

*Alamitos Generating Station*

## **Appendix E**

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### **Impingement Data**

E1. Fish Impingement Data

E2. Shellfish Impingement Data



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI01  
 Date: January 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinopsidae</i>	silverside, unid.	136	1.388
	<i>Fundulus parvipinnis</i>	California killifish	1	0.002
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	6	0.013
	<i>Lepidogobius lepidus</i>	bay goby	1	0.002
	<i>Pleuronichthys</i> sp.	righteyed flounder	1	0.046
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
			146	1.452

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI02  
Date: January 9-10, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinopsidae</i>	silverside, unid.	2	0.012
	<i>Fundulus parvipinnis</i>	California killifish	3	0.007
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	18	0.053
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.013
	<i>Hypsoblennius gilberti</i>	rockpool blenny	1	0.018
	<i>Scomber japonicus</i>	Pacific chub mackerel	2	0.188
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
			28	0.292

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI03  
 Date: January 16-17, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	1	0.039
	<i>Cheilotrema saturnum</i>	black croaker	1	0.008
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	4	0.008
	<i>Leuresthes tenuis</i>	California grunion	3	0.058
			9	0.113

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI04  
Date: January 23-24, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	3	0.009
	<i>Atherinops affinis</i>	topsmelt	1	0.006
	<i>Cymatogaster aggregata</i>	shiner perch	6	0.076
	<i>Engraulis mordax</i>	northern anchovy	3	0.008
	<i>Fundulus parvipinnis</i>	California killifish	1	0.004
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	8	0.034
	<i>Leuresthes tenuis</i>	California grunion	4	0.020
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.004
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
			28	0.162

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI05  
Date: January 30-31, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Atherinops affinis</i>	topsmelt	2	0.025
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.215
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.002
			4	0.242
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.032
	<i>Anchoa delicatissima</i>	slough anchovy	2	0.010
	<i>Atherinops affinis</i>	topsmelt	3	0.099
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	8	0.069
	<i>Hypsoblennius jenkinsi</i>	mussel blenny	1	0.006
	<i>Pleuronichthys guttulatus</i>	diamond turbot	1	0.001
	<i>Syngnathus leptorhynchus</i>	bay pipefish	2	0.006
			18	0.223

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI06  
 Date: February 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.027
	<i>Pleuronichthys ritteri</i>	spotted turbot	1	0.001
	<i>Scomber japonicus</i>	Pacific chub mackerel	1	0.603
			4	0.631



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI07  
 Date: February 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.005
	<i>Atherinops affinis</i>	topsmelt	2	0.019
	Cichlidae	tilapia, unid.	1	0.009
	<i>Fundulus parvipinnis</i>	California killifish	1	0.004
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.005
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
			8	0.043

**Alamitos Generating Station – Fish Impingement Data**

**Survey:** AGSFI08  
**Date:** February 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.003
			1	0.003

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI09  
Date: February 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	15	0.705
	<i>Atherinops affinis</i>	topsmelt	18	0.114
	Atherinopsidae	silverside, unid.	8,980	161.215
	<i>Cymatogaster aggregata</i>	shiner perch	90	3.565
	<i>Fundulus parvipinnis</i>	California killifish	21	0.090
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	53	0.111
	<i>Hypsoblennius gentilis</i>	bay blenny	20	0.326
	<i>Menticirrhus undulatus</i>	California corbina	15	11.355
	<i>Paralichthys californicus</i>	California halibut	20	15.640
	<i>Pleuronichthys guttulatus</i>	diamond turbot	88	22.416
	<i>Sardinops sagax</i>	Pacific sardine	40	0.540
			9,360	216.077

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI10  
 Date: March 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Atherinops affinis</i>	topsmelt	2	0.022
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.005
	<i>Pleuronichthys ritteri</i>	spotted turbot	1	0.002
			5	0.029

Alamitos Generating Station – Fish Impingement Data

Survey: AGSF11  
Date: March 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Anchoa compressa</i>	deepbody anchovy	1	0.009
	<i>Atherinops affinis</i>	topsmelt	2	0.047
	Cichlidae	tilapia, unid.	1	0.024
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.001
			5	0.081
3&4	<i>Gillichthys mirabilis</i>	longjaw mudsucker	3	0.006
	<i>Pleuronichthys ritteri</i>	spotted turbot	1	0.001
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.014
	<i>Urobatis halleri</i>	round stingray	1	0.195
			6	0.216

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI12  
 Date: March 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.003
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
			2	0.004

**Alamitos Generating Station – Fish Impingement Data**

**Survey:** AGSFI13  
**Date:** March 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.004
			1	0.004

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI14  
Date: April 3-4, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	4	0.138
	<i>Ameiurus</i> sp	bullhead catfish, unid.	2	0.117
	<i>Anchoa delicatissima</i>	slough anchovy	1	0.003
	<i>Atherinops affinis</i>	topsmelt	6	0.111
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.211
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.053
	<i>Engraulis mordax</i>	northern anchovy	3	0.022
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.005
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.003
	<i>Phanerodon furcatus</i>	white seaperch	1	0.001
	<i>Pleuronichthys ritteri</i>	spotted turbot	3	0.003
	<i>Porichthys</i> sp	midshipman, unid.	2	0.099
	<i>Urobatis halleri</i>	round stingray	2	1.258
			32	2.024
5	<i>Acanthogobius flavimanus</i>	yellowfin goby	2	0.045
	<i>Atherinops affinis</i>	topsmelt	3	0.058
	<i>Cymatogaster aggregata</i>	shiner perch	10	0.376
	<i>Porichthys notatus</i>	plainfin midshipman	1	0.232
	<i>Urobatis halleri</i>	round stingray	2	1.191
			18	1.902



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI15  
Date: April 10-11, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.042
	<i>Anchoa compressa</i>	deepbody anchovy	1	0.008
	<i>Atherinops affinis</i>	topsmelt	6	0.124
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.038
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.001
			10	0.213
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	5	0.164
	<i>Anchoa compressa</i>	deepbody anchovy	3	0.018
	<i>Anchoa delicatissima</i>	slough anchovy	3	0.011
	<i>Atherinops affinis</i>	topsmelt	6	0.100
	<i>Cymatogaster aggregata</i>	shiner perch	6	0.078
	<i>Engraulis mordax</i>	northern anchovy	2	0.008
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	4	0.011
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	3	0.014
	<i>Myliobatis californica</i>	bat ray	5	1.829
	<i>Pleuronichthys ritteri</i>	spotted turbot	1	0.002
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.393
	<i>Syngnathus leptorhynchus</i>	bay pipefish	3	0.001
	<i>Syngnathus sp</i>	pipefish, unid.	4	0.004
	<i>Urobatis halleri</i>	round stingray	2	1.448
			49	4.081
5	<i>Atherinops affinis</i>	topsmelt	7	0.131
	<i>Cymatogaster aggregata</i>	shiner perch	8	0.358
	<i>Embiotoca jacksoni</i>	black perch	1	0.004
			16	0.493

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI16  
Date: April 17-18, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Acanthogobius flavimanus</i>	yellowfin goby	4	0.146
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.003
			5	0.149
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.036
	<i>Anchoa delicatissima</i>	slough anchovy	2	0.016
	<i>Atherinops affinis</i>	topsmelt	1	0.012
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.105
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.028
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.003
			7	0.200
5	<i>Acanthogobius flavimanus</i>	yellowfin goby	3	0.114
	<i>Anchoa compressa</i>	deepbody anchovy	1	0.009
	<i>Anchoa delicatissima</i>	slough anchovy	2	0.009
	<i>Atherinops affinis</i>	topsmelt	2	0.026
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.135
	<i>Cymatogaster aggregata</i>	shiner perch	8	0.304
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	10	0.001
	<i>Menticirrhus undulatus</i>	California corbina	1	0.581
	<i>Pleuronichthys guttulatus</i>	diamond turbot	1	0.215
	<i>Seriphus politus</i>	queenfish	1	0.007
	<i>Xystreureys liolepis</i>	fantail sole	1	0.212
			31	1.613

