

Appendix Table 2-III. Common name, scientific name, and family of the 308 species of California fishes used in the analysis.

COMMON NAME	SCIENTIFIC NAME	FAMILY
albacore	<i>Thunnus alalunga</i>	Scombridae
American shad	<i>Alosa sapidissima</i>	Clupeidae
angel shark	<i>Squatina californica</i>	Squatinidae
arrow goby	<i>Clevelandia ios</i>	Gobiidae
arrowtooth flounder	<i>Atheresthes stomias</i>	Pleuronectidae
aurora rockfish	<i>Sebastes aurora</i>	Scorpaenidae
bald sculpin	<i>Clinocottus recalvus</i>	Psychrolutidae
banded guitarfish	<i>Zapteryx exasperata</i>	Rhinobatidae
bank rockfish	<i>Sebastes rufus</i>	Scorpaenidae
barcheek pipefish	<i>Syngnathus exilis</i>	Syngnathidae
barred pipefish	<i>Syngnathus auliscus</i>	Syngnathidae
barred sand bass	<i>Paralabrax nebulifer</i>	Serranidae
barred surfperch	<i>Amphistichus argenteus</i>	Embiotocidae
basketweave cuskeel	<i>Opidion scrippsae</i>	Ophidiidae
basking shark	<i>Cetorhinus maximus</i>	Cetorhinidae
bat ray	<i>Myliobatis californica</i>	Myliobatidae
bay blenny	<i>Hypsoblennius gentilis</i>	Blenniidae
bay goby	<i>Lepidogobius lepidus</i>	Gobiidae
bay pipefish	<i>Syngnathus leptorhynchus</i>	Syngnathidae
big skate	<i>Raja binoculata</i>	Rajidae
bigeye thresher	<i>Alopias superciliosus</i>	Alopiidae
bigeye tuna	<i>Thunnus obesus</i>	Scombridae
bigmouth sole	<i>Hippoglossina stomata</i>	Paralichthyidae
black and yellow rockfish	<i>Sebastes chrysomelas</i>	Scorpaenidae
black croaker	<i>Cheilotrema saturnum</i>	Sciaenidae
black hagfish	<i>Eptatretus deani</i>	Myxinidae
black prickleback	<i>Xiphister atropurpureus</i>	Stichaeidae
black rockfish	<i>Sebastes melanops</i>	Scorpaenidae
black surfperch	<i>Embiotoca jacksoni</i>	Embiotocidae
blackbelly eelpout	<i>Lycodes pacificus</i>	Zoarcidae
blackeye goby	<i>Rhinogobiops nicholsi</i>	Gobiidae
blackgill rockfish	<i>Sebastes melanostomus</i>	Scorpaenidae
blacksmith	<i>Chromis punctipinnis</i>	Pomacentridae
blacktip poacher	<i>Xenertmus latifrons</i>	Agonidae
blind goby	<i>Typhlogobius californiensis</i>	Gobiidae
blue rockfish	<i>Sebastes mystinus</i>	Scorpaenidae
blue shark	<i>Prionace glauca</i>	Carcharhinidae
bluebanded goby	<i>Lythrypnus dalli</i>	Gobiidae
bluebanded ronquil	<i>Rathbunella hypoplecta</i>	Bathymasteridae
bluefin tuna	<i>Thunnus thynnus</i>	Scombridae
bluntnose sixgill shark	<i>Hexanchus griseus</i>	Hexanchidae
boccacio	<i>Sebastes paucispinis</i>	Scorpaenidae
bonyhead sculpin	<i>Artedius notospilotus</i>	Psychrolutidae
broadnose sevengill shark	<i>Notorynchus cepedianus</i>	Hexanchidae
bronzespotted rockfish	<i>Sebastes gilli</i>	Scorpaenidae

COMMON NAME	SCIENTIFIC NAME	FAMILY
brown cat shark	<i>Apristurus brunneus</i>	Scyliorhinidae
brown Irish lord	<i>Hemilepidotus spinosus</i>	Psychrolutidae
brown rockfish	<i>Sebastes auriculatus</i>	Scorpaenidae
brown smoothhound	<i>Mustelus henlei</i>	Carcharhinidae
