

# Expanded Coverage of the Program to Monitor Time-Area Closures in the Pacific Coast Groundfish Fishery

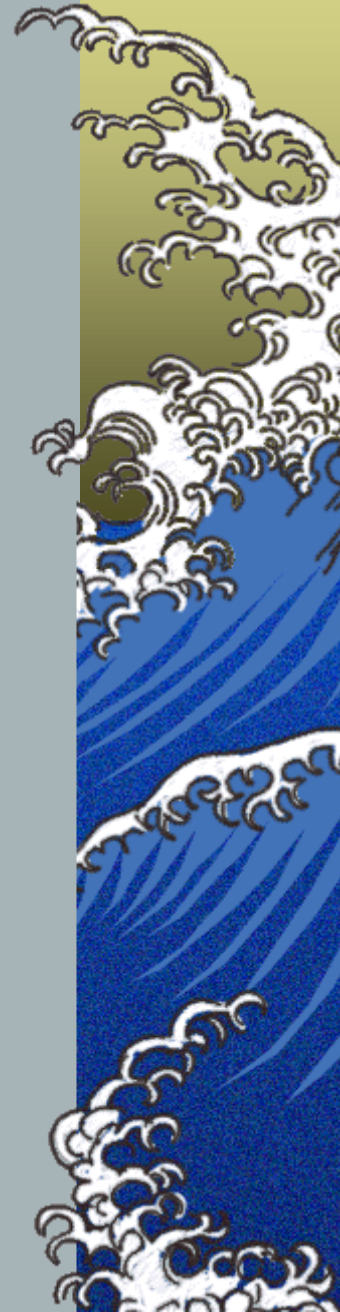
October 2005



Agenda Item H.10.b  
Supplemental NMFS Presentation  
November 2005

# VMS Pilot Program

- Implemented January 1, 2004.
- All LE vessels that fish off the west coast
- Type-approved transceiver unit required
- Declaration reports required
- EA for pilot program examined:
  - 1) the monitoring system,
  - 2) coverage levels, and
  - 3) the payment structure.
- Current EA examines coverage for OA fisheries



# Purpose of This Action

- To consider expansion of the VMS program into the OA fisheries
- When the closed areas are large-scale and defined by irregular lines, traditional enforcement methods are difficult to use
- VMS is a tool that aids enforcement in maintaining the integrity of conservation areas

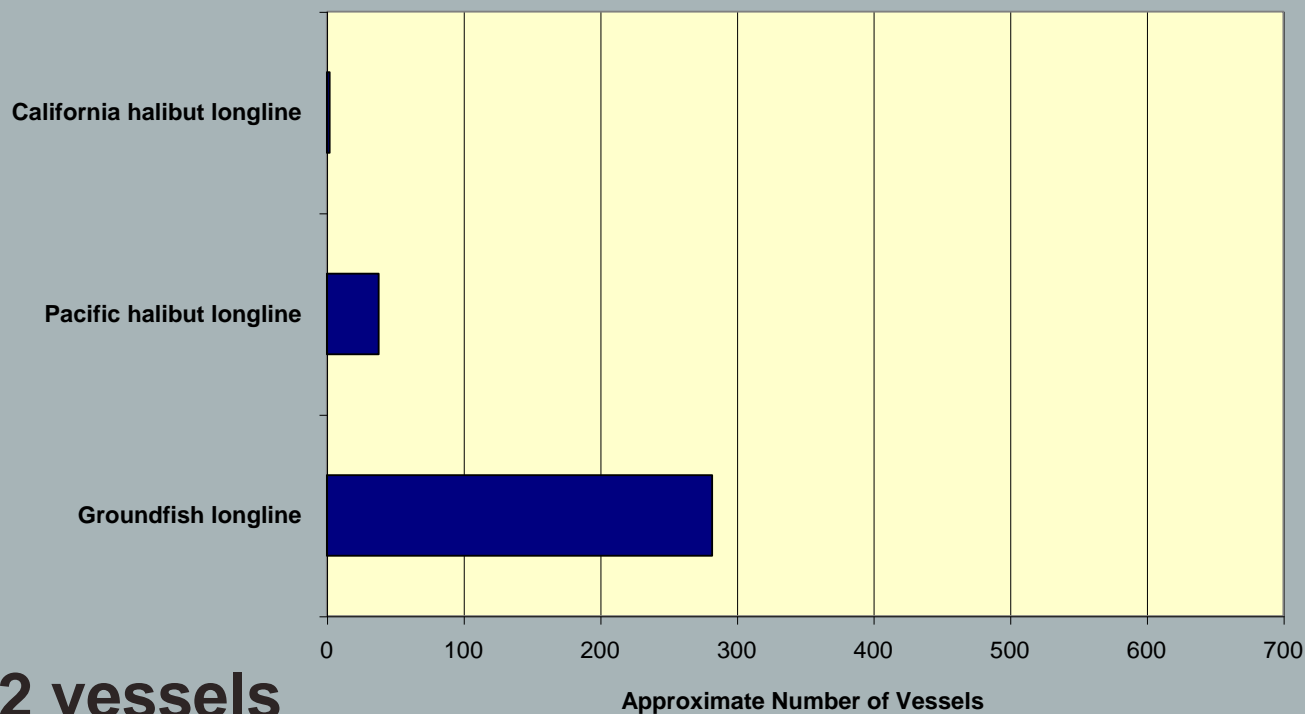


# Alternative 1 (Status quo) – No VMS, continue declaration reports for OA non-groundfish trawl vessels that fish within any trawl RCA

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## Alternative 2 – OA Vessels fishing with longline gear