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI17  
Date: April 24-25, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Acanthogobius flavimanus</i>	yellowfin goby	2	0.055
	<i>Atherinops affinis</i>	topsmelt	3	0.099
	<i>Cymatogaster aggregata</i>	shiner perch	4	0.158
	<i>Engraulis mordax larvae</i>	northern anchovy larvae	16	0.002
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.003
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.256
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
	<i>Urobatis halleri</i>	round stingray	1	0.492
			29	1.066
6	<i>Acanthogobius flavimanus</i>	yellowfin goby	3	0.065
	<i>Anchoa delicatissima</i>	slough anchovy	2	0.008
	<i>Atherinops affinis</i>	topsmelt	2	0.064
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.047
	<i>Cymatogaster aggregata</i>	shiner perch	20	0.402
	<i>Embiotoca jacksoni</i>	black perch	1	0.145
	<i>Engraulis mordax</i>	northern anchovy	1	0.014
	<i>Engraulis mordax larvae</i>	northern anchovy larvae	158	0.006
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.002
	<i>Myliobatis californica</i>	bat ray	3	0.581
	<i>Pleuronichthys guttulatus</i>	diamond turbot	1	0.219
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.446
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
	<i>Urobatis halleri</i>	round stingray	4	1.781
			200	3.781

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI18  
Date: May 1-2, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	No Fish			
3&4	<i>Atherinops affinis</i>	topsmelt	6	0.133
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.053
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.030
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	23	0.002
	<i>Fundulus parvipinnis</i>	California killifish	1	0.003
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.004
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.002
	<i>Porichthys myriaster</i>	specklefin midshipman	2	1.025
			37	1.252
6	<i>Acanthogobius flavimanus</i>	yellowfin goby	2	0.054
	<i>Atherinops affinis</i>	topsmelt	4	0.144
	Cichlidae	tilapia, unid.	1	0.028
	<i>Cymatogaster aggregata</i>	shiner perch	32	0.555
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	10	0.001
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.019
	<i>Porichthys myriaster</i>	specklefin midshipman	7	3.530
			57	4.331

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI19  
Date: May 8-9, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.015
	<i>Anchoa delicatissima</i>	slough anchovy	1	0.003
	<i>Atherinops affinis</i>	topsmelt	3	0.049
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.070
	<i>Engraulis mordax</i>	northern anchovy	25	0.028
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	5	0.001
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.003
	<i>Porichthys myriaster</i>	specklefin midshipman	4	1.857
	<i>Syngnathus leptorhynchus</i>	bay pipefish	2	0.002
	<i>Urobatis halleri</i>	round stingray	2	0.683
			47	2.711
6	<i>Acanthogobius flavimanus</i>	yellowfin goby	3	0.111
	<i>Anchoa compressa</i>	deepbody anchovy	1	0.011
	<i>Anchoa delicatissima</i>	slough anchovy	1	0.005
	<i>Atherinops affinis</i>	topsmelt	4	0.054
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.184
	<i>Cymatogaster aggregata</i>	shiner perch	46	0.504
	<i>Engraulis mordax</i>	northern anchovy	6	0.001
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	192	0.002
	<i>Myliobatis californica</i>	bat ray	1	0.272
	<i>Pleuronichthys guttulatus</i>	diamond turbot	3	0.128
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.180
	<i>Syngnathus leptorhynchus</i>	bay pipefish	3	0.010
			263	1.462

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI20  
Date: May 15-16, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.004
	<i>Atherinops affinis</i>	topsmelt	1	0.013
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.030
	<i>Engraulis mordax</i>	northern anchovy	1	0.005
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	11	0.001
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
	<i>Urobatis halleri</i>	round stingray	1	0.048
			17	0.102
6	<i>Acanthogobius flavimanus</i>	yellowfin goby	2	0.079
	<i>Anchoa compressa</i>	deepbody anchovy	1	0.023
	<i>Atherinops affinis</i>	topsmelt	1	0.022
	<i>Cymatogaster aggregata</i>	shiner perch	39	0.388
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	191	0.003
	<i>Gibbonsia elegans</i>	spotted kelpfish	1	0.012
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	5	0.118
	<i>Pleuronichthys guttulatus</i>	diamond turbot	2	0.008
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.011
			243	0.664

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI21  
Date: May 22-23, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4				
	<i>Acanthogobius flavimanus</i>	yellowfin goby	12	0.390
	<i>Anchoa compressa</i>	deepbody anchovy	24	0.315
	<i>Anchoa delicatissima</i>	slough anchovy	50	0.180
	<i>Atherinops affinis</i>	topsmelt	10,944	175.549
	<i>Cymatogaster aggregata</i>	shiner perch	2,965	13.456
	<i>Embiotoca jacksoni</i>	black perch	6	0.024
	<i>Engraulis mordax</i>	northern anchovy	4	0.031
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	17	0.032
	<i>Hypsoblennius gilberti</i>	rockpool blenny	3	0.066
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	741	8.187
	<i>Menticirrhus undulatus</i>	California corbina	4	1.896
	<i>Mustelus californicus</i>	grey smoothhound	1	0.064
	<i>Paraclinus integripinnis</i>	reef finspot	3	0.009
	<i>Paralichthys californicus</i>	California halibut	16	4.882
	<i>Pleuronichthys guttulatus</i>	diamond turbot	39	5.832
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.215
	<i>Seriphus politus</i>	queenfish	6	0.519
	<i>Syngnathus californiensis</i>	kelp pipefish	10	0.030
	<i>Syngnathus leptorhynchus</i>	bay pipefish	123	0.159
			14,969	211.836

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI22  
Date: June 2-3, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	3	0.010
	<i>Atherinops affinis</i>	topsmelt	3	0.062
	<i>Cymatogaster aggregata</i>	shiner perch	4	0.010
	<i>Engraulis mordax</i>	northern anchovy	2	0.006
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.003
	<i>Gobiesox rhesodon</i>	California clingfish	1	0.003
				15
5	<i>Atherinops affinis</i>	topsmelt	5	0.061
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.042
	<i>Engraulis mordax</i>	northern anchovy	2	0.001
	<i>Fundulus parvipinnis</i>	California killifish	1	0.004
	<i>Genyonemus lineatus</i>	white croaker	1	0.004
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.002
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.021
			14	0.135
6	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.031
	<i>Atherinops affinis</i>	topsmelt	1	0.019
	<i>Cymatogaster aggregata</i>	shiner perch	9	0.019
	<i>Engraulis mordax</i>	northern anchovy	2	0.001
	<i>Phanerodon furcatus</i>	white seaperch	1	0.006
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.685
				16



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI23  
Date: June 5-6, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.004
	<i>Atherinops affinis</i>	topsmelt	4	0.068
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.066
	<i>Cymatogaster aggregata</i>	shiner perch	13	0.026
	<i>Porichthys myriaster</i>	specklefin midshipman	3	0.209
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.002
			23	0.375
5	<i>Anchoa compressa</i>	deepbody anchovy	1	0.011
	<i>Atherinops affinis</i>	topsmelt	9	0.256
	<i>Cymatogaster aggregata</i>	shiner perch	20	0.088
	<i>Engraulis mordax</i>	northern anchovy	11	0.011
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	10	0.006
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	3	0.053
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.100
	<i>Sardinops sagax</i>	Pacific sardine	2	0.059
	<i>Syngnathus leptorhynchus</i>	bay pipefish	2	0.006
	<i>Trachurus symmetricus</i>	jack mackerel	1	0.184
		60	0.774	
6	<i>Anchoa compressa</i>	deepbody anchovy	1	0.013
	<i>Anchoa delicatissima</i>	slough anchovy	1	0.002
	<i>Atherinops affinis</i>	topsmelt	10	0.234
	<i>Cymatogaster aggregata</i>	shiner perch	26	0.120
	<i>Engraulis mordax</i>	northern anchovy	1	0.001
	<i>Pleuronichthys guttulatus</i>	diamond turbot	2	0.870
	<i>Trachurus symmetricus</i>	jack mackerel	1	0.106
			42	1.346

