

*Alamitos Generating Station*

## **Appendix F**

---

### **Master Species Lists**

F1. Entrainment Master Species List

F2. Impingement Master Species List – Invertebrates

F3. Impingement Master Species List - Fishes



## Appendix F1

### Master Species List of Target Invertebrates and Fishes Identified in the Entrainment Samples

Taxa Name	Taxon	Common Name
<b>Cephalopoda</b>	<i>Loligo opalescens</i>	market squid
<b>Decapoda</b>	unidentified crab (megalops)	unid. crab megalops
<b>Palinuridae</b>	<i>Panulirus interruptus</i>	California spiny lobster
	<i>Panulirus interruptus</i> (phyllosome)	California spiny lobster (larval)
<b>Paguridae</b>	Paguridae unid. (megalops)	hermit crab megalops
<b>Porcellanidae</b>	<i>Pachycheles rudis</i> (megalops)	thickclaw porcelain crab megalops
	<i>Pachycheles</i> spp. (megalops)	porcelain crabs megalops
	<i>Petrolisthes</i> spp. (megalops)	porcelain crab megalops
	Porcellanidae unid. (megalops)	porcelain crab megalops
<b>Hippoidea</b>	Hippoidea (megalops)	mole crab megalops
<b>Diogenidae</b>	Diogenidae (megalops)	left-handed hermit crabs megalops
<b>Brachyura</b>	Brachyura unid. (megalops)	unidentified crab megalops
<b>Majidae</b>	<i>Pugettia</i> spp. (megalops)	kelp crabs megalops
<b>Cancridae</b>	<i>Cancer antennarius</i> (megalops)	brown rock crab megalops
	<i>Cancer anthonyi</i> (megalops)	yellow crab megalops
	<i>Cancer gracilis</i> (megalops)	slender crab megalops
	<i>Cancer</i> spp. (megalops)	cancer crabs megalops
<b>Xanthidae</b>	<i>Lophopanopeus</i> spp. (megalops)	black-clawed crab megalops
<b>Pinnotheridae</b>	<i>Pinnixa</i> spp. (megalops)	pea crabs megalops
	<i>Pinnotheres</i> spp. (megalops)	pea crab megalops
<b>Grapsidae</b>	Grapsidae unid. (megalops)	shore crab megalops
	<i>Hemigrapsus oregonensis</i>	yellow shore crab
	<i>Hemigrapsus oregonensis</i> (megalops)	yellow shore crab megalops
	<i>Hemigrapsus</i> spp. (megalops)	shore crab megalops
	<i>Pachygrapsus crassipes</i>	striped shore crab
	<i>Pachygrapsus crassipes</i> (megalops)	striped shore crab megalops
<b>Actinopterygii</b>	fish eggs unid.	unidentified fish eggs
	larvae, unidentified yolksac	unidentified yolksac larvae
	larval fish - damaged	unidentified larval fishes
	larval fish fragment	unidentified larval fishes
	larval/post-larval fish unid.	larval fishes
	unidentified fish, damaged	unidentified damaged fish
<b>Acanthopterygii</b>	Sciaenidae / Paralichthyidae / Labridae (eggs)	fish eggs
<b>Clupeidae</b>	<i>Sardinops sagax</i>	Pacific sardine
<b>Engraulidae</b>	Engraulidae unid.	anchovies
	Engraulidae unid. (eggs)	anchovy eggs

(table continued)

Appendix F1 (continued). Master Species List of organisms identified in the entrainment samples.