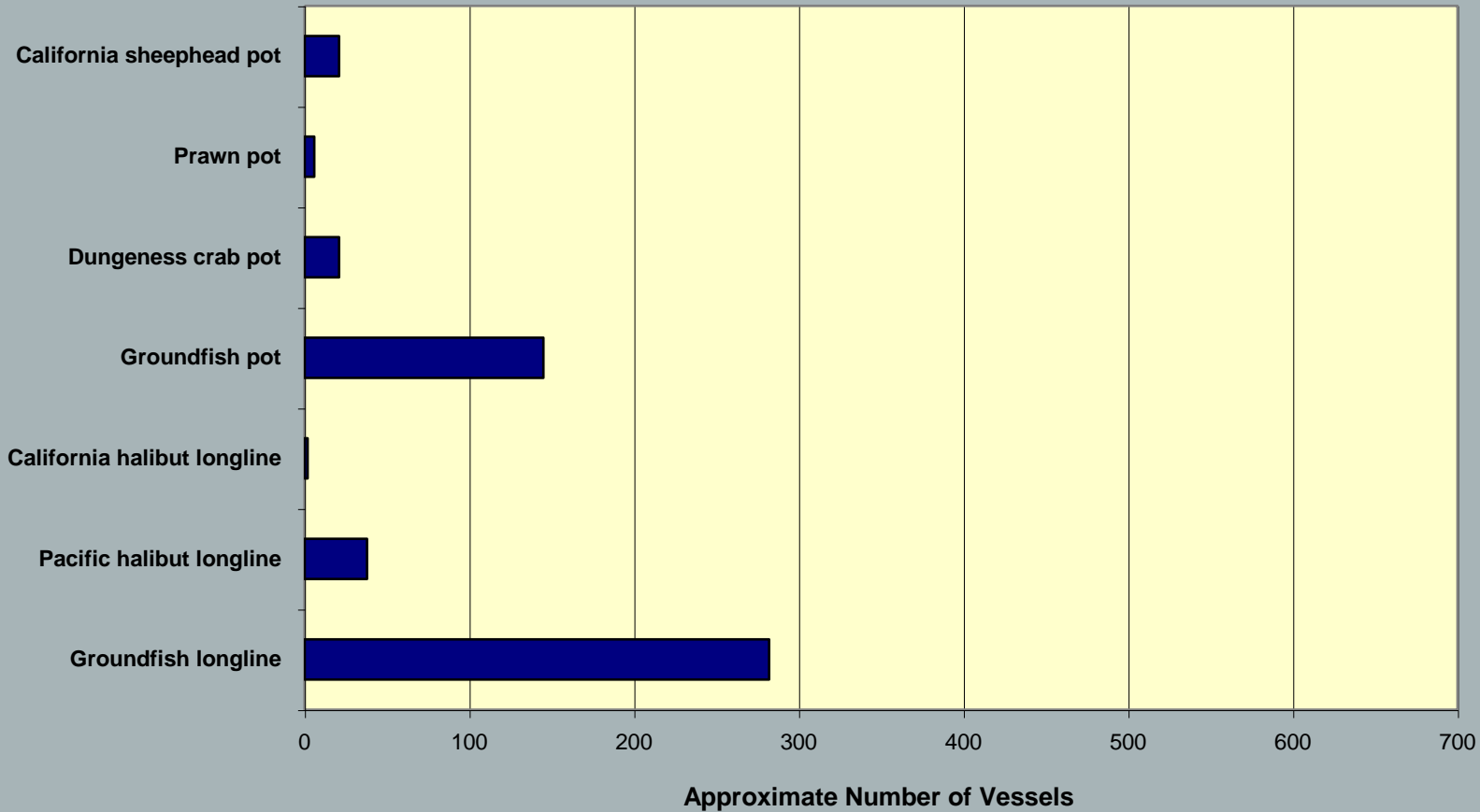
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**322 vessels**



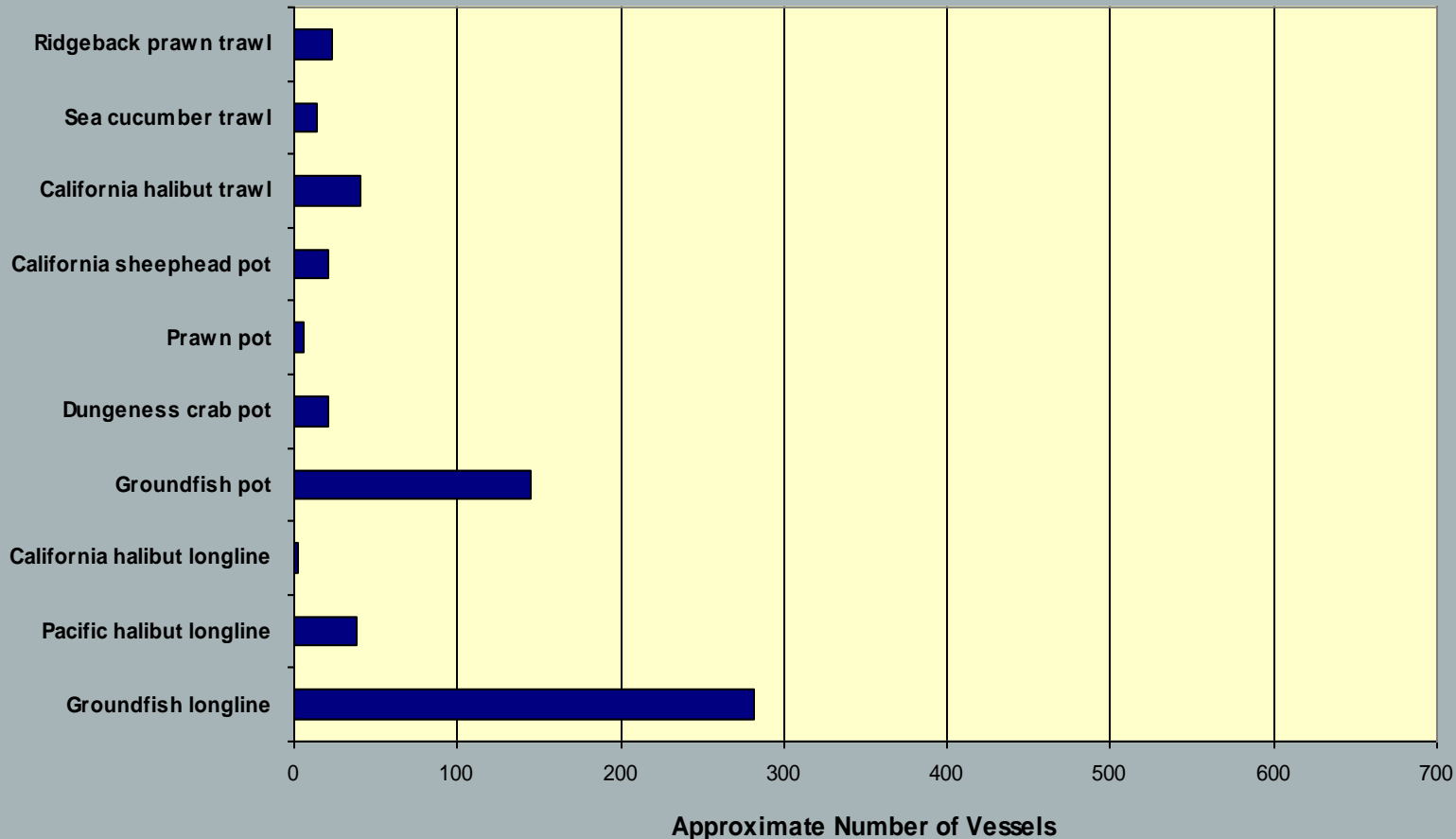
# Alternative 3 -- longline and pot vessels



