

Draft List of Fishes Likely to Benefit from the Establishment of Marine Protected Areas in California

(Updated August 2007)

Species	Primary Bottom type (Rock/Sand)	Shallow Depth (ft.)	Deepest Depth (ft.)	sm-mod adult home range (sm 0-5 km mod 10-20 km)	Currently mod-large take	Historically mod-large take	Low Pop. Estimate (<40% unfished)	Size structure shifted toward sm indiv	life history trait vulnerable	life stage to benefit (e.g., spawning activity, nursery area)	habitat impacted (by human activity)	Ecologically Important (keystone or habitat forming)	Comments
aurora rockfish	Sand/Rock	266	2930	ND	1	1	ND	ND	1	0	0	0	
bank rockfish	Rock	102	1489	ND	1	1	ND	1	1	0	0	0	declines in pop size and age/length in fishery
barred surfperch	Sand	0	240	1	1	1	ND	ND	1	0	0	0	piers;jetties;sandy beaches
bat ray	Sand/Rock	0	354	0	1	0	ND	ND	1	1	1	1	aggregate to spawn and breed inshore. Very often in the sandy areas in kelp beds, between the rocks. Top predator. Digging in sand has profound impact on invertebrate community.
big skate	Sand	7	2624	0	0	0	ND	ND	1	0	0	0	low fecundity
black rockfish	Rock	0	1200	1	1	1	1	1	1	0	0	0	Per Steve Ralston, CA population likely below 40%
black surfperch	Rock	0	150	1	1	1	ND	ND	1	0	1	0	piers; jetties; estuaries; kelp; low fecundity
black-and-yellow rockfish	Rock	0	120	1	1	1	ND	ND	1	0	0	0	
blackgill rockfish	Rock	289	2520	ND	1	1	0	ND	1	0	0	0	
blue rockfish	Rock	0	1800	0	1	1	0	1	1	0	0	1	filter barnacle larvae (Gaines and Roughgarden)
bocaccio	Rock	0	1578	0	1	1	1	1	1	0	0	1	Top predator; adults with low movement. declining lengths in central CA CPFV (Mason 1998)
bronzespotted rockfish	rock	246	1354	1	1	1	ND	ND	1	0	0	0	

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brown rockfish	Rock	0	480	1	1	1	ND	0	1	0	0	0	locally important species in places like SF Bay since 1850
brown smoothhound	Sand	0	922	0	1	0	ND	ND	1	1	1	0	inshore nursery
cabezon	Rock	0	360	1	1	1	0	ND	0	0	0	0	
calico rockfish	Rock	0	1000	1	0	0	ND	ND	1	0	0	0	
California halibut	Sand	1	922	0	1	1	0	ND	0	1	0	0	nursery and spawning aggregations
California skate	Sand	43	5248	0	0	0	ND	ND	1	0	0	0	
canary rockfish	Rock	0	1440	0	0	1	1	1	1	0	0	0	declining lengths in central CA CPFV (Mason 1998)
chilipepper rockfish	rock	0	1611	0	1	1	0	1	1	0	0	0	declining lengths in central CA CPFV (Mason 1998)
china rockfish	rock	10	420	1	1	1	ND	ND	1	0	0	0	
copper rockfish	Rock	0	607	1	1	1	ND	1	1	0	0	0	
cowcod	Rock	132	1610	1	0	1	1	ND	1	0	0	1	
darkblotched rockfish	Both	95	2985	1	1	1	1	ND	1	0	0	0	
Dover sole	Sand	7	4500	0	1	1	0	ND	0	0	0	0	
English sole	Sand	0	1800	0	1	1	0	ND	0	0	0	0	
flag rockfish	Rock	100	1371	1	1	1	ND	ND	1	0	0	0	
gopher rockfish	Rock	0	282	1	1	1	0	ND	1	0	0	0	
grass rockfish	Rock	0	150	1	1	1	ND	ND	1	0	0	0	
greenblotched rockfish	Rock	180	1610	1	1	1	ND	ND	1	0	0	0	
greenspotted rockfish	Both	98	1243	1	1	1	ND	ND	1	0	0	0	
greenstriped rockfish	Sand/Interface	39	3756	1	1	1	ND	ND	1	0	0	0	
kelp greenling	Rock	0	426	1	1	1	ND	ND	0	0	0	0	
kelp rockfish	Rock	0	190	1	1	1	ND	ND	1	0	0	0	
leopard shark	Sand	0	515	0	1	0	ND	ND	1	1	1	0	estuarine pupping and nursery grounds. Very common in kelp beds, up in the water column in kelp beds at night.

