is intended to provide the substantive information requested by staff in the format directed by you in your conversation with Dr. Mayer.

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- b. weight (in grams).
2. For each of these categories and for each sampling day, multiply the concentration value by CDP's projected daily intake volume (i.e., 304 million gallons) to estimate CDP's proportional impact for that day.
3. Perform the above for every sampling day.
4. Take the average of the above calculations to estimate CDP's average daily impacts.
5. Multiply the estimate of CDP's average daily impact by 365 to calculate CDP's average annual impact.

The attached Tables (1-3) provide the information that you have requested.

**Table 1** contains the impingement and flow data that were collected by Tenera Environmental during the 2004/2005 sampling period. The calculations contained in the other tables that estimate CDP's proportional impacts are based on the data in Table 1.

**Table 2** provides the requested information as described above. A detailed analysis of Table 2 follows:

1. Column 1 refers to the relevant sampling date.
2. Column 2 identifies CDP's projected flow volume—a constant value of 304 MGD.
3. Columns 3, 4, 5, 6, and 7 are each divided into:
  - a. 2 subcolumns, representing...
    - i. Number
    - ii. Weight
  - b. 4 sub-sub columns
    - i. Concentration of organisms impinged by EPS's intake system; represented in terms of number of organisms impinged per million gallons of water withdrawn.
      - This value is calculated by dividing the number of organisms impinged on a given sampling period (day) by the volume of water withdrawn over the course of that period.
      - For instance, on 6/24/04, Tenera collected and counted 276 impinged fish. These fish were impinged during the 24 hours prior to collection—a period during which 632 million gallons of water were withdrawn by EPS. In order to calculate the concentration, we have divided 276 fish by 632 million gallons, which equals 0.4364. This means that for every million gallons of water that was withdrawn by EPS during that sampling period, 0.4364 fish were impinged by EPS's intake and collected by Tenera.
    - ii. Estimated Number of organisms impinged by CDP's standalone operations.
      - This value represents an estimate of the number of organisms that would have been impinged by CDP's operations during a given sampling period had CDP withdrawn 304 million gallons during that period.



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- This value is calculated by multiplying CDP's projected intake volume (304) by the concentration of organisms (in terms of number) impinged by EPS's intake system (calculated in the adjacent cell, described above).
- For instance, on 6/24/04, this calculation estimates that CDP would have impinged 133 fish ( $304 \times 0.4364 = 133$ ).
- iii. Concentration of organisms impinged by EPS's intake system; represented in terms of weight (in grams) of organisms impinged per million gallons of water withdrawn.
  - This value is calculated by dividing the weight of organisms impinged on a given sampling period (day) by the volume of water withdrawn over the course of that period.
  - For instance, on 6/24/04, Tenera collected and counted 276 impinged fish that weighed 1,682.9 grams. In order to calculate the concentration (in terms of weight), we have divided 1,682.9 grams by 632 million gallons, which equals 2.6609. This means that for every million gallons of water that was withdrawn by EPS during that sampling period, 2.6609 grams of fish were impinged by EPS's intake and collected by Tenera.
- iv. Estimated weight of organisms impinged by CDP's standalone operations.
  - This value represents an estimate of the weight of organisms that would have been impinged by CDP's operations during a given sampling period had CDP withdrawn 304 million gallons during that period.
  - This value is calculated by multiplying CDP's projected intake volume (304) by the concentration of organisms (in terms of weight) impinged by EPS's intake system (calculated in the adjacent cell).
  - For instance, on 6/24/04, this calculation estimates that CDP would have impinged 808.9 grams of fish ( $304 \times 2.6609 = 808.9$ ).
- 4. The calculations described above were made for each of the categories of organisms. In other words, the same steps were taken for:
  - Fishes
  - Invertebrates
  - Sharks + Rays
  - All Organisms (i.e., Fishes & Invertebrates & Sharks + Rays)
  - Fishes & Sharks + Rays (i.e., Invertebrates EXCLUDED)
- 5. The second to last row in Table 2 provides estimates of CDP's average daily impacts over the entire 2004/2005 sampling period.
  - Each calculation presented in this row simply represents the average of the values in the column above that calculation.
  - For instance, if you add up the prorated estimates of the number of fish that would be impinged by CDP's operation and then divide by the number of sampling period (52), the resulting value is 185.