**515 vessels**



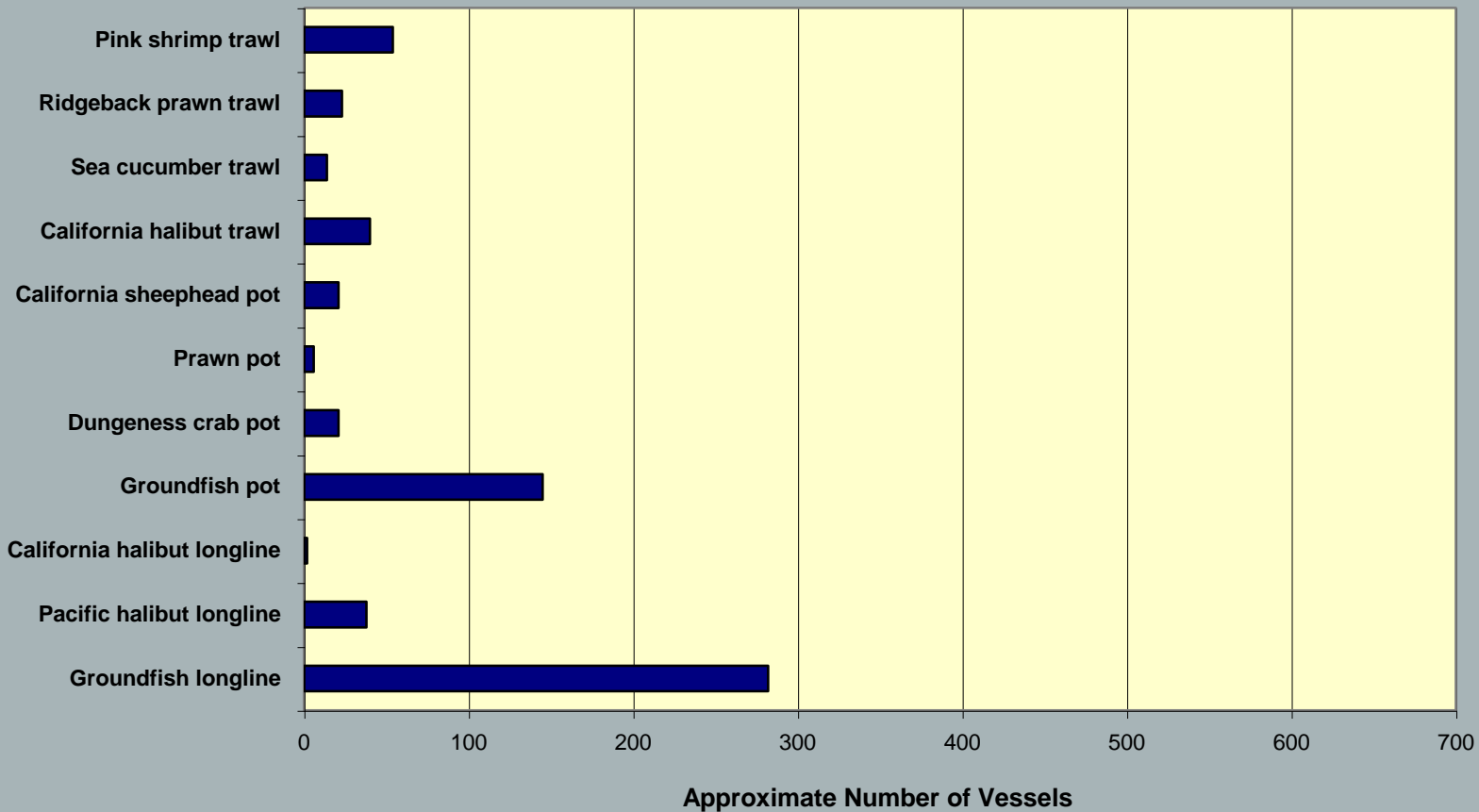
# Alternative 4A -- longline, pot, and trawl vessels; excluding pink shrimp trawl



**592 vessels**



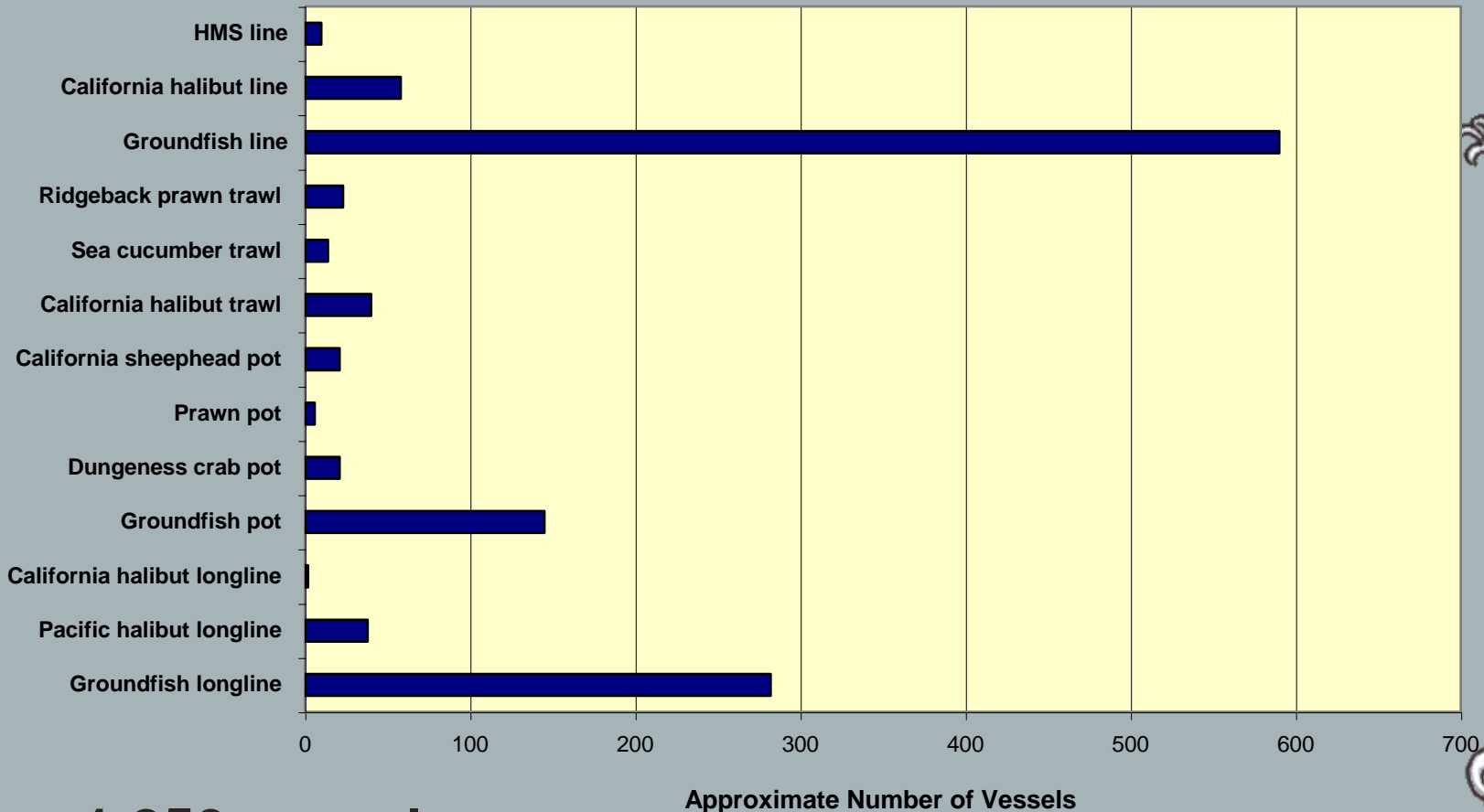
# Alternative 4B -- longline, pot, and trawl vessels