buffalo sculpin	<i>Enophrys bison</i>	Psychrolutidae
bullet mackerel	<i>Auxis rochei</i>	Scombridae
bullseye puffer	<i>Sphoeroides annulatus</i>	Tetraodontidae
burrito grunt	<i>Anisotremus interruptus</i>	Haemulidae
cabezon	<i>Scorpaenichthys marmoratus</i>	Scorpaenichthyidae
calico rockfish	<i>Sebastes dalli</i>	Scorpaenidae
calico surfperch	<i>Amphistichus koelzi</i>	Embiotocidae
California barracuda	<i>Sphyraena argentea</i>	Sphyraenidae
California butterfly ray	<i>Gymnura marmorata</i>	Gymnuridae
California clingfish	<i>Gobiesox rhesodon</i>	Gobiesocidae
California corbina	<i>Menticirrhus undulatus</i>	Sciaenidae
California grunion	<i>Leuresthes tenuis</i>	Atherinopsidae
California halfbeak	<i>Hyporhamphus rosae</i>	Hemirhamphidae
California halibut	<i>Paralichthys californicus</i>	Paralichthyidae
California hornshark	<i>Heterodontus francisi</i>	Heterodontidae
California killifish	<i>Fundulus parvipinnis</i>	Fundulidae
California lizardfish	<i>Synodus lucioceps</i>	Synodontidae
California moray	<i>Gymnothorax mordax</i>	Muraenidae
California needlefish	<i>Strongylura exilis</i>	Belonidae
California rattail	<i>Nezumia stelgidolepis</i>	Macrouridae
California sheephead	<i>Bodianus pulcher</i>	Labridae
California skate	<i>Raja inornata</i>	Rajidae
California slickhead	<i>Alepocephalus tenebrosum</i>	Alepocephalidae
California tonguefish	<i>Symphurus atricauda</i>	Cynoglossidae
canary rockfish	<i>Sebastes pinniger</i>	Scorpaenidae
chameleon goby	<i>Tridentiger trigonocephalus</i>	Gobiidae
chameleon wrasse	<i>Halichoeres dispilus</i>	Labridae
cheekspot goby	<i>Ilypnus gilberti</i>	Gobiidae
chillipepper rockfish	<i>Sebastes goodei</i>	Scorpaenidae
China rockfish	<i>Sebastes nebulosus</i>	Scorpaenidae
chinook salmon	<i>Oncorhynchus tshawytscha</i>	Salmonidae
CO turbot	<i>Pleuronichthys coenosus</i>	Pleuronectidae
common thresher shark	<i>Alopias vulpinus</i>	Alopiidae
copper rockfish	<i>Sebastes caurinus</i>	Scorpaenidae
coralline sculpin	<i>Artedius corallinus</i>	Psychrolutidae
Cortez barracuda	<i>Sphyraena lucasana</i>	Sphyraenidae
Cortez gregory	<i>Stegastes rectifraenum</i>	Pomacentridae
cowcod	<i>Sebastes levis</i>	Scorpaenidae
crevice kelpfish	<i>Gibbonsia montereyensis</i>	Clinidae
crisscross prickleback	<i>Plagiogrammus hopkinsi</i>	Stichaeidae
curlfin turbot	<i>Pleuronichthys decurrens</i>	Pleuronectidae
darkblotched rockfish	<i>Sebastes crameri</i>	Scorpaenidae
deepbody anchovy	<i>Anchoa compressa</i>	Engraulidae
delta smelt	<i>Hypomesus transpacificus</i>	Osmeridae

COMMON NAME	SCIENTIFIC NAME	FAMILY
diamond turbot	<i>Hypsopsetta guttulata</i>	Pleuronectidae
dolphinfish	<i>Coryphaena hippus</i>	Coryphaenidae
dover sole	<i>Microstomus pacificus</i>	Pleuronectidae
dwarf surfperch	<i>Micrometrus minimus</i>	Embiotocidae
English sole	<i>Parophrys vetulus</i>	Pleuronectidae
eulachon	<i>Thaleichthys pacificus</i>	Osmeridae
fantail sole	<i>Xystreurus liolepis</i>	Paralichthyidae