Taxa Name	Taxon	Common Name
<b>Engraulidae</b>	<i>Engraulis mordax</i>	northern anchovy
<b>Bathylagidae</b>	<i>Bathylagus ochotensis</i>	popeye blacksmelt
<b>Myctophidae</b>	Myctophidae unid.	lanternfishes
	<i>Stenobranchius leucopsarus</i>	northern lampfish
	<i>Triphoturus mexicanus</i>	Mexican lampfish
<b>Gobiesocidae</b>	Gobiesocidae unid.	clingfishes
	<i>Gobiesox</i> spp.	clingfishes
<b>Merlucciidae</b>	<i>Merluccius productus</i>	Pacific hake
<b>Ophidiidae</b>	Ophidiidae unid.	cusks-eels
	<i>Ophidion scrippsae</i>	basketweave cusk-eel
<b>Atherinopsidae</b>	<i>Atherinops affinis</i>	topsmelt
	<i>Atherinops affinis</i> (eggs)	topsmelt eggs
	Atherinopsidae unid.	silversides
	Atherinopsidae unid. (eggs)	silverside eggs
	<i>Atherinopsis californiensis</i>	jacksmelt
<b>Syngnathidae</b>	<i>Leuresthes tenuis</i>	California grunion
	Syngnathidae unid.	pipefishes
	<i>Syngnathus</i> spp.	pipefishes
<b>Scorpaenidae</b>	Scorpaenidae unid.	scorpionfishes
	<i>Sebastes</i> spp.	rockfishes
<b>Hexagrammidae</b>	Hexagrammidae unid.	greenlings
	<i>Oxylebius pictus</i>	painted greenling
	<i>Zaniolepis frenata</i>	shortspine combfish
<b>Cottidae</b>	<i>Artedius lateralis</i>	smoothhead sculpin
	<i>Clinocottus analis</i>	wooly sculpin
	<i>Clinocottus</i> spp.	sculpins
	Cottidae unid.	sculpins
	<i>Icelinus quadriseriatus</i>	yellowchin sculpin
	<i>Leptocottus armatus</i>	Pacific staghorn sculpin
	<i>Ruscarius creaseri</i>	roughcheek sculpin
	<i>Scorpaenichthys marmoratus</i>	cabezon
<b>Serranidae</b>	<i>Paralabrax</i> spp.	sand bass
<b>Haemulidae</b>	Haemulidae unid.	grunts
	<i>Xenistius californiensis</i>	salema
<b>Sciaenidae</b>	<i>Cheilotrema saturnum</i>	black croaker
	<i>Genyonemus lineatus</i>	white croaker
	<i>Genyonemus lineatus</i> (eggs)	white croaker eggs
	<i>Menticirrhus undulatus</i>	California corbina
	<i>Roncador stearnsii</i>	spotfin croaker
	Sciaenidae unid.	croakers
	Sciaenidae unid. (eggs)	croaker eggs
<i>Seriphus politus</i>	queenfish	

(table continued)

**Appendix F1** (continued). Master Species List of organisms identified in the entrainment samples.

Taxa Name	Taxon	Common Name
<b>Sciaenidae</b>	<i>Umbrina roncador</i>	yellowfin croaker
<b>Kyphosidae</b>	<i>Girella nigricans</i>	opaleye
<b>Pomacentridae</b>	<i>Hypsypops rubicundus</i>	garibaldi
	Pomacentridae unid.	damsel fishes
<b>Sphyraenidae</b>	<i>Sphyraena argentea</i>	Pacific barracuda
<b>Labridae</b>	<i>Halichoeres semicinctus</i>	rock wrasse
	<i>Oxyjulis californica</i>	senorita
	<i>Semicossyphus pulcher</i>	California sheephead
<b>Blennioidei</b>	Blennioidei unid.	blennies
<b>Blenniidae</b>	<i>Hypsoblennius jenkinsi</i>	mussel blenny
	<i>Hypsoblennius</i> spp.	combtooth blennies
<b>Clinidae</b>	Clinidae unid.	kelp blennies
	<i>Gibbonsia</i> spp.	clinid kelpfishes
	<i>Heterostichus rostratus</i>	giant kelpfish
<b>Chaenopsidae</b>	Chaenopsidae unid.	tube blennies
	<i>Neoclinus</i> spp.	fringeheads
<b>Labrisomidae</b>	Labrisomidae unid.	labrisomid blennies
	<i>Paraclinus</i> spp.	clinid
<b>Gobiidae</b>	<i>Acanthogobius flavimanus</i>	yellowfin goby
	<i>Clevelandia ios</i>	arrow goby
	<i>Gillichthys mirabilis</i>	longjaw mudsucker
	Gobiidae unid.	gobies
	<i>Ilypnus gilberti</i>	cheekspot goby
	<i>Lepidogobius lepidus</i>	bay goby
	<i>Quietula y-cauda</i>	shadow goby
	<i>Rhinogobiops nicholsii</i>	blackeye goby
	<i>Tridentiger trigonocephalus</i>	chameleon goby
	<i>Typhlogobius californiensis</i>	blind goby
<b>Stromateidae</b>	<i>Peprilus simillimus</i>	Pacific butterfish
<b>Pleuronectiformes</b>	Pleuronectiformes unid.	flatfishes
<b>Pleuronectidae</b>	<i>Parophrys vetulus</i>	English sole
	Pleuronectidae unid.	righteye flounders
	<i>Pleuronichthys guttulatus</i>	diamond turbot
	<i>Pleuronichthys ritteri</i>	spotted turbot
	<i>Pleuronichthys</i> spp.	turbots
	<i>Pleuronichthys</i> spp. (eggs)	turbot eggs
	<i>Pleuronichthys verticalis</i>	hornyhead turbot

(table continued)

Appendix F1 (continued). Master Species List of organisms identified in the entrainment samples.