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI24  
Date: June 12-13, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.004
	<i>Atherinops affinis</i>	topsmelt	13	0.422
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.005
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	12	0.013
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.311
	<i>Syngnathus leptorhynchus</i>	bay pipefish	11	0.011
	<i>Urobatis halleri</i>	round stingray	1	0.207
			42	0.973

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI25  
Date: June 19-20, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.002
	<i>Atherinops affinis</i>	topsmelt	2	0.022
	<i>Engraulis mordax</i>	northern anchovy	1	0.001
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.002
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.003
	<i>Paralichthys californicus</i>	California halibut	1	0.002
	<i>Symphurus atricaudus</i>	California tonguefish	1	0.001
	<i>Urobatis halleri</i>	round stingray	1	0.130
			9	0.163
5	<i>Atherinops affinis</i>	topsmelt	8	0.110
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.018
	<i>Engraulis mordax</i>	northern anchovy	1	0.001
	<i>Genyonemus lineatus</i>	white croaker	1	0.001
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.003
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.036
	<i>Porichthys notatus</i>	plainfin midshipman	1	0.228
	<i>Sardinops sagax</i>	Pacific sardine	1	0.033
			16	0.430

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI26  
Date: June 26-27, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Atherinops affinis</i>	topsmelt	11	0.371
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	3	0.004
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	245	3.201
	<i>Pleuronichthys guttulatus</i>	diamond turbot	1	0.006
			260	3.582
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.005
	<i>Atherinops affinis</i>	topsmelt	4	0.069
	<i>Engraulis mordax</i>	northern anchovy	33	0.033
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	3	0.008
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.008
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	35	0.668
	<i>Umbrina roncadore</i>	yellowfin croaker	1	0.258
	<i>Urobatis halleri</i>	round stingray	1	0.362
			79	1.411
5	<i>Atherinops affinis</i>	topsmelt	2	0.070
	<i>Engraulis mordax</i>	northern anchovy	50	0.005
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	30	0.488
	<i>Seriphus politus</i>	queenfish	1	0.027
	<i>Trachurus symmetricus</i>	jack mackerel	5	0.255
	<i>Umbrina roncadore</i>	yellowfin croaker	1	0.265
	<i>Urobatis halleri</i>	round stingray	5	0.650
			94	1.760
6	<i>Anchoa compressa</i>	deepbody anchovy	1	0.012
	<i>Atherinops affinis</i>	topsmelt	6	0.059
	<i>Engraulis mordax</i>	northern anchovy	2	0.002
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	25	0.466
	<i>Myliobatis californica</i>	bat ray	1	0.290
			35	0.829

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI27  
Date: July 3-4, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Atherinops affinis</i>	topsmelt	4	0.037
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	3	0.046
	<i>Seriphus politus</i>	queenfish	1	0.001
			8	0.084
34	<i>Anchoa delicatissima</i>	slough anchovy	1	0.004
	<i>Atherinops affinis</i>	topsmelt	17	0.330
	<i>Cymatogaster aggregata</i>	shiner perch	5	0.017
	<i>Engraulis mordax</i> larvae	northern anchovy larvae	2	0.001
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.008
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.036
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.172
	<i>Seriphus politus</i>	queenfish	3	0.003
	<i>Urobatis halleri</i>	round stingray	1	0.086
	<i>Xenistius californiensis</i>	salema	1	0.036
			35	0.693
5	<i>Atherinops affinis</i>	topsmelt	11	0.213
	<i>Cymatogaster aggregata</i>	shiner perch	4	0.015
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	5	0.066
	<i>Leuresthes tenuis</i>	California grunion	1	0.023
	<i>Myliobatis californica</i>	bat ray	1	0.366
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.140
	<i>Seriphus politus</i>	queenfish	1	0.009
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.001
	<i>Trachurus symmetricus</i>	jack mackerel	1	0.061
	<i>Xenistius californiensis</i>	salema	1	0.042
	<i>Xystreureys liolepis</i>	fantail sole	1	0.188
			29	1.124
6	<i>Atherinops affinis</i>	topsmelt	2	0.042
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	1	0.020
	<i>Phanerodon furcatus</i>	white seaperch	1	0.089
	<i>Porichthys myriaster</i>	specklefin midshipman	3	0.457
	<i>Seriphus politus</i>	queenfish	1	0.011
			8	0.619

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI28  
Date: July 10-11, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Acanthogobius flavimanus</i>	yellowfin goby	1	0.024
	<i>Atherinops affinis</i>	topsmelt	31	0.720
	<i>Cymatogaster aggregata</i>	shiner perch	20	0.060
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.004
	<i>Heterostichus rostratus</i>	giant kelpfish	10	0.080
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	3	0.064
	<i>Myliobatis californica</i>	bat ray	1	0.123
	<i>Urobatis halleri</i>	round stingray	1	0.161
			68	1.236
5	<i>Atherinops affinis</i>	topsmelt	6	0.104
	<i>Cymatogaster aggregata</i>	shiner perch	7	0.010
	<i>Engraulis mordax</i>	northern anchovy	4	0.004
	<i>Fundulus parvipinnis</i>	California killifish	1	0.005
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.010
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	40	0.810
	<i>Myliobatis californica</i>	bat ray	1	0.124
	<i>Seriphus politus</i>	queenfish	3	0.003
	<i>Symphurus atricaudus</i>	California tonguefish	1	0.035
		64	1.105	
6	<i>Atherinops affinis</i>	topsmelt	4	0.031
	<i>Cymatogaster aggregata</i>	shiner perch	5	0.012
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.030
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	24	0.502
	<i>Porichthys myriaster</i>	specklefin midshipman	2	0.116
	<i>Seriphus politus</i>	queenfish	5	0.024
	<i>Urobatis halleri</i>	round stingray	1	0.143
			43	0.858

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI29

Date: July 17-18, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Anchoa compressa</i>	deepbody anchovy	1	0.017
	<i>Atherinops affinis</i>	topsmelt	4	0.086
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.005
	<i>Engraulis mordax</i>	northern anchovy	1	0.018
	<i>Genyonemus lineatus</i>	white croaker	2	0.299
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.021
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	5	0.113
	<i>Seriphus politus</i>	queenfish	4	0.004
	<i>Syngnathus leptorhynchus</i>	bay pipefish	2	0.004
			22	0.567
3&4	<i>Anchoa delicatissima</i>	slough anchovy	6	0.027
	<i>Atherinops affinis</i>	topsmelt	5	0.053
	<i>Cymatogaster aggregata</i>	shiner perch	11	0.026
	<i>Engraulis mordax</i>	northern anchovy	4	0.052
	<i>Fundulus parvipinnis</i>	California killifish	1	0.006
	<i>Genyonemus lineatus</i>	white croaker	1	0.001
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	2	0.011
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	9	0.174
	<i>Seriphus politus</i>	queenfish	23	0.024
	<i>Syngnathus leptorhynchus</i>	bay pipefish	4	0.010
	<i>Urobatis halleri</i>	round stingray	1	0.179
			67	0.563
5	<i>Anchoa compressa</i>	deepbody anchovy	1	0.012
	<i>Atherinops affinis</i>	topsmelt	7	0.123
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.008
	<i>Genyonemus lineatus</i>	white croaker	1	0.002
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	5	0.088
	<i>Seriphus politus</i>	queenfish	11	0.039
	<i>Strongylura exilis</i>	California needlefish	1	0.064
	<i>Trachurus symmetricus</i>	jack mackerel	1	0.058
	<i>Umbrina roncadior</i>	yellowfin croaker	1	0.256
			30	0.650
6	<i>Atherinops affinis</i>	topsmelt	4	0.073
	<i>Cymatogaster aggregata</i>	shiner perch	5	0.015
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	3	0.042
	<i>Porichthys myriaster</i>	specklefin midshipman	2	1.274
	<i>Seriphus politus</i>	queenfish	7	0.118
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.002
	<i>Trachurus symmetricus</i>	jack mackerel	1	0.174
			23	1.698