**646 vessels**



# Alternative 5A -- longline, pot, trawl and line vessels; excluding pink shrimp trawl and salmon troll

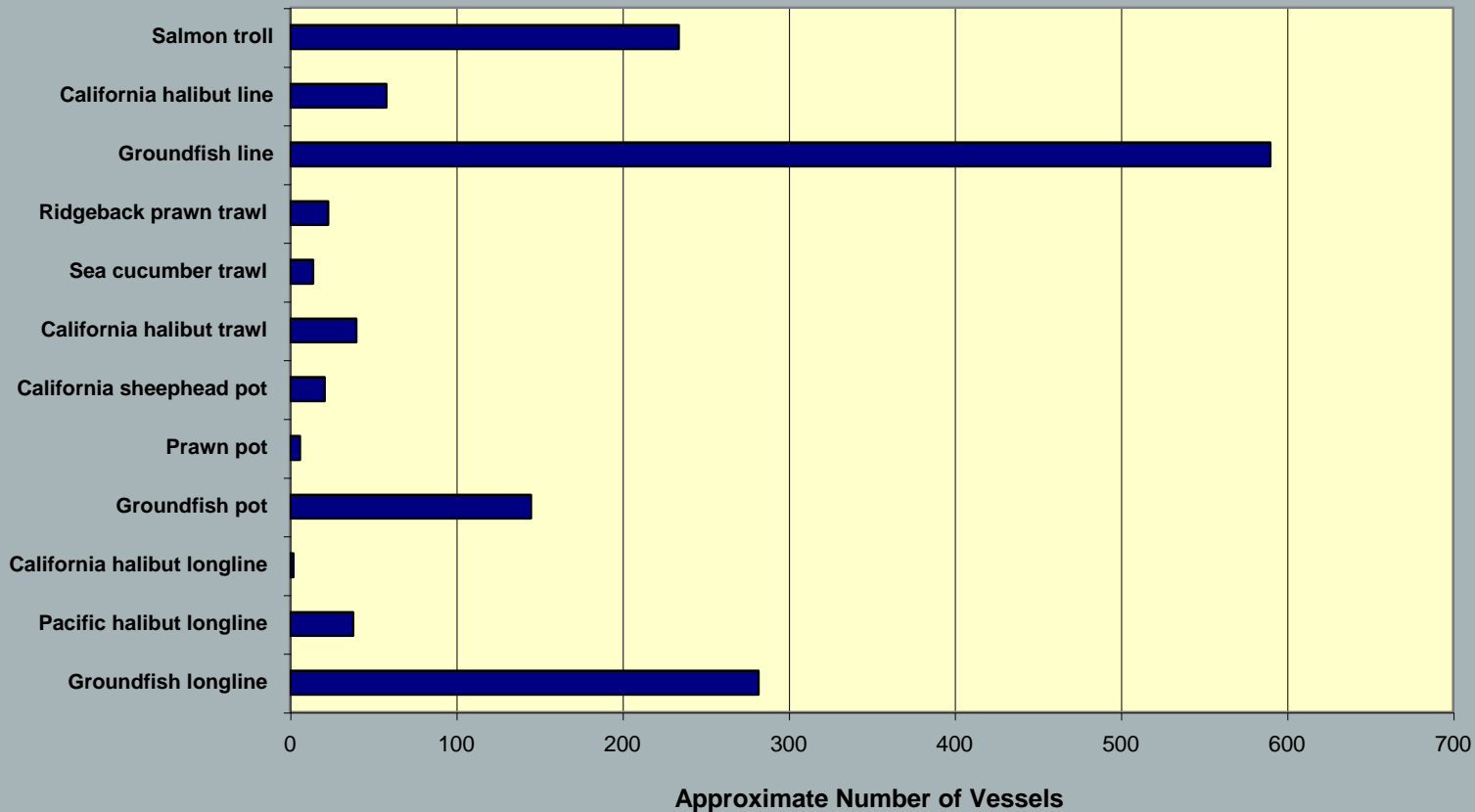


**1,250 vessels**





# Alternative 5B – longline, pot, trawl and line vessels; excluding pink shrimp trawl, HMS line and longline, and Dungeness crab pot