Taxa Name	Taxon	Common Name
<b>Paralichthyidae</b>	<i>Citharichthys sordidus</i>	Pacific sanddab
	<i>Citharichthys</i> spp.	sanddabs
	<i>Citharichthys</i> spp. (eggs)	sanddab eggs
	<i>Citharichthys stigmaeus</i>	speckled sanddab
	Paralichthyidae unid.	sand flounders
	Paralichthyidae unid. (eggs)	sand flounder eggs
	<i>Paralichthys californicus</i>	California halibut
<i>Paralichthys californicus</i> (eggs)	California halibut eggs	
<b>Cynoglossidae</b>	Cynoglossidae unid.	tongue soles
	<i>Symphurus atricaudus</i>	California tonguefish

## Appendix F2

### Master Species List of Invertebrates Identified in Impingement Samples

Family	Taxon	Common Name
<b>Cnidaria</b>	Cnidaria	sea jelly, unid.
<b>Polyorchidae</b>	<i>Polyorchis penicillatus</i>	red jellyfish
<b>Ulmaridae</b>	<i>Aurelia aurita</i>	moon jelly
	<i>Aurelia</i> sp.	moon jelly, unid.
<b>Gastropoda</b>	Gastropoda	gastropod, unid.
<b>Calyptraeidae</b>	<i>Crepipatella dorsata</i>	Pacific half-slippersnail
<b>Buccinidae</b>	<i>Kelletia kelletii</i>	Kellet's whelk
<b>Aplysiidae</b>	<i>Aplysia californica</i>	California seahare
	<i>Aplysia</i> spp.	seahare, unid.
<b>Bullidae</b>	<i>Bulla gouldiana</i>	California bubble
<b>Haminoeidae</b>	<i>Haminoea</i> spp.	glassy bubble, unid.
	<i>Haminoea vesicula</i>	blister glassy bubble
<b>Aglajidae</b>	<i>Navanax inermis</i>	California aglaja
<b>Archidorididae</b>	<i>Archidoris montereyensis</i>	Monterey sea-lemon
<b>Discodorididae</b>	<i>Diaulula sandiegensis</i>	ring-spotted dorid
<b>Dendronotidae</b>	<i>Dendronotus frondosus</i>	leafy dendronotid
<b>Facelinidae</b>	<i>Hermisenda crassicornis</i>	hermissenda
<b>Pectinidae</b>	<i>Argopecten ventricosus</i>	Pacific calico scallop
	<i>Leptopecten</i> spp.	scallop, unid.
<b>Veneridae</b>	<i>Protothaca staminea</i>	Pacific littleneck
<b>Loliginidae</b>	<i>Loligo opalescens</i>	California market squid
<b>Octopodidae</b>	<i>Octopus bimaculatus/bimaculoides</i>	California two-spot octopus
<b>Pycnogonida</b>	<i>Pycnogonida</i>	sea spider, unid.
<b>Penaeidae</b>	<i>Farfantepenaeus californiensis</i>	yellowleg shrimp
<b>Alpheidae</b>	<i>Alpheus californiensis</i>	mudflat snapping shrimp
<b>Pandalidae</b>	<i>Pandalus tridens</i>	yellowleg pandalid
<b>Hippolytidae</b>	<i>Heptacarpus palpator</i>	intertidal coastal shrimp
<b>Crangonidae</b>	<i>Crangon nigromaculata</i>	blackspotted bay shrimp
	<i>Neotrypaea gigas</i>	giant ghost shrimp
<b>Upogebiidae</b>	<i>Upogebia pugettensis</i>	blue mud shrimp
<b>Majidae</b>	<i>Pyromaia tuberculata</i>	tuberculate pear crab
<b>Epialtidae</b>	<i>Pugettia producta</i>	northern kelp crab
<b>Cancriidae</b>	<i>Cancer antennarius</i>	Pacific rock crab
	<i>Cancer anthonyi</i>	yellow crab
<b>Portunidae</b>	<i>Portunus xantusii</i>	Xantus swimming crab

(table continued)

**Appendix F2** (continued). Master Species List of invertebrates identified in the impingement samples.

<b>Family</b>	<b>Taxon</b>	<b>Common Name</b>
<b>Grapsidae</b>	<i>Hemigrapsus nudus</i>	purple shore crab
	<i>Hemigrapsus oregonensis</i>	yellow shore crab
	<i>Pachygrapsus crassipes</i>	striped shore crab
<b>Asterinidae</b>	<i>Pisaster</i> sp.	sea star, unid.
<b>Strongylocentrotidae</b>	<i>Strongylocentrotus purpuratus</i>	purple sea urchin