filetail cat shark	<i>Parmaturus xaniurus</i>	Scyliorhinidae
flag rockfish	<i>Sebastes runbrivinctus</i>	Scorpaenidae
fluffy sculpin	<i>Oligocottus snyderi</i>	Psychrolutidae
garibaldi	<i>Hypsypops rubicundus</i>	Pomacentridae
giant grenadier	<i>Coryphaenoides pectoralis</i>	Macrouridae
giant kelpfish	<i>Heterostichus rostratus</i>	Clinidae
giant sea bass	<i>Stereolepis gigas</i>	Stereolepidae
gopher rockfish	<i>Sebastes carnatus</i>	Scorpaenidae
grass rockfish	<i>Sebastes rastrelliger</i>	Scorpaenidae
graveldiver	<i>Scytalina cerdale</i>	Scytalindae
gray smoothhound	<i>Mustelus californicus</i>	Carcharhinidae
greenblotched rockfish	<i>Sebastes rosenblatti</i>	Scorpaenidae
greenspotted rockfish	<i>Sebastes chlorosticus</i>	Scorpaenidae
greenstriped rockfish	<i>Sebastes elongatus</i>	Scorpaenidae
halfbanded rockfish	<i>Sebastes semicinctus</i>	Scorpaenidae
halfblind goby	<i>Lethops connectens</i>	Gobiidae
halfmoon	<i>Medialuna californica</i>	Kyphosidae
high cockscomb	<i>Anoplarchus purpurescens</i>	Stichaeidae
honeycomb rockfish	<i>Sebastes umbrosus</i>	Scorpaenidae
hornyhead turbot	<i>Pleuronichthys verticalis</i>	Pleuronectidae
Hundred fathom codling	<i>Physiculus rastrelliger</i>	Moridae
island kelpfish	<i>Alloclinus holderi</i>	Clinidae
jack mackerel	<i>Trachurus symmetricus</i>	Carangidae
jacksmelt	<i>Atherinopsis californiensis</i>	Atherinopsidae
juvenile rockfish	<i>Sebastes YOY</i>	Scorpaenidae
kelp bass	<i>Paralabrax clathratus</i>	Serranidae
kelp clingfish	<i>Rimicola muscarum</i>	Gobiesocidae
kelp greenling	<i>Hexagrammus decagrammus</i>	Hexagrammidae
kelp pipefish	<i>Syngnathus californiensis</i>	Syngnathidae
kelp rockfish	<i>Sebastes atrovirens</i>	Scorpaenidae
kelp surfperch	<i>Brachyistius frenatus</i>	Embiotocidae
lavender sculpin	<i>Leicottus hirundo</i>	Psychrolutidae
leopard shark	<i>Triakis semifasciata</i>	Carcharhinidae
lingcod	<i>Ophiodon elongatus</i>	Hexagrammidae
longfin sanddab	<i>Citharichthys xanthostigma</i>	Paralichthyidae
longfin sculpin	<i>Jordania zonope</i>	Psychrolutidae
longfin smelt	<i>Spirinchus thaleichthys</i>	Osmeridae
longjaw mudsucker	<i>Gillichthys mirabilis</i>	Gobiidae
longnose skate	<i>Raja rhina</i>	Rajidae
longspine combfish	<i>Zaniolepis latipinnis</i>	Hexagrammidae
longspine thornyhead	<i>Sebastolobus altivelis</i>	Scorpaenidae

COMMON NAME	SCIENTIFIC NAME	FAMILY
louvar	<i>Luvarus imperialis</i>	Luvaridae
Mazatlan sole	<i>Achirus mazatlanus</i>	Soleidae
Mexican goatfish	<i>Mulloidichthys dentatus</i>	Mullidae
monkeyface prickleback	<i>Cebidichthys violaceus</i>	Stichaeidae
mosquitofish	<i>Gambusia affinis</i>	Poeciliidae
mosshead sculpin	<i>Clinocottus globiceps</i>	Psychrolutidae
mosshead warbonnet	<i>Chirolophus nugator</i>	Clinidae
mussel blenny	<i>Hypsoblennius jenkinsi</i>	Blenniidae
night smelt	<i>Spirinchus starksii</i>	Osmeridae