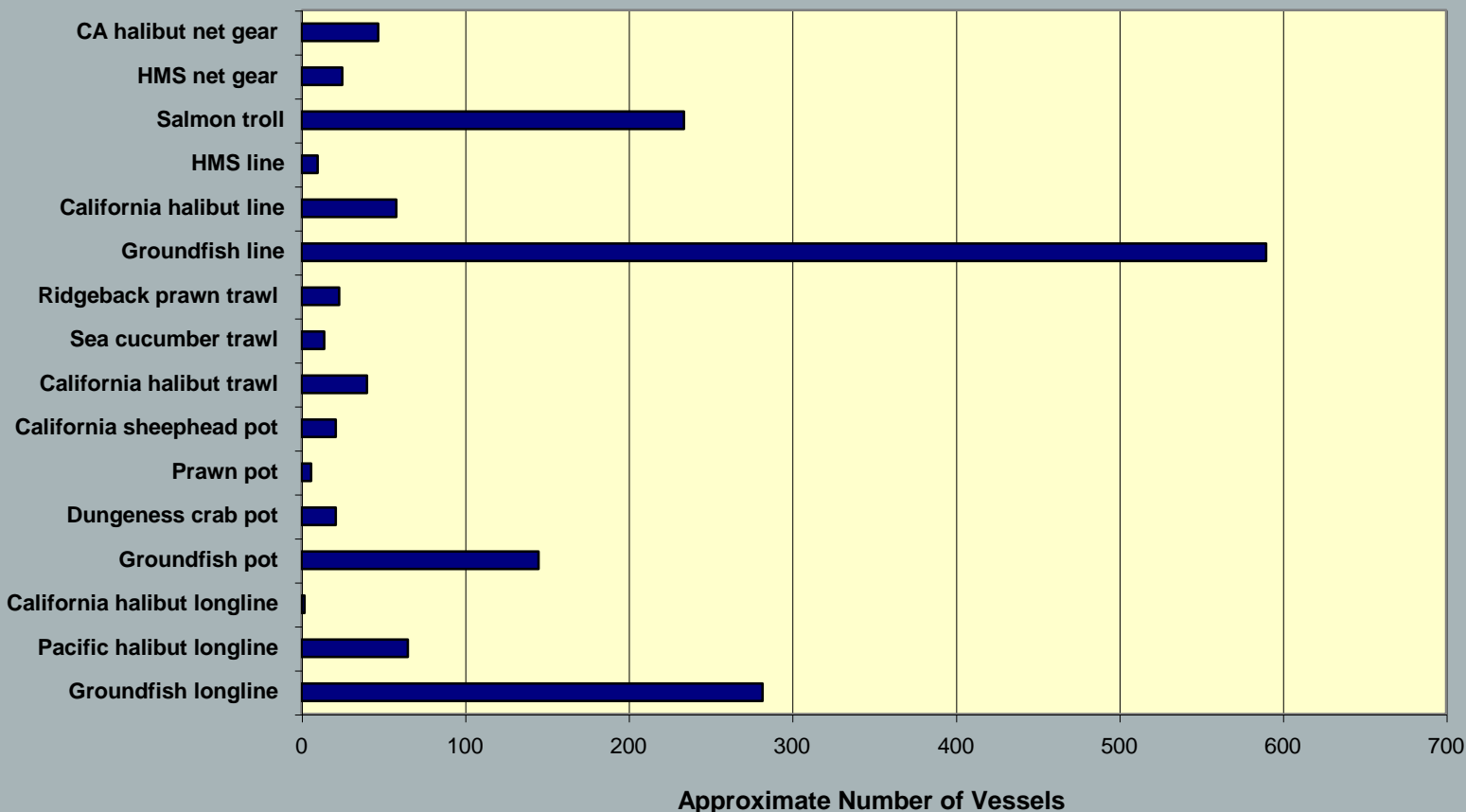


**1,453 vessels**



# Alternative 6A – Vessels engaged in commercial fishing to which RCA restrictions apply

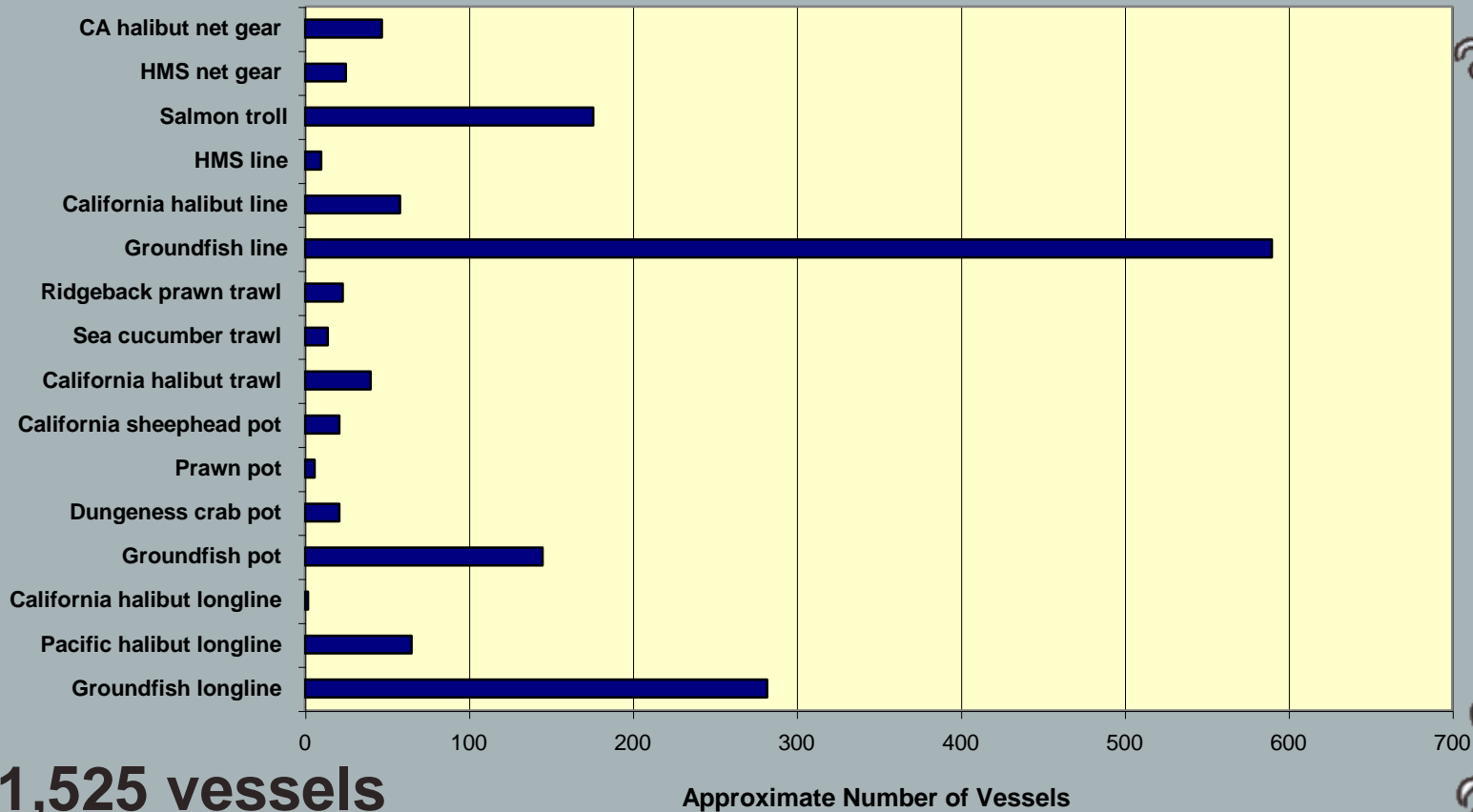
– Pink shrimp trawl is excluded. Vessels using salmon troll Dungeness crab, CPS or HMS gear are excluded if they do not take and retain groundfish.



**1,583 vessels**



# Alternative 6B -- Vessel engaged in commercial fishing to which RCA restrictions apply, excluding salmon troll vessels in the north that retain only yellowtail rockfish -- Pink shrimp trawl is excluded. If an RCA requirement is discontinued during the year, mandatory VMS coverage would be discontinued for the affected vessels.