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI30  
Date: July 24-25, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Atherinops affinis</i>	topsmelt	76	1.222
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.011
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	31	0.293
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	31	0.514
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.014
	<i>Seriphus politus</i>	queenfish	15	0.015
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.003
	<i>Umbrina roncador</i>	yellowfin croaker	15	1.785
			172	3.857
3&4	<i>Anchoa delicatissima</i>	slough anchovy	2	0.007
	<i>Atherinops affinis</i>	topsmelt	9	0.090
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.310
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.006
	<i>Engraulis mordax</i>	northern anchovy	1	0.001
	<i>Genyonemus lineatus</i>	white croaker	2	0.004
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	5	0.034
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.032
	<i>Myliobatis californica</i>	bat ray	1	0.528
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.637
	<i>Sardinops sagax</i>	Pacific sardine	1	0.002
	<i>Seriphus politus</i>	queenfish	6	0.022
	<i>Syngnathus leptorhynchus</i>	bay pipefish	3	0.009
			36	1.682
5	<i>Atherinops affinis</i>	topsmelt	6	0.140
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	7	0.129
	<i>Sardinops sagax</i>	Pacific sardine	1	0.053
	<i>Urobatis halleri</i>	round stingray	1	0.342
			15	0.664
6	<i>Anchoa</i> sp.	anchovy, unid.	1	0.014
	<i>Atherinops affinis</i>	topsmelt	4	0.101
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.262
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.042
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	15	0.233
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.117
	<i>Seriphus politus</i>	queenfish	2	0.011
			27	0.780



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI31  
Date: July 31- August 1, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	2	0.009
	<i>Atherinops affinis</i>	topsmelt	1	0.006
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.005
	<i>Seriphus politus</i>	queenfish	2	0.003
	<i>Syngnathus</i> sp.	pipefish, unid.	3	0.004
			11	0.027
5	<i>Atherinops affinis</i>	topsmelt	2	0.068
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.005
	<i>Gibbonsia elegans</i>	spotted kelpfish	1	0.040
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.022
	<i>Sardinops sagax</i>	Pacific sardine	1	0.047
	<i>Seriphus politus</i>	queenfish	1	0.002
	<i>Strongylura exilis</i>	California needlefish	2	0.001
		9	0.185	
6	<i>Anchoa compressa</i>	deepbody anchovy	1	0.014
	<i>Atherinops affinis</i>	topsmelt	2	0.025
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.017
	<i>Engraulis mordax</i>	northern anchovy	2	0.001
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	2	0.026
	<i>Porichthys myriaster</i>	specklefin midshipman	2	1.119
	<i>Seriphus politus</i>	queenfish	2	0.004
	<i>Strongylura exilis</i>	California needlefish	1	0.200
	<i>Urobatis halleri</i>	round stingray	1	0.643
		16	2.049	

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI32  
Date: August 7-8, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	20	0.070
	<i>Cymatogaster aggregata</i>	shiner perch	220	1.110
	<i>Embiotoca jacksoni</i>	black perch	1	0.510
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	30	0.150
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	12	0.248
	<i>Syngnathus</i> sp.	pipefish, unid.	10	0.020
	<i>Umbrina roncador</i>	yellowfin croaker	1	0.145
			294	2.253
6	<i>Atherinops affinis</i>	topsmelt	4	0.057
	<i>Leuresthes tenuis</i>	California grunion	1	0.002
	<i>Myliobatis californica</i>	bat ray	2	0.659
	<i>Pleuronichthys verticalis</i>	hornyhead turbot	1	0.070
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.380
	<i>Sardinops sagax</i>	Pacific sardine	1	0.052
	<i>Seriphus politus</i>	queenfish	3	0.016
	<i>Sphyræna argentea</i>	Pacific barracuda	1	0.001
			14	1.237

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI33  
Date: August 14-15, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	1	0.002
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.006
	<i>Genyonemus lineatus</i>	white croaker	1	0.002
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.255
	<i>Seriphus politus</i>	queenfish	13	0.010
	<i>Sphyraena argentea</i>	Pacific barracuda	1	0.002
	<i>Syngnathus</i> sp.	pipefish, unid.	2	0.001
			20	0.278
6	<i>Anchoa delicatissima</i>	slough anchovy	1	0.003
	<i>Atherinops affinis</i>	topsmelt	3	0.033
	<i>Cymatogaster aggregata</i>	shiner perch	3	0.021
	<i>Hypsoblennius gentilis</i>	bay blenny	1	0.008
	<i>Myliobatis californica</i>	bat ray	1	0.249
	<i>Seriphus politus</i>	queenfish	3	0.063
	<i>Syngnathus leptorhynchus</i>	bay pipefish	1	0.002
	<i>Urobatis halleri</i>	round stingray	1	0.177
			14	0.556

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI34  
Date: August 21-22, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	1	0.003
	<i>Atherinops affinis</i>	topsmelt	4	0.041
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin	11	0.205
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.267
	<i>Seriphus politus</i>	queenfish	33	0.033
	<i>Syngnathus</i> sp.	pipefish, unid.	11	0.011
			61	0.560
5	<i>Atherinops affinis</i>	topsmelt	8	0.065
	<i>Atractoscion nobilis</i>	white seabass	1	0.004
	<i>Cheilotrema saturnum</i>	black croaker	1	0.006
	<i>Cymatogaster aggregata</i>	shiner perch	7	0.038
	<i>Engraulis mordax</i>	northern anchovy	1	0.001
	<i>Genyonemus lineatus</i>	white croaker	1	0.006
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.012
	<i>Leuresthes tenuis</i>	California grunion	1	0.009
	<i>Myliobatis californica</i>	bat ray	1	0.192
	<i>Sardinops sagax</i>	Pacific sardine	1	0.040
	<i>Seriphus politus</i>	queenfish	6	0.010
	<i>Sphyræna argentea</i>	Pacific barracuda	2	0.007
	<i>Strongylura exilis</i>	California needlefish	3	0.004
			34	0.394

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI35  
Date: August 28-29, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anchoa delicatissima</i>	slough anchovy	3	0.011
	<i>Atherinops affinis</i>	topsmelt	9	0.087
	<i>Engraulis mordax</i>	northern anchovy	5	0.008
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.012
	<i>Peprilus simillimus</i>	Pacific pompano	1	0.031
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.494
	<i>Sardinops sagax</i>	Pacific sardine	1	0.046
	<i>Sciaenidae unid</i>	croaker unid	1	1.900
	<i>Seriphus politus</i>	queenfish	23	0.027
	<i>Syngnathus sp.</i>	pipefish, unid.	1	0.001
			46	2.617
5	<i>Atherinops affinis</i>	topsmelt	7	0.064
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.264
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.009
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.017
	<i>Strongylura exilis</i>	California needlefish	1	0.002
			12	0.356