northern anchovy	<i>Engraulis mordax</i>	Engraulidae
northern clingfish	<i>Gobiesox maeandricus</i>	Gobiesocidae
northern ronquil	<i>Ronquilus jordani</i>	Bathymasteridae
ocean sunfish	<i>Mola mola</i>	Molidae
ocean whitefish	<i>Caulolatilus princeps</i>	Malacanthidae
olive rockfish	<i>Sebastes serranoides</i>	Scorpaenidae
onespot fringehead	<i>Neoclinus uninotatus</i>	Clinidae
opah	<i>Lampris megalopsis</i>	Lampridae
opaleye	<i>Girella nigricans</i>	Kyphosidae
orangethroat pikeblenny	<i>Chaenopsis alepidota</i>	Chaenopsidae
Pacific hagfish	<i>Eptatretus stouti</i>	Myxinidae
Pacific argentine	<i>Argentina sialis</i>	Argentinidae
Pacific bonito	<i>Sarda chiliensis</i>	Scombridae
Pacific butterfish	<i>Peprilus simillimus</i>	Stromateidae
Pacific electric ray	<i>Torpedo californica</i>	Torpedinidae
Pacific hake	<i>Merluccius productus</i>	Merlucciidae
Pacific herring	<i>Clupea harengus</i>	Clupeidae
Pacific mackerel	<i>Scomber japonicus</i>	Scombridae
Pacific pomfret	<i>Brama japonica</i>	Brammidae
Pacific sanddab	<i>Citharichthys sordidus</i>	Paralichthyidae
Pacific sardine	<i>Sardinops sagax</i>	Clupeidae
Pacific saury	<i>Cololabis saira</i>	Scomberesocidae
Pacific seahorse	<i>Hippocampus ingens</i>	Syngnathidae
Pacific tomcod	<i>Microgadus proximus</i>	Gadidae
padded sculpin	<i>Artedius fenestralis</i>	Psychrolutidae
painted greenling	<i>Oxylebius pictus</i>	Hexagrammidae
Panamic sergeant major	<i>Abudefduf troscheli</i>	Pomacentridae
penpoint gunnel	<i>Apodichthys flavidus</i>	Pholidae
petrale sole	<i>Eopsetta jordani</i>	Pleuronectidae
pile surfperch	<i>Rhacochilus vacca</i>	Embiotocidae
pinkrose rockfish	<i>Sebastes simulator</i>	Scorpaenidae
plainfin midshipman	<i>Porichthys notatus</i>	Batrachoididae
pricklebreast poacher	<i>Stellerina xyosterna</i>	Agonidae
pygmy poacher	<i>Odontopyxis trispinosa</i>	Agonidae
pygmy rockfish	<i>Sebastes wilsoni</i>	Scorpaenidae
queenfish	<i>Seriphus politus</i>	Sciaenidae
quillback rockfish	<i>Sebastes maliger</i>	Scorpaenidae
rainbow surfperch	<i>Hypsurus caryi</i>	Embiotocidae
red brotula	<i>Brosomphycis marginata</i>	Ophidiidae

COMMON NAME	SCIENTIFIC NAME	FAMILY
redstripe rockfish	<i>Sebastes proriger</i>	Scorpaenidae
reef finspot	<i>Paraclinus integripinnis</i>	Labrisomidae
reef surfperch	<i>Micrometrus aurora</i>	Embiotocidae
rex sole	<i>Glyptocephalus zachirus</i>	Pleuronectidae
rock greenling	<i>Hexagrammos lagocephalus</i>	Hexagrammidae
rock prickleback	<i>Xiphister mucosus</i>	Stichaeidae
rock sole	<i>Psettichthys melanostictus</i>	Pleuronectidae
rock wrasse	<i>Halichoeres semicinctus</i>	Labridae
rockweed gunnel	<i>Apodichthys fucorum</i>	Pholidae
rosethorn rockfish	<i>Sebastes helvomaculatus</i>	Scorpaenidae
rosy rockfish	<i>Sebastes rosaceus</i>	Scorpaenidae
rosy sculpin	<i>Oligocottus rubellio</i>	Psychrolutidae
rosy surfperch	<i>Zalemibus rosaceus</i>	Embiotocidae
rosy lip sculpin	<i>Ascelichthys rhodorus</i>	Psychrolutidae