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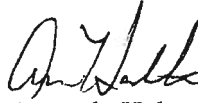
- This number represents an estimate of the average number of fish that would have been impinged each day by CDP during the 2004/2005 sampling period had it operated in standalone mode withdrawing 304 millions gallons of water per day.
- 6. The last column in Table 2 provides estimates of CDP's average annual impacts over the entire 2004/2005 sampling period.
  - Each calculation presented in this row simply represents the value above it (i.e., CDP's average daily impingement impact) multiplied by 365 days.
  - For instance, if you multiply 185 fish by 365 days, the resulting value is 67,528 fish per year.
  - This number represents an estimate of the number of fish that would have been impinged by CDP during the entire 2004/2005 sampling period had it operated in standalone mode withdrawing 304 million gallons of water per day.

The impingement estimates provided in **Table 3** are identical to the information provided in Table 2. However, Table 3 calculates these values in a more straightforward manner.

1. Column 1 refers to the relevant sampling date.
2. Column 2 presents a daily proportional flow.
  - This value represents the relationship between CDP's projected flow (304 MGD) and EPS actual flow for a given sampling period.
  - For instance, during the 24 hours period preceding Tenera's collection of impinged organisms on 6/24/04, EPS withdrew 632 million gallons of seawater. CDP's daily proportional flow for that period was, therefore, 48.1% (304/632).
3. The daily proportional flow figure is then multiplied by each of EPS's impingement values to estimate CDP's discounted impact.
  - For instance, on 6/24/04 Tenera collected and counted 276 impinged fish. Since CDP's would have withdrawn 48.1% of the water that EPS withdrew during that sampling period ( $304/632 = 48.1\%$ ), this methodology assumes that CDP would have impinged 48.1% of the number of fish impinged by EPS, or 133 fish.
  - The above-described step is repeated for each of the organism categories:
    - a. Fishes
    - b. Invertebrates
    - c. Sharks + Rays
    - d. All Organisms (i.e., Fishes & Invertebrates & Sharks + Rays)
    - e. Fishes & Sharks + Rays (i.e., Invertebrates EXCLUDED)

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Best regards,



Amanda Halter  
of LATHAM & WATKINS LLP

Attachments

cc: Phil Wyels  
Catherine George Hagan  
Peter MacLaggan  
Dr. David Mayer  
Christopher W. Garrett