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI36  
Date: September 8-9, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	11	0.078
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.003
	<i>Sardinops sagax</i>	Pacific sardine	1	0.009
	<i>Seriphus politus</i>	queenfish	34	0.054
			47	0.144
5	<i>Atherinops affinis</i>	topsmelt	4	0.036
	<i>Engraulis mordax</i>	northern anchovy	3	0.005
	<i>Seriphus politus</i>	queenfish	14	0.100
	<i>Sphyraena argentea</i>	Pacific barracuda	1	0.002
			22	0.143
6	<i>Atherinops affinis</i>	topsmelt	5	0.109
	<i>Atractoscion nobilis</i>	white seabass	2	0.014
	<i>Seriphus politus</i>	queenfish	19	0.081
			26	0.204

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI37  
Date: September 11-12, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Seriphus politus</i>	queenfish	1	0.001
			1	0.001
6	<i>Atherinops affinis</i>	topsmelt	1	0.005
	<i>Atherinopsis californiensis</i>	jacksmelt	1	0.120
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.015
	<i>Embiotoca jacksoni</i>	black perch	1	0.176
	<i>Engraulis mordax</i>	northern anchovy	1	0.002
	<i>Genyonemus lineatus</i>	white croaker	1	0.006
	<i>Leuresthes tenuis</i>	California grunion	1	0.003
	<i>Seriphus politus</i>	queenfish	15	0.025
			23	0.352

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI38  
Date: September 18-19, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	4	0.019
	<i>Atractoscion nobilis</i>	white seabass	1	0.014
	<i>Cymatogaster aggregata</i>	shiner perch	10	0.066
	<i>Engraulis mordax</i>	northern anchovy	2	0.004
	<i>Seriphus politus</i>	queenfish	25	0.041
	<i>Strongylura exilis</i>	California needlefish	1	0.008
			43	0.152



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI39  
 Date: September 25-26, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	2	0.008
			2	0.008

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI40  
 Date: October 2-3, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	2	0.005
	<i>Myliobatis californica</i>	bat ray	1	0.343
			3	0.348

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI41  
 Date: October 9-10, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	3	0.036
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.014
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.002
	<i>Seriphus politus</i>	queenfish	7	0.014
	<i>Syngnathus</i> sp.	pipefish, unid.	1	0.002
	<i>Xenistius californiensis</i>	salema	1	0.002
			15	0.070

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI42  
 Date: October 16-17, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	3	0.011
			3	0.011

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI43  
Date: October 23-24, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	2	0.006
	<i>Cymatogaster aggregata</i>	shiner perch	2	0.017
	<i>Genyonemus lineatus</i>	white croaker	1	0.098
	<i>Gobiesox rhessodon</i>	California clingfish	1	0.002
	<i>Seriphus politus</i>	queenfish	1	0.001
	<i>Syngnathus</i> sp.	pipefish, unid.	1	0.001
	<i>Xenistius californiensis</i>	salema	1	0.002
			9	0.127

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI44  
 Date: October 30-31, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	7	0.021
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.003
	<i>Porichthys myriaster</i>	specklefin midshipman	1	0.002
	<i>Seriphus politus</i>	queenfish	1	0.001
	<i>Xenistius californiensis</i>	salema	1	0.001
			11	0.028

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI45  
 Date: November 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Syngnathus</i> sp.	pipefish, unid.	1	0.001
			1	0.001

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI46  
 Date: November 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Cymatogaster aggregata</i>	shiner perch	1	0.009
			1	0.009



Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI47  
 Date: November 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	3	0.019
	<i>Cymatogaster aggregata</i>	shiner perch	1	0.002
	<i>Seriphus politus</i>	queenfish	6	0.012
			10	0.033

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI48  
Date: November 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	278	3.073
	<i>Cymatogaster aggregata</i>	shiner perch	7	0.058
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.003
	<i>Heterostichus rostratus</i>	giant kelpfish	1	0.048
	<i>Seriphus politus</i>	queenfish	1	0.001
			288	3.183

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI49  
 Date: December 4-5, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Embiotoca jacksoni</i>	black perch	1	0.090
	<i>Pleuronichthys guttulatus</i>	diamond turbot	4	0.004
			5	0.094

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI50  
Date: December 11-12, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Myliobatis californica</i>	bat ray	1	0.344
	<i>Syngnathus</i> sp.	pipefish, unid.	10	0.020
			11	0.364

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI51  
Date: December 18-19, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Anisotremus davidsonii</i>	sargo	2	0.011
	<i>Atherinops affinis</i>	topsmelt	9	0.093
	<i>Cymatogaster aggregata</i>	shiner perch	6	0.070
	<i>Gillichthys mirabilis</i>	longjaw mudsucker	1	0.011
	<i>Seriphus politus</i>	queenfish	1	0.001
	<i>Xenistius californiensis</i>	salema	2	0.007
			21	0.193

Alamitos Generating Station – Fish Impingement Data

Survey: AGSFI52  
 Date: December 26-27, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Atherinops affinis</i>	topsmelt	1	0.039
	<i>Pleuronichthys guttulatus</i>	diamond turbot	1	0.522
			2	0.561

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI01  
Date: January 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	22	0.195
	<i>Neotrypaea gigas</i>	giant ghost shrimp	1	0.005
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.188
			24	0.388
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia</i> sp.	moon jelly unid	53	1.618
	<i>Bulla gouldiana</i>	California bubble	3	0.046
	<i>Crepidatella dorsata</i>	Pacific half-slippersnail	1	0.001
			57	1.665

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI02  
Date: January 9-10, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	14	0.118
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.009
			15	0.127
	<b><u>Other Macroinvertebrates</u></b>			
3&4	<i>Aurelia aurita</i>	moon jelly	18	0.380
	<i>Bulla gouldiana</i>	California bubble	14	0.234
			32	0.614



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI03  
Date: January 16-17, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	15	0.099
			15	0.099
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	31	0.383
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.007
	<i>Protothaca staminea</i>	Pacific littleneck	1	0.019
			33	0.409

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI04  
Date: January 23-24, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	27	0.244
	<i>Upogebia pugettensis</i>	blue mud shrimp	1	0.001
			28	0.245
	<b><u>Other Macroinvertebrates</u></b>			
3&4	<i>Aurelia aurita</i>	moon jelly	2	0.02
	<i>Aurelia</i> sp.	moon jelly, unid.	1	0.005
	<i>Kelletia kelletii</i>	Kellet's whelk	1	0.004
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.001
	<i>Protothaca staminea</i>	Pacific littleneck	1	0.004
			6	0.034

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI05  
Date: January 30-31, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Argopecten ventricosus</i>	Pacific calico scallop	5	0.027
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.043
			9	0.07
3&4	<i>Alpheus californiensis</i>	mudflat snapping shrimp	1	0.001
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	12	0.104
	<i>Neotrypaea gigas</i>	giant ghost shrimp	1	0.006
			14	0.111
<b>Other Macroinvertebrates</b>				
1&2	<i>Aurelia aurita</i>	moon jelly	77	1.490
	<i>Navanax inermis</i>	California aglaja	1	0.018
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.006
		79	1.514	
3&4	<i>Aurelia aurita</i>	moon jelly	137	1.591
	<i>Argopecten ventricosus</i>	Pacific calico scallop	8	0.046
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.005
		146	1.642	

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI06  
 Date: February 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Argopecten ventricosus</i>	Pacific calico scallop	3	0.028
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	6	0.060
			9	0.088
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	60	0.985
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.012
			61	0.997