## Appendix F3

### Master Species List of fishes identified in the impingement samples.

Family	Taxon	Common Name
<b>(Chondrichthyes)</b>		cartilaginous fishes
<b>Triakidae</b>	<i>Mustelus californicus</i>	grey smoothhound
<b>Urolophidae</b>	<i>Urobatis halleri</i>	round stingray
<b>Myliobatidae</b>	<i>Myliobatis californica</i>	bat ray
<b>(Actinopterygii)</b>		ray-finned fishes
<b>Engraulidae</b>	<i>Anchoa compressa</i>	deepbody anchovy
	<i>Anchoa delicatissima</i>	slough anchovy
	<i>Anchoa</i> spp.	deepbody/slough anchovy, unid.
	<i>Engraulis mordax</i>	northern anchovy
	<i>Engraulis mordax</i> larvae	northern anchovy larvae
<b>Ictaluridae</b>	<i>Ameiurus</i> sp.	bullhead catfish, unid.
<b>Clupeidae</b>	<i>Sardinops sagax</i>	Pacific sardine
<b>Batrachoididae</b>	<i>Porichthys myriaster</i>	specklefin midshipman
	<i>Porichthys notatus</i>	plainfin midshipman
	<i>Porichthys</i> sp.	midshipman, unid.
<b>Atherinopsidae</b>	<i>Atherinops affinis</i>	topsmelt
	Atherinopsidae	silverside, unid.
	<i>Atherinopsis californiensis</i>	jacksmelt
	<i>Leuresthes tenuis</i>	California grunion
<b>Belonidae</b>	<i>Strongylura exilis</i>	California needlefish
<b>Fundulidae</b>	<i>Fundulus parvipinnis</i>	California killifish
<b>Syngnathidae</b>	<i>Syngnathus californiensis</i>	kelp pipefish
	<i>Syngnathus leptorhynchus</i>	bay pipefish
	<i>Syngnathus</i> sp.	pipefish, unid.
<b>Cottidae</b>	<i>Leptocottus armatus</i>	Pacific staghorn sculpin
<b>Carangidae</b>	<i>Trachurus symmetricus</i>	jack mackerel
<b>Haemulidae</b>	<i>Anisotremus davidsonii</i>	sargo
	<i>Xenistius californiensis</i>	salema
<b>Sciaenidae</b>	<i>Atractoscion nobilis</i>	white seabass
	<i>Cheilotrema saturnum</i>	black croaker
	<i>Genyonemus lineatus</i>	white croaker
	<i>Menticirrhus undulatus</i>	California corbina
	Sciaenidae	croaker, unid.
	<i>Seriphus politus</i>	queenfish
	<i>Umbrina roncadore</i>	yellowfin croaker

(table continued)

**Appendix F3** (continued). Master Species List of fishes identified in the impingement samples.

<b>Family</b>	<b>Taxon</b>	<b>Common Name</b>
<b>Cichlidae</b>	Cichlidae	tilapia, unid.
<b>Embiotocidae</b>	<i>Cymatogaster aggregata</i>	shiner perch
	<i>Embiotoca jacksoni</i>	black perch
	<i>Phanerodon furcatus</i>	white seaperch
<b>Labrisomidae</b>	<i>Paraclinus integripinnis</i>	reef finspot
<b>Clinidae</b>	<i>Gibbonsia elegans</i>	spotted kelpfish
	<i>Heterostichus rostratus</i>	giant kelpfish
<b>Blennidae</b>	<i>Hypsoblennius gentilis</i>	bay blenny
	<i>Hypsoblennius gilberti</i>	rockpool blenny
	<i>Hypsoblennius jenkinsi</i>	mussel blenny
<b>Gobiesocidae</b>	<i>Gobiesox rhessodon</i>	California clingfish
<b>Gobiidae</b>	<i>Acanthogobius flavimanus</i>	yellowfin goby
	<i>Gillichthys mirabilis</i>	longjaw mudsucker
	<i>Lepidogobius lepidus</i>	bay goby
<b>Sphyraenidae</b>	<i>Sphyraena argentea</i>	Pacific barracuda
<b>Scombridae</b>	<i>Scomber japonicus</i>	Pacific chub mackerel
<b>Stromateidae</b>	<i>Peprilus simillimus</i>	Pacific pompano
<b>Paralichthyidae</b>	<i>Paralichthys californicus</i>	California halibut
	<i>Xystreureys liolepis</i>	fantail sole
<b>Pleuronectidae</b>	<i>Pleuronichthys guttulatus</i>	diamond turbot
	<i>Pleuronichthys ritteri</i>	spotted turbot
	<i>Pleuronichthys</i> sp.	righteyed flounder, unid.
	<i>Pleuronichthys verticalis</i>	hornyhead turbot
<b>Cynoglossidae</b>	<i>Symphurus atricaudus</i>	California tonguefish