**ATTACHMENT**



Date	Daily Volume (MGD)	Fishes		Invertebrates		Sharks + Rays		All Organisms	
		Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)
6/24/2004	632	276	1,682.9	7	66.1	11	2,672.7	294	4,421.7
6/30/2004	620	413	2,769.2	6	106.4	6	1,897.1	425	4,772.7
7/7/2004	671	201	1,635.5	6	54.0	8	1,954.6	215	3,644.1
7/14/2004	856	816	5,201.8	4	272.1	26	7,175.6	846	12,649.5
7/21/2004	817	252	3,019.8	3	21.1	11	4,244.2	266	7,285.1
7/28/2004	751	244	3,881.3	2	32.5	11	2,598.0	257	6,511.8
8/4/2004	676	60	2,162.9	2	7.4	10	1,788.1	72	3,958.4
8/11/2004	857	653	5,399.7	7	45.1	26	6,499.0	686	11,943.8
8/18/2004	857	80	1,379.5	3	24.9	6	2,620.2	89	4,024.6
8/25/2004	626	91	2,277.5	5	26.4	9	1,532.0	105	3,835.9
9/1/2004	735	32	856.5	2	4.7	2	633.3	36	1,494.5
9/8/2004	857	244	2,991.8	1	2.5	6	1,018.2	251	4,012.5
9/15/2004	771	94	849.4	8	62.6	2	499.0	104	1,411.0
9/22/2004	793	165	1,387.4	6	50.1	2	705.0	173	2,142.5
9/29/2004	840	120	1,121.4	15	115.9	2	460.0	137	1,697.3
10/6/2004	823	213	2,140.2	28	116.5	5	768.6	246	3,025.3
10/13/2004	550	17	323.6	21	118.8	0	0.0	38	442.4
10/20/2004	419	257	2,742.3	16	70.2	1	200.0	274	3,012.5
10/27/2004	477	202	2,949.5	37	254.0	4	1,775.0	243	4,978.5
11/3/2004	477	98	368.5	12	100.1	1	120.0	111	588.6
11/10/2004	550	21	129.0	29	196.6	0	0.0	50	325.6
11/17/2004	544	60	937.9	12	117.9	1	27.7	73	1,083.5
11/22/2004	550	42	890.5	37	156.2	1	460.0	80	1,506.7
12/1/2004	813	1,943	8,742.8	21	142.5	4	1,040.0	1,968	9,925.3
12/8/2004	784	322	1,849.0	22	335.0	2	1,050.0	346	3,234.0
12/15/2004	710	207	2,570.5	20	161.3	0	0.0	227	2,731.8
12/20/2004	710	166	678.9	20	197.7	0	0.0	86	876.6
12/29/2004	710	1,137	4,897.0	45	189.8	9	5,530.0	1,191	10,616.8
1/5/2005	566	522	5,484.3	40	385.6	6	1,795.9	568	7,665.8
1/12/2005	560	4,945	73,673.0	95	2,583.5	56	35,853.0	5,096	112,110.0
1/19/2005	599	595	4,764.1	49	444.0	5	2,150.0	649	7,358.1
1/26/2005	632	302	3,300.4	39	414.0	4	5,030.0	345	8,744.4
2/2/2005	560	246	3,196.5	26	678.4	0	0.0	272	3,874.9
2/9/2005	632	223	2,926.6	19	133.5	4	2,770.0	246	5,830.1
2/16/2005	497	23	1,186.0	714	2,153.6	0	0.0	737	3,339.6
2/23/2005	307	1,270	28,151.0	42	4,199.8	4	1,380.0	1,316	33,731.2
3/2/2005	497	48	3,638.2	20	424.6	0	0.0	68	4,062.8
3/9/2005	497	126	3,723.0	74	629.9	6	2,863.5	206	7,216.4
3/16/2005	497	30	887.6	16	62.0	0	0.0	46	949.6
3/23/2005	673	276	4,695.2	65	295.8	6	3,027.6	347	8,018.6
3/30/2005	674	234	2,290.1	37	162.5	6	6,873.3	277	9,325.9
4/6/2005	673	106	5,080.5	49	343.0	3	2,070.0	158	7,493.5
4/13/2005	673	207	6,419.5	184	631.4	13	4,717.9	404	11,768.8
4/20/2005	745	94	2,521.2	23	288.1	2	213.3	119	3,022.6
4/27/2005	745	101	4,391.5	8	24.4	1	2,500.0	110	3,915.9
5/4/2005	706	277	2,191.0	7	28.6	3	2,050.8	287	4,270.4
5/11/2005	576	193	3,965.9	11	328.4	7	2,377.5	211	6,671.8
5/18/2005	706	299	3,890.7	20	96.6	13	3,456.7	332	7,444.0
5/25/2005	632	192	3,398.6	20	107.0	3	1,046.0	215	4,551.6
6/1/2005	700	222	3,660.9	19	52.9	6	2,264.5	247	5,978.3
6/8/2005	778	232	3,554.2	5	13.0	2	1,072.4	239	4,656.8
6/15/2005	563	37	1,912.7	8	24.5	0	0.0	45	1,943.4