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI07  
Date: February 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Argopecten ventricosus</i>	Pacific calico scallop	1	0.003
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	7	0.050
	<i>Loligo opalescens</i>	California market squid	1	0.032
			9	0.085
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	10	0.215
			10	0.215

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI08  
 Date: February 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Argopecten ventricosus</i>	Pacific calico scallop	1	0.006
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	7	0.049
			8	0.055
	<b><u>Other Macroinvertebrates</u></b>			
3&4	<i>Aurelia aurita</i>	moon jelly	8	0.261
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.004
			9	0.265

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI09  
Date: February 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	79	0.671
			79	0.671
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	91	5.925
	Gastropoda	gastropod, unid.	6	0.005
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.017
			98	5.947

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI10  
Date: March 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.029
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.072
			5	0.101
	<b>Other Macroinvertebrates</b>			
1&2	<i>Aurelia aurita</i>	moon jelly	98	2.706
	<i>Bulla gouldiana</i>	California bubble	2	0.023
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.024
			101	2.753



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSF11  
Date: March 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.035
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.016
			5	0.051
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	12	0.124
			12	0.124
<b><u>Other Macroinvertebrates</u></b>				
1&2	<i>Aurelia aurita</i>	moon jelly	6	0.485
	<i>Haminoea vesicula</i>	blister glassy bubble	1	0.002
			7	0.487
3&4	<i>Aurelia aurita</i>	moon jelly	26	1.368
	<i>Haminoea vesicula</i>	blister glassy bubble	4	0.006
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.026
			31	1.4

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI12  
 Date: March 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.011
			2	0.011
	<i>Aurelia aurita</i>	moon jelly	19	0.490
	<i>Haminoea vesicula</i>	blister glassy bubble	4	0.007
			23	0.497

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI13  
Date: March 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.021
	<i>Loligo opalescens</i>	California market squid	15	0.589
			18	0.610
	<i>Aurelia aurita</i>	moon jelly	19	1.065
	<i>Haminoea vesicula</i>	blister glassy bubble	2	0.003
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.009
			22	1.077

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI14  
Date: April 3-4, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	5	0.042
			5	0.042
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1	0.010
	<i>Loligo opalescens</i>	California market squid	1	0.038
			2	0.048
3&4	<b>Other Macroinvertebrates</b>			
	<i>Aurelia aurita</i>	moon jelly	61	5.142
	<i>Polyorchis penicillatus</i>	red jellyfish	43	0.158
			104	5.300
5	<i>Aplysia californica</i>	California seahare	3	3.893
	<i>Aurelia aurita</i>	moon jelly	93	2.562
	<i>Polyorchis penicillatus</i>	red jellyfish	14	0.047
			110	6.502

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI15  
Date: April 10-11, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Loligo opalescens</i>	California market squid	1	0.031
			1	0.031
3&4	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.030
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.022
			5	0.052
5	<i>Loligo opalescens</i>	California market squid	2	0.038
			2	0.038
<b>Other Macroinvertebrates</b>				
1&2	<i>Aurelia aurita</i>	moon jelly	13	1.271
	<i>Bulla gouldiana</i>	California bubble	3	0.078
	<i>Haminoea vesicula</i>	blister glassy bubble	1	0.002
	<i>Polyorchis penicillatus</i>	red jellyfish	4	0.015
			21	1.366
3&4	<i>Aurelia aurita</i>	moon jelly	52	7.011
	<i>Polyorchis penicillatus</i>	red jellyfish	9	0.024
			61	7.035
5	<i>Aurelia aurita</i>	moon jelly	49	3.962
	<i>Polyorchis penicillatus</i>	red jellyfish	3	0.013
			52	3.975

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI16  
Date: April 17-18, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.018
			2	0.018
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.015
			3	0.015
5	<i>Hemigrapsus nudus</i>	purple shore crab	1	0.009
			1	0.009
<b>Other Macroinvertebrates</b>				
1&2	<i>Aurelia aurita</i>	moon jelly	12	0.979
	<i>Polyorchis penicillatus</i>	red jellyfish	2	0.008
			14	0.987
3&4	<i>Aurelia aurita</i>	moon jelly	35	3.834
	<i>Bulla gouldiana</i>	California bubble	1	0.014
	<i>Polyorchis penicillatus</i>	red jellyfish	12	0.042
			48	3.890
5	<i>Aurelia aurita</i>	moon jelly	69	9.271
	<i>Navanax inermis</i>	California aglaja	1	0.040
	<i>Polyorchis penicillatus</i>	red jellyfish	9	0.067
			79	9.378

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI17  
Date: April 24-25, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	8	0.047
			8	0.047
6	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.030
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1	0.008
	<i>Neotrypaea gigas</i>	giant ghost shrimp	1	0.003
	<i>Portunus xantusii</i>	Xantus swimming crab	2	0.047
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			6	0.089
<b>Other Macroinvertebrates</b>				
1&2	<i>Aurelia aurita</i>	moon jelly	35	3.240
	<i>Polyorchis penicillatus</i>	red jellyfish	15	0.034
			50	3.274
6	<i>Aplysia californica</i>	California seahare	1	1.050
	<i>Aplysia</i> sp.	seahare, unid.	1	1.500
	<i>Aurelia aurita</i>	moon jelly	81	8.019
	<i>Polyorchis penicillatus</i>	red jellyfish	12	0.041
			95	10.61

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI18  
Date: May 1-2, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	No Shellfish			
3&4	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.026
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	6	0.049
			7	0.075
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.019
	<i>Loligo opalescens</i>	California market squid	8	0.275
			10	0.294
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	43	3.876
	<i>Haminoea</i> sp.	glassy bubble, unid.	1	0.001
	<i>Polyorchis penicillatus</i>	red jellyfish	8	0.038
			52	3.915
6	<i>Aplysia</i> sp.	seahare, unid.	1	2.050
	<i>Aurelia aurita</i>	moon jelly	9	1.440
	<i>Polyorchis penicillatus</i>	red jellyfish	1	0.023
			11	3.513



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI19  
 Date: May 8-9, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Crangon nigromaculata</i>	blackspotted bay shrimp	1	0.001
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.029
			4	0.030
6	No Shellfish			
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	23	1.455
			23	1.455
6	<i>Aplysia californica</i>	California seahare	1	1.650
	<i>Aurelia aurita</i>	moon jelly	23	2.198
			24	3.848

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI20  
Date: May 15-16, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	9	0.066
			9	0.066
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.025
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			4	0.026
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	47	4.177
			47	4.177
6	<i>Aurelia aurita</i>	moon jelly	60	7.567
	<i>Dendronotus frondosus</i>	leafy dendronotid	3	0.001
			63	7.568

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI21  
 Date: May 22-23, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	50	0.404
			50	0.404
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	524	25.62
			524	25.62

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI22  
Date: June 2-3, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	7	0.042
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.002
			9	0.044
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1	0.006
	<i>Loligo opalescens</i>	California market squid	1	0.021
			2	0.027
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	5	0.033
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.015
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.002
			8	0.050
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	10	0.689
	<i>Bulla gouldiana</i>	California bubble	2	0.040
			12	0.729
5	<i>Aurelia aurita</i>	moon jelly	4	0.327
			4	0.327
6	<i>Aurelia aurita</i>	moon jelly	8	0.746
	<i>Hermisenda crassicornis</i>	hermissenda	1	0.001
			9	0.747

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI23  
Date: June 5-6, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.05
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	11	0.038
	<i>Loligo opalescens</i>	California market squid	4	0.075
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.026
			17	0.189
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.010
	<i>Loligo opalescens</i>	California market squid	6	0.154
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	4	0.004
			12	0.168
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.012
	<i>Loligo opalescens</i>	California market squid	2	0.047
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	6	0.003
			11	0.062
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	11	0.560
			11	0.560
5	<i>Aurelia aurita</i>	moon jelly	8	0.402
	<i>Haminoea</i> sp.	glassy bubble, unid.	1	0.001
	<i>Navanax inermis</i>	California aglaja	1	0.033
			10	0.436
6	<i>Aurelia aurita</i>	moon jelly	3	0.064
			3	0.064