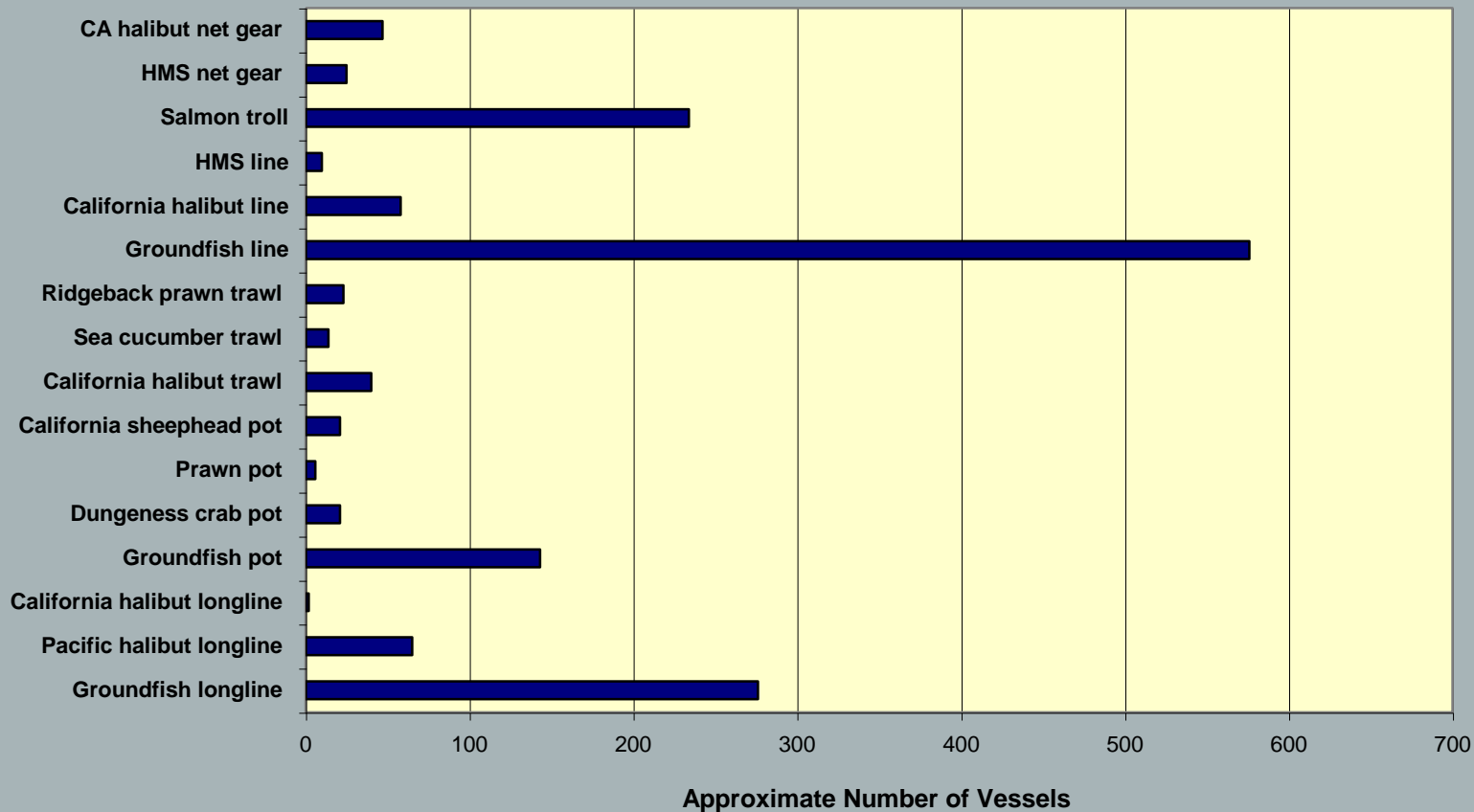


**1,525 vessels**

Approximate Number of Vessels



# Alternative 7 – Vessel engaged in commercial fishing to which RCA restrictions apply, except vessels less than 12 feet in length. Pink shrimp trawl are excluded.

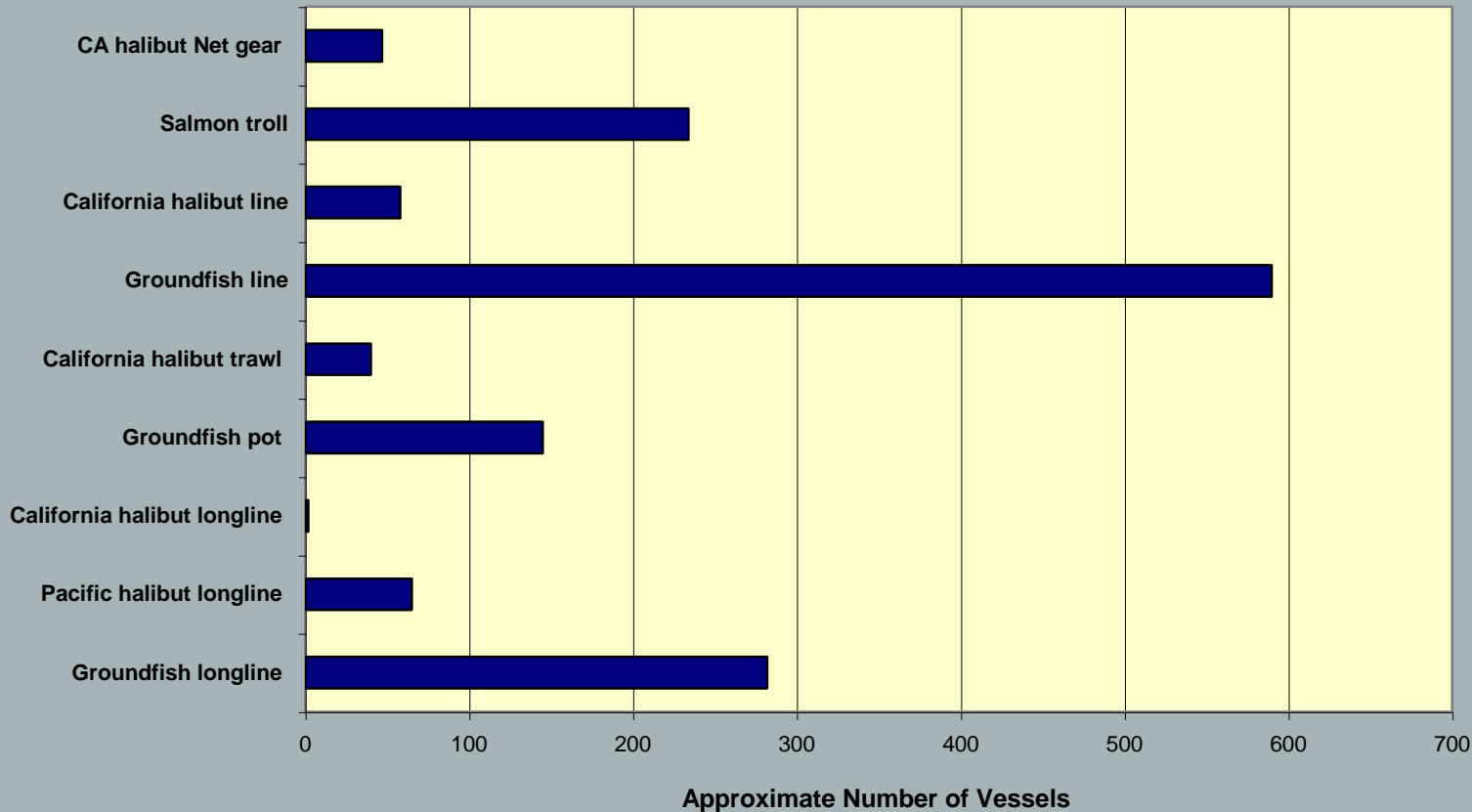


**1,561 vessels**



# Alternative 8 - Low impact OA fisheries

**exempt** — Dungeness crab pot, spot prawn pot, sea cucumber trawl, ridgeback prawn trawl, HMS line, HMS net, California sheephead pot gear and pink shrimp vessels would be excluded.



**1,463 vessels**



**Low impact fisheries** -- If illegal fishing occurred in the RCA, the risk to overfished species would be low

**Generally these are fisheries where:**

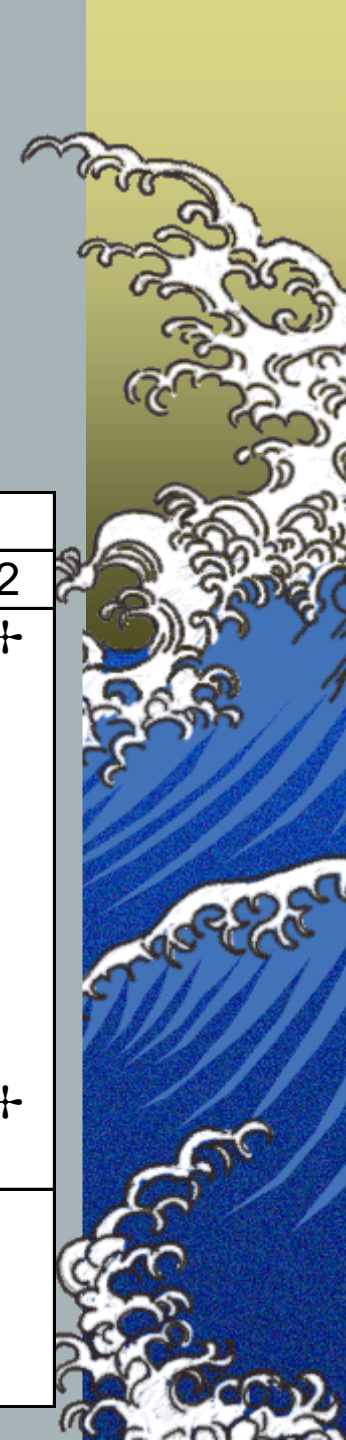
- Minimal historical landings of overfished species
- Little co-occurrence of target and overfished species
- Overfished species are less vulnerable to the gear
- Observer data indicates low incidental catch