EPS's  
Impingement and Flow Data  
Collected by Tenera Environmental in 2004/2005

PRELIMINARY DRAFT

TABLE 1

February 25, 2009

	Fishes				Invertebrates				Sharks + Rays				All Organisms				Fishes & Sharks + Rays			
	Number		Weight		Number	Weight (g)		Number	Weight (g)		Number	Weight (g)		Number	Weight (g)		Number	Weight (g)		
	Concentration (# fish / MG)	# Fish Impinged	Concentration (Grams / MG)	Weight in Grams	Concentration (# Inverts / MG)	# Inverts Impinged	Concentration (Grams / MG)	Weight in Grams	Concentration (# Sharks + Rays / MG)	# Sharks + Ray Impinged	Concentration (Grams /MG)	Weight in Grams	Concentration (# Organisms / MG)	# Organisms Impinged	Concentration (Grams / MG)	Weight in Grams	Concentration (# Fish & Sharks + Rays / MG)	# Fish & Sharks + Ray Impinged	Concentration (Grams / MG)	Weight in Grams
304	133	2.6609	808.9	0.0097	3	0.1045	31.8	0.0174	5	4.2260	1284.7	0.4649	141	6.9914	2125.4	0.4538	138	6.8869	2093.6	
304	203	4.4667	1357.9	0.0089	3	0.1716	52.2	0.0097	3	310600	930.2	0.6855	208	7.6983	2340.3	0.6758	205	7.5267	2288.1	
304	91	2.4369	740.8	0.0047	1	0.0805	24.5	0.0119	4	219123	885.3	0.3203	97	5.4297	1650.6	0.3114	95	5.3492	1626.2	
304	290	6.0794	1848.1	0.0037	1	0.3180	96.7	0.0304	9	83862	2549.4	0.9887	301	14.7835	4494.2	0.9840	299	14.4655	4397.5	
304	94	3.6951	1123.3	0.0027	1	0.0258	7.8	0.0135	4	551933	1578.8	0.3255	99	8.9142	2709.9	0.3218	98	8.884	2702.1	
304	99	5.1714	1572.1	0.0030	1	0.0433	13.2	0.0147	4	34616	1052.3	0.3424	104	8.6763	2637.6	0.3398	103	8.6330	2624.4	
304	27	3.2012	973.2	0.0082	2	0.0110	3.3	0.0148	4	2.6465	804.5	0.1066	32	5.8587	1781.0	0.1036	31	5.8477	1777.7	
304	232	6.3001	1915.2	0.0035	1	0.0526	16.0	0.0303	9	7.5827	2305.1	0.8004	243	13.9353	4236.3	0.7922	241	13.8827	4220.3	
304	28	1.6095	489.3	0.0080	2	0.0291	8.8	0.0070	2	3.0571	929.4	0.1038	32	4.6957	1427.5	0.1003	31	4.6666	1418.7	
304	44	3.6356	1105.2	0.0027	1	0.0421	12.8	0.0144	4	24455	743.4	0.1676	51	6.1233	1861.5	0.1596	49	6.0811	1848.7	
304	13	1.1647	354.1	0.0012	0	0.0064	1.9	0.0027	1	0.8612	261.8	0.0490	15	2.0322	617.8	0.0462	14	2.0258	615.8	
304	87	3.4907	1061.2	0.0104	3	0.0029	0.9	0.0070	2	1.1880	361.5	0.2929	89	4.6815	1423.2	0.2917	89	4.6786	1422.3	
304	37	1.1014	334.8	0.0076	2	0.0812	24.7	0.0026	1	0.6474	196.7	0.1349	41	1.8297	556.2	0.1245	38	1.7485	531.5	
304	63	1.7495	531.9	0.0179	5	0.0632	19.2	0.0025	1	0.8890	270.3	0.2182	66	2.7017	821.3	0.2106	64	2.6386	802.1	
304	43	1.3345	405.7	0.0340	10	0.1379	41.9	0.0024	1	0.05474	166.4	0.1630	50	2.0199	614.1	0.1452	44	1.8820	572.1	
304	79	2.6020	791.0	0.0382	12	0.1416	43.1	0.0061	2	0.9344	284.1	0.2991	91	3.6781	1118.1	0.2650	81	3.5364	1075.1	
304	9	0.5880	178.7	0.0382	12	0.2159	65.6	0.0000	0	0.0000	0.0	0.0690	21	0.8038	244.4	0.0309	9	0.5880	178.7	
304	186	6.5454	1989.8	0.0776	24	0.1676	50.9	0.0024	1	0.4774	145.1	0.6540	199	7.1903	2185.8	0.6158	187	7.0227	2134.9	
304	129	6.1844	1880.0	0.0252	8	0.5326	161.9	0.0084	3	3.7217	1131.4	0.5095	155	10.4387	3173.4	0.4319	131	9.9061	3011.5	
304	62	0.7727	234.9	0.0527	16	0.2099	63.8	0.0021	1	0.2516	76.5	0.2327	71	1.2341	375.2	0.2076	63	1.0243	311.4	
304	12	0.2344	71.3	0.0221	7	0.3572	108.6	0.0000	0	0.0000	0.0	0.0908	28	0.5916	179.8	0.0382	12	0.2344	71.3	
304	34	1.7237	524.0	0.0672	20	0.2167	65.9	0.0018	1	0.0509	15.5	0.1342	41	1.9913	605.3	0.1121	34	1.7746	539.5	