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI24  
Date: June 12-13, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	176	0.135
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	3	0.007
			179	0.142
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	232	16.999
	<i>Bulla gouldiana</i>	California bubble	1	0.024
	<i>Navanax inermis</i>	California aglaja	2	0.005
			235	17.028

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI25  
Date: June 19-20, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	24	0.070
	<i>Loligo opalescens</i>	California market squid	3	0.081
			27	0.151
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	14	0.028
	<i>Loligo opalescens</i>	California market squid	2	0.043
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.023
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	3	0.003
			20	0.097
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	28	2.188
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.011
	<i>Navanax inermis</i>	California aglaja	6	0.014
			35	2.213
5	<i>Aurelia aurita</i>	moon jelly	18	0.838
	<i>Navanax inermis</i>	California aglaja	2	0.039
			20	0.877

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI26  
Date: June 26-27, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	275	0.289
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	14	0.006
			289	0.295
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	64	0.089
	<i>Loligo opalescens</i>	California market squid	33	1.233
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			98	1.323
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	20	0.076
	<i>Pugettia producta</i>	northern kelp crab	1	0.006
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.003
			23	0.085
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	9	0.028
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	6	0.008
			15	0.036
	<b>Other Macroinvertebrates</b>			
1&2	<i>Aplysia californica</i>	California seahare	243	70.665
	<i>Aurelia aurita</i>	moon jelly	41	1.796
	<i>Leptopecten</i> sp.	scallop, unid.	10	0.100
	<i>Navanax inermis</i>	California aglaja	12	0.225
			306	72.786
3&4	<i>Aplysia californica</i>	California seahare	3	0.926
	<i>Aurelia aurita</i>	moon jelly	609	48.91
	<i>Navanax inermis</i>	California aglaja	1	0.051
			613	49.887
5	<i>Aplysia californica</i>	California seahare	1	0.170
	<i>Aurelia aurita</i>	moon jelly	53	2.725
	<i>Bulla gouldiana</i>	California bubble	1	0.035
	<i>Navanax inermis</i>	California aglaja	2	0.027
			57	2.957
6	<i>Aplysia californica</i>	California seahare	2	0.494
	<i>Aurelia aurita</i>	moon jelly	80	3.830
	<i>Navanax inermis</i>	California aglaja	4	0.058
			86	4.382



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI27  
Date: July 3-4, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	10	0.022
	<i>Loligo opalescens</i>	California market squid	1	0.032
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	3	0.003
			14	0.057
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	12	0.030
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.002
			13	0.032
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1	0.001
	<i>Loligo opalescens</i>	California market squid	10	0.380
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.003
			13	0.384
6	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	2	0.135
			2	0.135
	<b>Other Macroinvertebrates</b>			
1&2	<i>Aplysia californica</i>	California seahare	5	2.044
	<i>Aurelia aurita</i>	moon jelly	4	0.260
	<i>Navanax inermis</i>	California aglaja	4	0.023
			13	2.327
3&4	<i>Aplysia californica</i>	California seahare	6	3.678
	<i>Aurelia aurita</i>	moon jelly	8	0.367
	<i>Navanax inermis</i>	California aglaja	2	0.014
			16	4.059
5	<i>Aplysia californica</i>	California seahare	1	0.066
	<i>Aurelia aurita</i>	moon jelly	4	0.214
	<i>Navanax inermis</i>	California aglaja	1	0.016
			6	0.296
6	<i>Aplysia californica</i>	California seahare	3	1.400
	<i>Aurelia aurita</i>	moon jelly	2	0.047
			5	1.447

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI28  
Date: July 10-11, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	65	0.108
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.003
			66	0.111
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	16	0.034
			16	0.034
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.008
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.002
			4	0.010
<b>Other Macroinvertebrates</b>				
3&4	<i>Aplysia californica</i>	California seahare	1	0.424
	<i>Aurelia aurita</i>	moon jelly	208	16.166
	<i>Navanax inermis</i>	California aglaja	2	0.010
			211	16.600
5	<i>Aurelia aurita</i>	moon jelly	237	11.480
	<i>Navanax inermis</i>	California aglaja	3	0.012
			240	11.492
6	<i>Aurelia aurita</i>	moon jelly	117	5.046
	<i>Navanax inermis</i>	California aglaja	2	0.037
			119	5.083

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI29  
Date: July 17-18, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	16	0.028
			16	0.028
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	45	0.099
	<i>Upogebia pugettensis</i>	blue mud shrimp	1	0.003
			46	0.102
5	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.062
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	9	0.017
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.201
			11	0.280
6	<i>Loligo opalescens</i>	California market squid	2	0.035
			2	0.035
<b>Other Macroinvertebrates</b>				
1&2	<i>Aplysia californica</i>	California seahare	2	0.862
	<i>Aurelia aurita</i>	moon jelly	2	0.086
	<i>Diaulula sandiegensis</i>	ring-spotted dorid	1	0.008
	<i>Navanax inermis</i>	California aglaja	1	0.031
			6	0.987
3&4	<i>Aurelia aurita</i>	moon jelly	6	0.216
	Pycnogonida	sea spider, unid.	2	0.001
			8	0.217
5	<i>Aplysia californica</i>	California seahare	1	0.075
	<i>Aurelia aurita</i>	moon jelly	3	0.234
	<i>Navanax inermis</i>	California aglaja	1	0.015
			5	0.324
6	<i>Aplysia californica</i>	California seahare	2	0.119
	<i>Navanax inermis</i>	California aglaja	2	0.013
			4	0.132

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI30  
Date: July 24-25, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
1&2	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1,023	2.144
	<i>Pugettia producta</i>	northern kelp crab	1	0.001
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.005
			1,025	2.150
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	146	0.325
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.003
			147	0.328
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	11	0.025
			11	0.025
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.005
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			4	0.006
<b>Other Macroinvertebrates</b>				
1&2	<i>Aplysia californica</i>	California seahare	2	0.729
	<i>Aurelia aurita</i>	moon jelly	544	35.803
	<i>Leptopecten</i> sp.	scallop, unid.	30	0.015
			576	36.547
3&4	<i>Aurelia aurita</i>	moon jelly	13	0.698
	<i>Navanax inermis</i>	California aglaja	2	0.013
			15	0.711
5	<i>Aurelia aurita</i>	moon jelly	42	1.991
	<i>Navanax inermis</i>	California aglaja	1	0.008
			43	1.999
6	<i>Aplysia californica</i>	California seahare	1	0.655
	<i>Aurelia aurita</i>	moon jelly	54	3.082
	<i>Diaulula sandiegensis</i>	ring-spotted dorid	1	0.004
	<i>Navanax inermis</i>	California aglaja	2	0.010
			58	3.751

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI31  
Date: July 31- August 1, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	37	0.101
			37	0.101
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	6	0.021
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.004
			8	0.025
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.009
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			5	0.010
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	9	0.339
			9	0.339
5	<i>Aplysia californica</i>	California seahare	1	0.700
	<i>Aurelia aurita</i>	moon jelly	4	0.083
	<i>Navanax inermis</i>	California aglaja	2	0.019
			7	0.802
6	<i>Aplysia californica</i>	California seahare	1	0.472
	<i>Aurelia aurita</i>	moon jelly	2	0.130
	<i>Navanax inermis</i>	California aglaja	1	0.009
	<i>Pandalus tridens</i>	yellowleg pandalid	1	0.068
			5	0.679