roughback sculpin	<i>Chitonotus pugetensis</i>	Psychrolutidae
roughcheek sculpin	<i>Ruscarius creaseri</i>	Psychrolutidae
round stingray	<i>Urobatis halleri</i>	Urotrygonidae
rubberlip surfperch	<i>Rhacochilus toxotes</i>	Embiotocidae
sablefish	<i>Anoplopoma fimbria</i>	Anoplopomatidae
saddleback gunnel	<i>Pholis ornata</i>	Pholidae
saddleback sculpin	<i>Oligocottus rimensis</i>	Psychrolutidae
sailfin sculpin	<i>Nautichthys oculofasciatus</i>	Agonidae
salema	<i>Brachygenys californiensis</i>	Haemulidae
salmon shark	<i>Lamna ditropis</i>	Lamnidae
Sargassum blenny	<i>Exerpes asper</i>	Clinidae
sargo	<i>Anisotremus davidsoni</i>	Haemulidae
scalloped hammerhead	<i>Sphyrna lewini</i>	Sphyrnidae
scalyhead sculpin	<i>Artedius harringtoni</i>	Psychrolutidae
scissortail chromis	<i>Chromis atrilobata</i>	Pomacentridae
senorita	<i>Oxyjulis californica</i>	Labridae
shadow goby	<i>Quietula ycauda</i>	Gobiidae
sharpchin rockfish	<i>Sebastes zacentrus</i>	Scorpaenidae
sharpnose sculpin	<i>Clinocottus acuticeps</i>	Psychrolutidae
Shimofuri goby	<i>Tridentiger bifasciatus</i>	Gobiidae
shiner surfperch	<i>Cymatogaster aggregata</i>	Embiotocidae
Shokihaze goby	<i>Tridentiger barbatus</i>	Gobiidae
shortbelly rockfish	<i>Sebastes jordani</i>	Scorpaenidae
shortfin mako	<i>Isurus oxyrinchus</i>	Lamnidae
shortspine combfish	<i>Zaniolepis frenata</i>	Hexagrammidae
shortspine thornyhead	<i>Sebastobus alascanus</i>	Scorpaenidae
shovelnose guitarfish	<i>Pseudobatos productus</i>	Rhinobatidae
silver surfperch	<i>Hyperprosopon ellipticum</i>	Embiotocidae
Silverspotted Sculpin	<i>Blepsias cirrhosus</i>	Agonidae
skinflap puffer	<i>Sphoeroides lobatus</i>	Tetraodontidae
skipjack tuna	<i>Katsuwonus pelamis</i>	Scombridae
slender clingfish	<i>Rimicola eigenmanni</i>	Gobiesocidae
slender cockscomb	<i>Anoplarchus insignis</i>	Stichaeidae
slender sole	<i>Lyopsetta exilis</i>	Pleuronectidae

COMMON NAME	SCIENTIFIC NAME	FAMILY
slipskin snailfish	<i>Liparis fucensis</i>	Liparidae
slope brotula	<i>Cataetyx rubrirostris</i>	Ophidiidae
slough anchovy	<i>Anchoa delicatissima</i>	Engraulidae
smoothhead sculpin	<i>Artedius lateralis</i>	Psychrolutidae
snubnose pipefish	<i>Bryx arctos</i>	Syngnathidae
snubnose sculpin	<i>Orthonopias triacis</i>	Psychrolutidae
soupfin shark	<i>Galeorhinus zyopterus</i>	Carcharhinidae
speckled rockfish	<i>Sebastes ovalis</i>	Scorpaenidae
speckled sanddab	<i>Citharichthys stigmaeus</i>	Paralichthyidae
specklefin midshipman	<i>Porichthys myriaster</i>	Batrachoididae
Spiny dogfish	<i>Squalus suckleyi</i>	Squalidae
splitnose rockfish	<i>Sebastes diploproa</i>	Scorpaenidae
splittail	<i>Pogonichthys macrolepidotus</i>	Cyprinidae
spotfin croaker	<i>Roncador stearnsii</i>	Sciaenidae
spotfin surfperch	<i>Hyperprosopon anale</i>	Embiotocidae
spotted cuskeel	<i>Chilara taylori</i>	Ophidiidae
spotted kelpfish	<i>Gibbonsia elegans</i>	Clinidae