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lingcod	Rock	0	1558	1	1	1	1	ND	0	1	0	0	reproductive aggregations
longnose skate	Sand	30	3506	0	0	0	ND	ND	1	0	0	0	low fecundity
longspine thornyhead	Sand	660	5760	0	1	1	0	ND	0	0	0	0	
monkeyface prickleback	Rock	0	80	1	1	1	ND	ND	1	0	1	0	homing; tidepools; large TL; potential local depletion
olive rockfish	Rock	0	564	1	1	1	ND	1	1	0	0	0	
Pacific hagfish	Sand/Rock	53	3168	0	0	1	ND	ND	0	0	0	0	
petrale sole	Sand	0	1800	0	1	1	1	ND	0	0	0	0	
pile surfperch	Rock	0	295	1	1	1	ND	ND	1	0	0	0	piers; jetties; estuaries; kelp. Low fecundity
pink rockfish	Rock	150	1200	1	0	0	ND	ND	1	0	0	0	
quillback rockfish	rock	16	899	1	1	1	ND	ND	1	0	0	0	
rainbow surfperch	Rock	0	165	ND	0	0	ND	ND	1	0	1	0	harbors; eelgrass. some evidence they move inshore and offshore, movements are not known; low fecundity.
redbanded rockfish	Rock	161	3756	ND	1	1	ND	ND	1	0	0	0	
rex sole	Sand	0	3756	0	1	1	0	ND	0	0	0	0	
rosethorn rockfish	Both	194	3756	1	1	1	ND	ND	1	0	0	0	
rosy rockfish	Rock	24	864	1	1	1	ND	ND	1	0	0	0	
rubberlip surfperch	Rock	0	165	ND	1	1	ND	ND	1	0	1	0	piers; jetties; kelp. Low fecundity
sand sole	Sand	0	1066	ND	1	1	ND	ND	0	0	0	0	
sanddab, Pacific	Sand	0	1800	0	1	1	0	ND	0	0	0	0	
shiner surfperch	Both	0	480	ND	1	1	ND	ND	0	0	1	0	estuaries; kelpbeds
shortspine thornyhead	Sand/Rock	56	5000	0	1	1	0	ND	0	0	0	0	Juveniles, in particular, are often found on rocks.

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slender sole	Sand	30	3756	0	0	0	ND	ND	0	0	0	0	
speckled rockfish	Rock	100	1200	1	1	1	ND	ND	1	0	0	0	
splitnose rockfish	sand	262	2932	0	1	1	ND	ND	1	0	0	0	
squarespot rockfish	Rock	60	1000	1	1	0	0	ND	1	0	0	0	
starry flounder	Sand	0	1968	ND	1	1	0	ND	0	0	1	0	estuarine nurseries
starry rockfish	Rock	50	900	1	1	1	ND	ND	1	0	0	0	
striped surfperch	Rock	0	165	0	1	1	ND	ND	0	0	1	0	piers; jetties; estuaries; kelp
surf smelt	Sand	0	30	0	1	1	ND	ND	0	1	1	0	spawn in surfzone
topsmelt	Sand	0	85	ND	1	1	ND	ND	0	1	1	0	eggs laid on plants in backwater
treefish	Rock	0	320	1	1	1	ND	ND	1	0	0	0	
vermilion rockfish	Rock	0	1440	1	1	1	0	1	1	0	0	0	southern CA declines in length (Love et al.)
walleye surfperch	Both	0	597	1	1	1	ND	ND	0	0	0	0	sandy beaches; piers
white croaker	Sand	0	781	0	0	0	ND	ND	0	0	0	0	
white surfperch	Both	0	230	1	1	1	ND	ND	0	0	1	0	estuaries
widow rockfish	Rock	0	2625	0	0	1	1	ND	1	1	0	0	known to aggregate around pinnacles/seamounts
wolf eel	Rock	0	740	1	0	0	ND	ND	0	1	0	0	sedentary; mate-for-life? Large size
yelloweye rockfish	Rock	49	1800	1	0	1	1	ND	1	0	0	1	Top predator.
yellowtail rockfish	rock	0	1801	0	1	1	0	1	1	0	0	0	declining lengths in central CA CPFV (Mason 1998)