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI32  
Date: August 7-8, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1,659	2.946
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	11	0.013
			1,670	2.959
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.013
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	2	0.264
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	4	0.006
			10	0.283
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aplysia californica</i>	California seahare	1	0.362
	<i>Aurelia aurita</i>	moon jelly	364	14.501
			365	14.863
6	<i>Aurelia aurita</i>	moon jelly	199	10.608
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.001
	<i>Navanax inermis</i>	California aglaja	3	0.011
			203	10.620

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI33  
Date: August 14-15, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	36	0.094
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.324
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.004
			38	0.422
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	4	0.009
	<i>Loligo opalescens</i>	California market squid	1	0.022
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.181
			6	0.212
<b>Other Macroinvertebrates</b>				
	<i>Aurelia aurita</i>	moon jelly	8	0.742
			8	0.742
	<i>Aplysia californica</i>	California seahare	2	1.471
	<i>Aurelia aurita</i>	moon jelly	7	0.430
	<i>Hermisenda crassicornis</i>	hermissenda	1	0.001
	<i>Navanax inermis</i>	California aglaja	1	0.004
			11	1.906

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI34  
Date: August 21-22, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	402	0.826
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.563
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	11	0.011
			414	1.400
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	78	0.174
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.154
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.020
	<i>Portunus xantusii</i>	Xantus swimming crab	2	0.005
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	3	0.003
			85	0.356
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	7	0.287
	<i>Navanax inermis</i>	California aglaja	10	0.020
			17	0.307
5	<i>Aurelia aurita</i>	moon jelly	11	0.355
	<i>Navanax inermis</i>	California aglaja	7	0.025
	<i>Pisaster</i> sp.	sea star, unid.	1	0.002
			19	0.382



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI35  
Date: August 28-29, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.076
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	98	0.214
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	2	0.491
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.007
			102	0.788
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	31	0.087
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	2	0.551
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			34	0.639
<b>Other Macroinvertebrates</b>				
3&4	<i>Aplysia californica</i>	California seahare	2	0.526
	<i>Aurelia aurita</i>	moon jelly	16	1.048
			18	1.574
5	<i>Aurelia aurita</i>	moon jelly	14	0.709
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.001
			15	0.710

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI36  
Date: September 8-9, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	141	0.387
			141	0.387
5	<i>Hemigrapsus oregonensis</i>	yellow shore crab	14	0.026
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.355
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	2	0.001
			17	0.382
6	<i>Hemigrapsus oregonensis</i>	yellow shore crab	5	0.013
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.433
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	6	0.007
			12	0.453
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aplysia californica</i>	California seahare	1	0.319
	<i>Aurelia aurita</i>	moon jelly	5	1.158
	<i>Navanax inermis</i>	California aglaja	1	0.006
			7	1.483
5	<i>Aurelia aurita</i>	moon jelly	7	0.724
	<i>Diaulula sandiegensis</i>	ring-spotted dorid	2	0.013
			9	0.737
6	<i>Aplysia californica</i>	California seahare	4	1.688
	<i>Aurelia aurita</i>	moon jelly	5	0.279
			9	1.967

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI37  
Date: September 11-12, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	5	0.008
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.216
			6	0.224
6	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.031
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	7	0.025
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.005
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			10	0.062
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	7	0.511
			7	0.511
6	<i>Aplysia californica</i>	California seahare	1	0.186
	<i>Aurelia aurita</i>	moon jelly	25	2.139
			26	2.325

**Alamitos Generating Station – Shellfish Impingement Data**

**Survey:** AGSFI38  
**Date:** September 18-19, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	71	0.135
			71	0.135
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	15	1.657
			15	1.657

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI39  
 Date: September 25-26, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	33	0.052
			33	0.052
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	8	1.322
			8	1.322

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI40  
Date: October 2-3, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	88	0.106
	<i>Pugettia producta</i>	northern kelp crab	2	0.002
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	4	0.003
			94	0.111
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	8	1.385
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.001
	<i>Navanax inermis</i>	California aglaja	3	0.023
			12	1.409

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI41  
Date: October 9-10, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Cancer antennarius</i>	Pacific rock crab	1	0.712
	<i>Hemigrapsus oregonensis</i>	yellow shore crab	29	0.034
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.014
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.004
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			33	0.765
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	15	3.166
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.001
	<i>Navanax inermis</i>	California aglaja	1	0.020
			17	3.187

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI42  
 Date: October 16-17, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	9	0.018
			9	0.018
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	4	0.700
	<i>Navanax inermis</i>	California aglaja	1	0.020
			5	0.720



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI43  
Date: October 23-24, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	20	0.027
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.002
	<i>Pachygrapsus crassipes</i>	striped shore crab	1	0.013
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			23	0.043
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	10	2.798
	<i>Leptopecten</i> sp.	scallop, unid.	2	0.002
	<i>Strongylocentrotus purpuratus</i>	purple sea urchin	1	0.008
			13	2.808

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI44  
 Date: October 30-31, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	7	0.007
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			8	0.008
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	4	0.414
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.001
			5	0.415

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI45  
 Date: November 6-7, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	22	0.027
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.002
			23	0.029
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	17	4.139
	<i>Bulla gouldiana</i>	California bubble	1	0.002
	<i>Leptopecten</i> sp.	scallop, unid.	4	0.005
			22	4.146

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI46  
 Date: November 13-14, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.002
	<i>Heptacarpus palpator</i>	intertidal coastal shrimp	1	0.001
			3	0.003
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	10	2.524
	<i>Leptopecten</i> sp.	scallop, unid.	1	0.002
			11	2.526

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI47  
Date: November 20-21, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	3	0.004
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	3	0.003
			6	0.007
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aplysia californica</i>	California seahare	1	0.998
	<i>Aurelia aurita</i>	moon jelly	28	4.375
	Pycnogonida	sea spider, unid.	7	0.001
			36	5.374

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI48  
Date: November 27-28, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.013
	<i>Pugettia producta</i>	northern kelp crab	1	0.002
			2	0.015
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aplysia californica</i>	California seahare	1	1.174
	<i>Aurelia aurita</i>	moon jelly	12	1.160
	<i>Leptopecten</i> sp.	scallop, unid.	5	0.010
	<i>Navanax inermis</i>	California aglaja	1	0.040
			19	2.384

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI49  
 Date: December 4-5, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	2	0.002
			2	0.002
<b>Other Macroinvertebrates</b>				
3&4	<i>Aurelia aurita</i>	moon jelly	10	1.641
	<i>Navanax inermis</i>	California aglaja	1	0.052
			11	1.693

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI50  
Date: December 11-12, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Hemigrapsus oregonensis</i>	yellow shore crab	1	0.002
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.175
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.007
			3	0.184
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	4	0.489
			4	0.489



Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI51  
 Date: December 18-19, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Cancer anthonyi</i>	yellow crab	2	0.002
	<i>Portunus xantusii</i>	Xantus swimming crab	1	0.009
	<i>Pyromaia tuberculata</i>	tuberculate pear crab	1	0.001
			4	0.012
	<b>Other Macroinvertebrates</b>			
3&4	<i>Aurelia aurita</i>	moon jelly	48	7.756
			48	7.756

Alamitos Generating Station – Shellfish Impingement Data

Survey: AGSFI52  
Date: December 26-27, 2006

Unit	Taxon	Common Name	Survey Totals	
			Abundance	Biomass (kg)
3&4	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp	1	0.009
	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus	1	0.158
			2	0.167
	<b>Other Macroinvertebrates</b>			
3&4	<i>Archidoris montereyensis</i>	Monterey sea-lemon	1	0.059
	<i>Aurelia aurita</i>	moon jelly	6	0.470
			7	0.529