spotted ratfish	<i>Hydrolagus coliei</i>	Chimaeridae
spotted sand bass	<i>Paralabrax maculatofasciatus</i>	Serranidae
spotted scorpionfish	<i>Scorpaena guttata</i>	Scorpaenidae
spotted stingray	<i>Urolophus maculatus</i>	Urolophidae
spotted turbot	<i>Pleuronichthys ritteri</i>	Pleuronectidae
squarespot rockfish	<i>Sebastes hopkinsi</i>	Scorpaenidae
staghorn sculpin	<i>Leptocottus armatus</i>	Cottidae
starry flounder	<i>Platichthys stellatus</i>	Pleuronectidae
starry rockfish	<i>Sebastes constellatus</i>	Scorpaenidae
steelhead trout	<i>Oncorhynchus mykiss</i>	Salmonidae
striped bass	<i>Morone saxatilis</i>	Moronidae
striped kelpfish	<i>Gibbonsia metzi</i>	Clinidae
striped marlin	<i>Tetrapterus audax</i>	Istiophoridae
striped mullet	<i>Mugil cephalus</i>	Mugilidae
striped surfperch	<i>Embiotoca lateralis</i>	Embiotocidae
stripetail rockfish	<i>Sebastes saxicola</i>	Scorpaenidae
surf smelt	<i>Hypomesus pretiosus</i>	Osmeridae
swell shark	<i>Cephaloscyllium ventriosum</i>	Scyliorhinidae
swordfish	<i>Xiphias gladius</i>	Xiphiidae
swordspine rockfish	<i>Sebastes ensifer</i>	Scorpaenidae
thornback	<i>Platyrrhinoides triseriatus</i>	Rhinobatidae
threadfin shad	<i>Dorosoma petenense</i>	Clupeidae
three-spine stickleback	<i>Gasterosteus aculeatus</i>	Gasterosteidae
tidepool blenny	<i>Hypsoblennius gilberti</i>	Blenniidae
tidepool sculpin	<i>Oligocottus maculosus</i>	Psychrolutidae
tidepool snailfish	<i>Liparis florae</i>	Liparidae
tidewater goby	<i>Eucyclogobius newberryi</i>	Gobiidae
topsmelt	<i>Atherinops affinis</i>	Atherinopsidae
tree rockfish	<i>Sebastes serriceps</i>	Scorpaenidae
tubesnout	<i>Aulorhynchus flavidus</i>	Aulorhynchidae
vermillion rockfish	<i>Sebastes miniatus</i>	Scorpaenidae

COMMON NAME	SCIENTIFIC NAME	FAMILY
wahoo	<i>Acanthocybium solandri</i>	Scombridae
walleye surfperch	<i>Hyperprosopon argentuem</i>	Embiotocidae
white croaker	<i>Genyonemus lineatus</i>	Sciaenidae
white seabass	<i>Atractoscion nobilis</i>	Sciaenidae
white shark	<i>Carcharodon carcharias</i>	Lamnidae
white surfperch	<i>Phanerodon furcatus</i>	Embiotocidae
whitebait smelt	<i>Allosmerus elongatus</i>	Osmeridae
whitespotted rockfish	<i>Sebastes moseri</i>	Scorpaenidae
widow rockfish	<i>Sebastes entomelas</i>	Scorpaenidae
wolf eel	<i>Anarrhichthys ocellatus</i>	Anarrhichadidae
wooly sculpin	<i>Clinocottus analis</i>	Pscyhrolutidae
yellowchin sculpin	<i>Icelinus quadriseriatus</i>	Pscyhrolutidae
yelloweye rockfish	<i>Sebastes ruberrimus</i>	Scorpaenidae
yellowfin croaker	<i>Umbrina roncadior</i>	Sciaenidae
yellowfin fringehead	<i>Neoclinus stephensae</i>	Clinidae
yellowfin goby	<i>Acanthogobius flavimanus</i>	Gobiidae
yellowfin tuna	<i>Thunnus albacares</i>	Scombridae
yellowtail	<i>Seriola lalandi</i>	Carangidae
yellowtail rockfish	<i>Sebastes flavidus</i>	Scorpaenidae
zebra goby	<i>Lythrypnus zebra</i>	Gobiidae
zebraperch	<i>Kyphosus azureus</i>	Kyphosidae