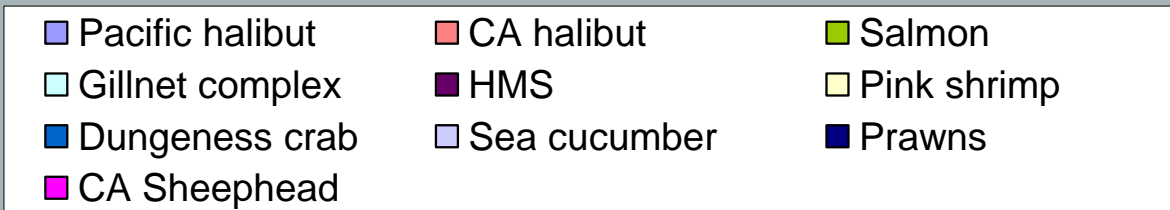
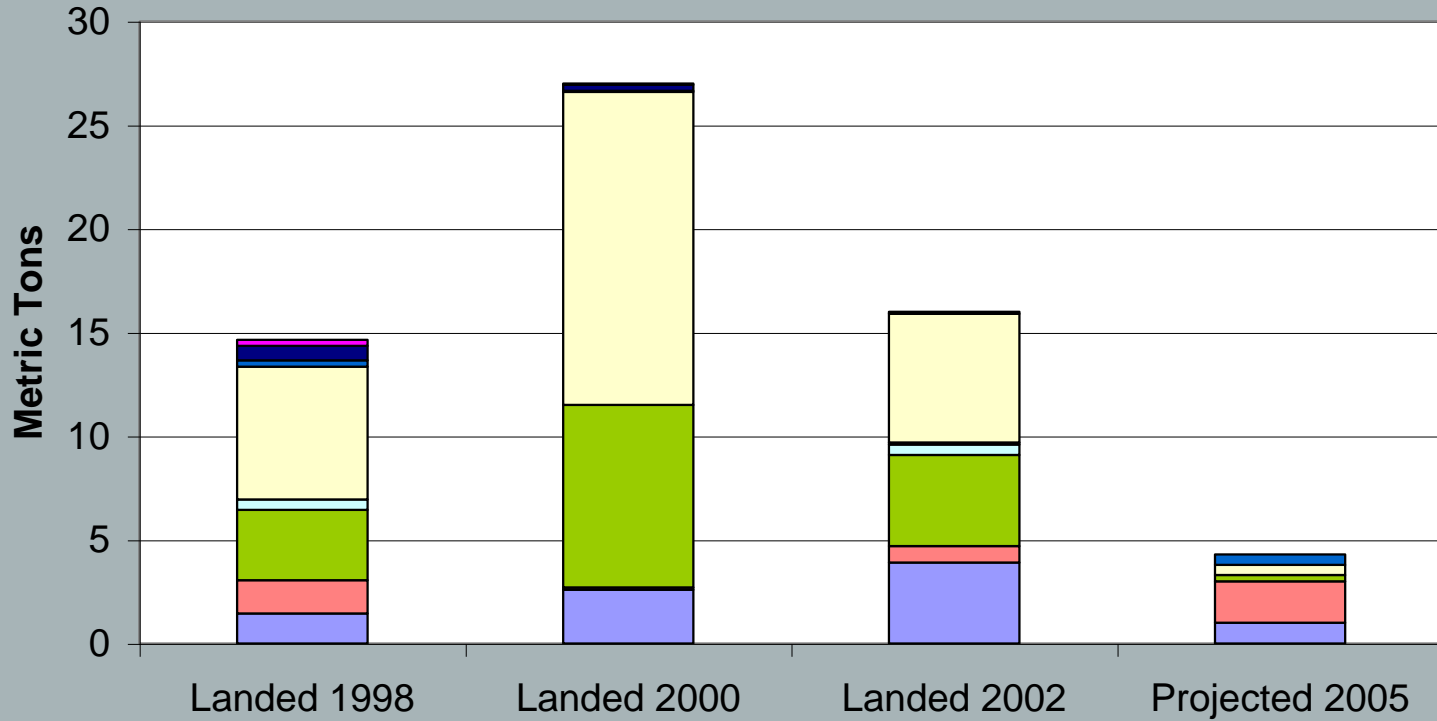
# Historical landings of overfished species prior to depth-based management

Fishery (all gears)	North of Mendocino			South of Mendocino		
	1998	2000	2002	1998	2000	2002
California halibut	~	~	+	+++	+	+++
California gillnet				+++	+	+
California sheephead				+	+	+
Dungeness crab	+	+	+	+	~	~
HMS	+	+	~	+	+	+
Pacific halibut	+++	+++	+++	+	~	~
Pink shrimp	+++	+++	+++	+++	+	~
Prawn	~	~	~	+++	++	+
Salmon troll	+++	+++	+++	++	++	+++
Sea cucumber				+	~	+

+++ More than 0.5 mt of a single overfished species  
 ++ More than 0.5 mt of all overfished species combined  
 + Less than 0.5 mt of all overfished species combined  
 ~ No overfished species landings data