February 25, 2009

Prorated Impingement Data (with concentration values and outliers)

PRELIMINARY DRAFT

TABLE 2



	Fishes			Invertebrates			Sharks + Rays			All Organisms			Fishes & Sharks + Rays																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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		Concentration (Grams / MG)	Weight in Grams		Concentration (# Inverts / MG)	# Inverts Impinged		Concentration (Grams / MG)	Weight in Grams		Concentration (# Organisms / MG)	# Organisms Impinged		Concentration (Grams / MG)	Weight in Grams	Concentration (# Fish & Sharks + Rays / MG)	# Fish & Sharks + Ray Impinged	Concentration (Grams / MG)	Weight in Grams																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
CDP's Daily Flow Volume (MGD)	Concentration (# fish / MG)	# Fish Impinged																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

February 25, 2009

Prorated Impingement Data (with concentration values and outliers)

PRELIMINARY DRAFT

TABLE 2

	Fishes				Invertebrates				Sharks + Rays				All Organisms				Fishes & Sharks + Rays				
	Number		Weight		Number		Weight (g)		Number		Weight (g)		Number		Weight (g)		Number		Weight (g)		
CDP's Daily Flow Volume (MGD)	# Fish Impinged		Weight in Grams		Concentration (# Inverts / MG)		# Inverts Impinged		Concentration (Grams / MG)		Weight in Grams		# Organisms Impinged		Concentration (Grams / MG)		# Fish & Sharks + Ray Impinged		Concentration (Grams / MG)		
	Concentration (# fish / MG)		Concentration (Grams / MG)		Concentration (# Inverts / MG)		Concentration (# Inverts / MG)		Concentration (Grams / MG)		Concentration (Grams / MG)		Concentration (# Organisms / MG)		Concentration (Grams / MG)		Concentration (# Fish & Sharks + Rays / MG)		Concentration (Grams / MG)		
4/27/2005	304	0.1356	41	18684	568.0	0.0099	3	0.0328	10.0	0.0013	0	3.3568	1020.5	0.1477	45	5.2579	1598.4	0.1370	42	5.2251	1588.4
5/4/2005	304	0.3924	119	31039	943.6	0.0191	6	0.0405	12.3	0.0042	1	2.9053	883.2	0.4066	124	6.0497	1839.1	0.3967	121	6.0092	1826.8
5/11/2005	304	0.3349	102	6.8818	2092.1	0.0283	9	0.5699	173.2	0.0121	4	4.1255	1254.2	0.3661	111	11.5772	3519.5	0.3470	106	11.0073	3346.2
5/18/2005	304	0.4236	129	5.5118	1675.6	0.0316	10	0.1368	41.6	0.0184	6	4.8970	1488.7	0.4703	143	10.5456	3205.9	0.4420	134	10.4087	3164.3
5/25/2005	304	0.3036	92	5.3737	1633.6	0.0271	8	0.1692	51.4	0.0047	1	1.6539	502.8	0.3399	103	7.1968	2187.8	0.3083	94	7.0276	2136.4
6/1/2005	304	0.3172	96	5.2307	1590.1	0.0064	2	0.0756	23.0	0.0086	3	3.2355	983.6	0.3529	107	8.5418	2596.7	0.3258	99	8.4662	2573.7
6/8/2005	304	0.2984	91	4.5712	1389.6	0.0142	4	0.0167	5.1	0.0026	1	1.3792	419.3	0.3074	93	5.9892	1820.7	0.3010	91	5.9504	1808.9
6/15/2005	304	0.0657	20	3.3954	1032.2	0.0582	18	0.0435	13.2	0.0000	0	0.0000	0.0	0.0799	24	3.4499	1048.8	0.0657	20	3.3954	1032.2
Prorated Estimate of CDP's Daily Impingement Impact (Based on Flow of 304 MGD)		0.6086	185	8.3682	2,543.9	0.0694	21	0.7049	214.3	0.0092	3	3.9179	1,191.0	0.6863	209	12.9917	3,949.5	0.6177	188	12.2861	3,735.0
Prorated Estimate of CDP's Annual Impingement Impact (Based on Flow of 304 MGD)		N/A	67,528	N/A	928,534	N/A	7,704	N/A	78,214	N/A	1,018	N/A	434,732	N/A	76,149	N/A	1,441,556	N/A	68,546	N/A	1,363,266

February 25, 2009

Prorated Impingement Data (with concentration values and outliers)

PRELIMINARY DRAFT

TABLE 2

	Daily Proportional Flow	Fishes		Invertebrates		Sharks + Rays		All Organisms		Fishes & Sharks + Rays	
		Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)
6/24/2004	48.1%	133	809	3	32	5	1,285	141	2,125	138	2,094
6/30/2004	49.0%	203	1,358	3	52	3	930	208	2,340	205	2,288
7/7/2004	45.3%	91	741	3	24	4	885	97	1,651	95	1,626
7/14/2004	35.5%	290	1,848	1	97	9	2,549	301	4,494	299	4,398
7/21/2004	37.2%	94	1,123	1	8	4	1,579	99	2,710	98	2,702
7/28/2004	40.5%	99	1,572	1	13	4	1,052	104	2,638	103	2,624
8/4/2004	45.0%	27	973	1	3	4	805	32	1,781	31	1,778
8/11/2004	35.5%	232	1,915	2	16	9	2,305	243	4,236	241	4,220
8/18/2004	35.5%	28	489	1	9	2	929	32	1,427	31	1,419
8/25/2004	48.5%	44	1,105	2	13	4	743	51	1,861	49	1,849
9/1/2004	41.3%	13	354	1	2	1	262	15	618	14	616
9/8/2004	35.5%	87	1,061	0	1	2	361	89	1,423	89	1,422
9/15/2004	39.4%	37	335	3	25	1	197	41	556	38	532
9/22/2004	38.3%	63	532	2	19	1	270	66	821	64	802
9/29/2004	36.2%	43	406	5	42	1	166	50	614	44	572
10/6/2004	37.0%	79	791	10	43	2	284	91	1,118	81	1,075
10/13/2004	55.2%	9	179	12	66	0	0	21	244	9	179
10/20/2004	72.6%	186	1,990	12	51	1	145	199	2,186	187	2,135
10/27/2004	63.7%	129	1,880	24	162	3	1,131	155	3,173	131	3,011
11/3/2004	63.7%	62	235	8	64	1	76	71	375	63	311
11/10/2004	55.2%	12	71	16	109	0	0	28	180	12	71
11/17/2004	55.9%	34	524	7	66	1	15	41	605	34	539
11/22/2004	55.2%	23	492	20	86	1	254	44	832	24	746
11/29/2004	37.4%	726	3,268	8	53	1	389	736	3,709	728	3,656
12/8/2004	38.8%	125	717	9	130	1	407	134	1,255	126	1,125
12/15/2004	42.8%	89	1,100	9	69	0	0	97	1,169	89	1,100
12/20/2004	42.8%	28	291	9	85	0	0	37	375	28	291
12/29/2004	42.8%	487	2,096	19	81	4	2,367	510	4,544	491	4,463
1/5/2005	53.7%	280	2,945	21	207	3	964	305	4,116	283	3,909
1/12/2005	54.2%	2,682	39,962	52	1,401	30	19,447	2,764	60,811	2,713	59,409
1/19/2005	50.7%	302	2,417	25	225	3	1,091	329	3,732	304	3,507
1/26/2005	48.1%	145	1,586	19	199	2	2,418	166	4,203	147	4,004
2/2/2005	54.2%	133	1,734	14	368	0	0	148	2,102	133	1,734
2/9/2005	48.1%	107	1,407	9	64	2	1,331	118	2,802	109	2,738
2/16/2005	61.2%	14	726	437	1,318	0	0	451	2,044	14	726
2/23/2005	99.1%	1,259	27,901	42	4,163	4	1,368	1,304	33,432	1,263	29,269

TABLE 3



	Daily Proportional Flow	Fishes		Invertebrates		Sharks + Rays		All Organisms		Fishes & Sharks + Rays	
		Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)	Number	Weight (g)
3/2/2005	61.2%	29	2,226	12	260	0	0	42	2,486	29	2,226
3/9/2005	61.2%	77	2,278	45	385	4	1,752	126	4,416	81	4,030
3/16/2005	61.2%	18	543	10	38	0	0	28	581	18	543
3/23/2005	45.2%	125	2,122	29	134	3	1,368	157	3,623	127	3,490
3/30/2005	45.1%	106	1,033	17	73	3	3,099	125	4,205	108	4,132
4/6/2005	45.2%	48	2,296	22	155	1	935	71	3,386	49	3,231
4/13/2005	45.2%	94	2,901	83	285	6	2,132	183	5,318	99	5,033
4/20/2005	40.8%	38	1,029	9	118	1	87	49	1,234	39	1,116
4/27/2005	40.8%	41	568	3	10	0	1,020	45	1,598	42	1,588
5/4/2005	43.1%	119	944	3	12	1	883	124	1,839	121	1,827
5/11/2005	52.8%	102	2,092	6	173	4	1,254	111	3,519	106	3,346
5/18/2005	43.1%	129	1,676	9	42	6	1,489	143	3,206	134	3,164
5/25/2005	48.1%	92	1,634	10	51	1	503	103	2,188	94	2,136
6/1/2005	43.4%	96	1,590	8	23	3	984	107	2,597	99	2,574
6/8/2005	39.1%	91	1,390	2	5	1	419	93	1,821	91	1,809
6/15/2005	54.0%	20	1,032	4	13	0	0	24	1,049	20	1,032
Prorated Estimate of CDP's Daily Impingement Impact (Based on Flow of 304 MGD)		185	<b>2,544</b>	21	214	3	1,191	209	3,949	188	<b>3,735</b>
Prorated Estimate of CDP's Annual Impingement Impact (Based on Flow of 304 MGD)		67,528	928,534	7,604	78,214	1,018	434,732	76,149	1,441,556	68,546	1,363,266

TABLE 3