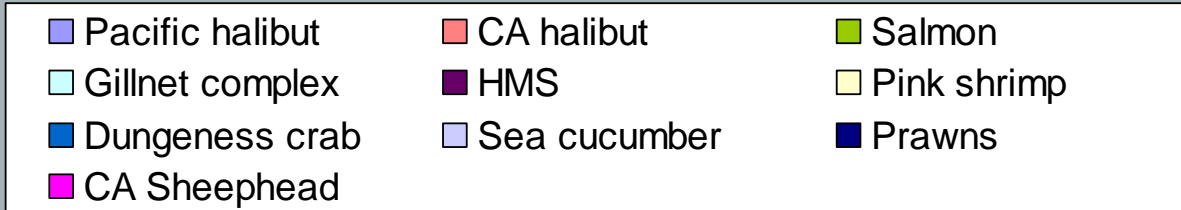
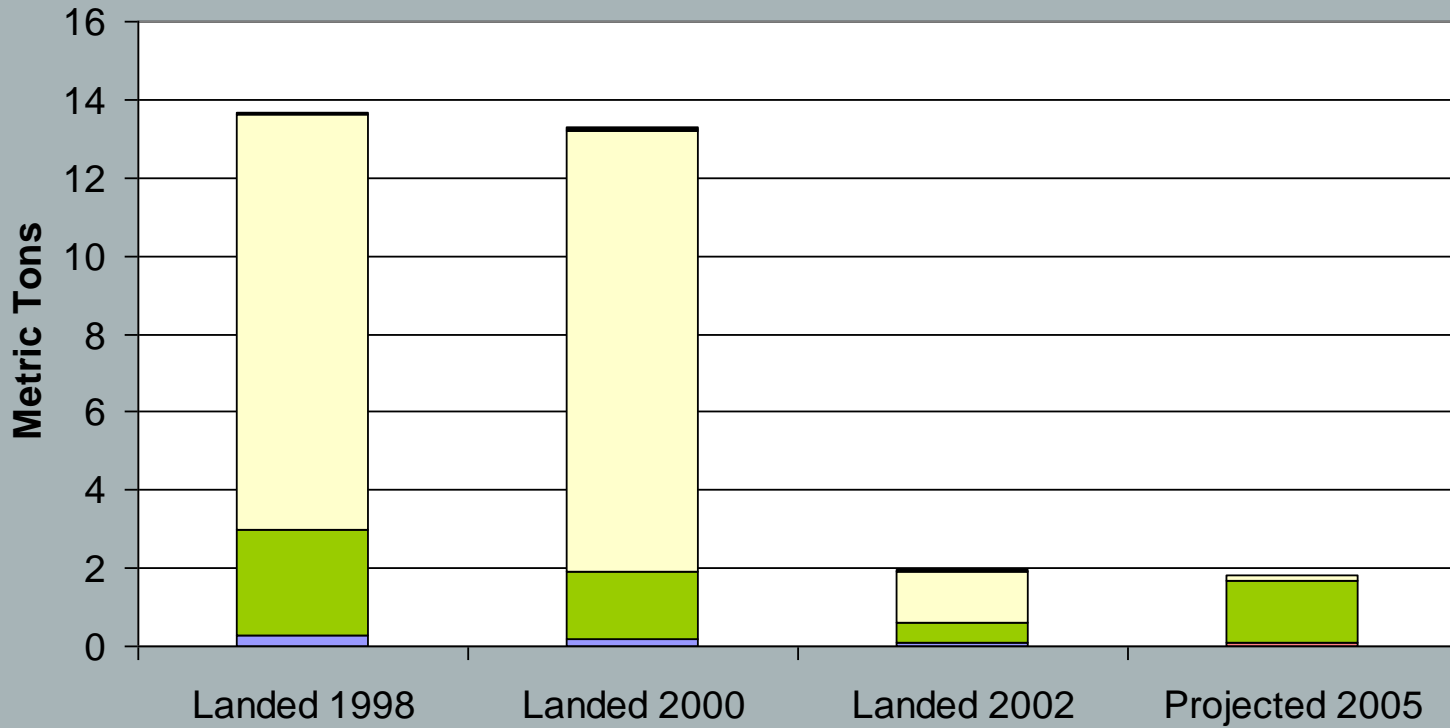


# Lingcod Impacts

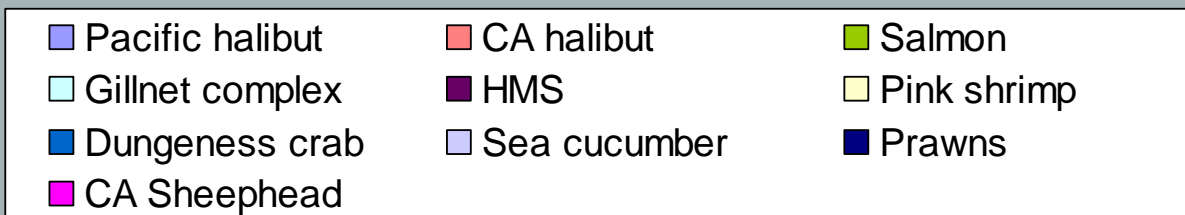
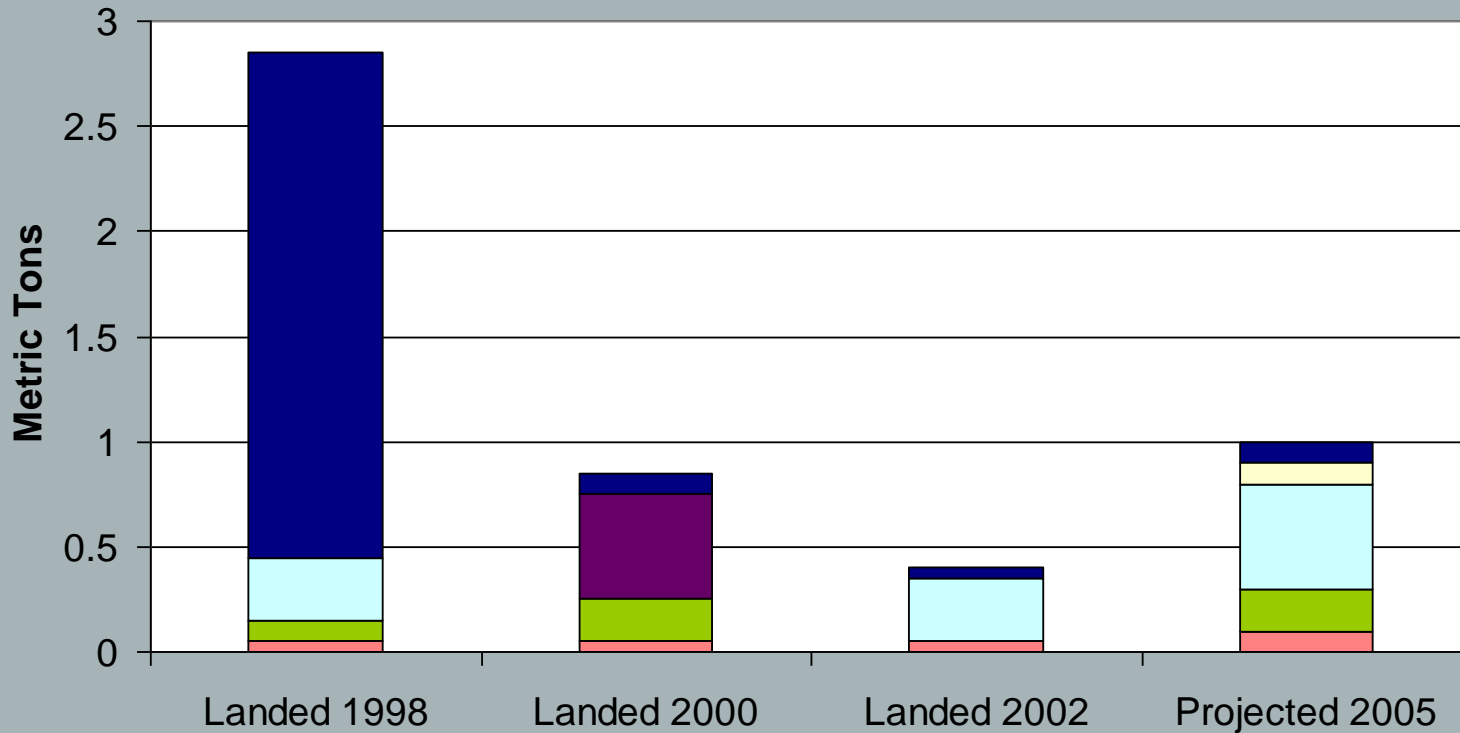




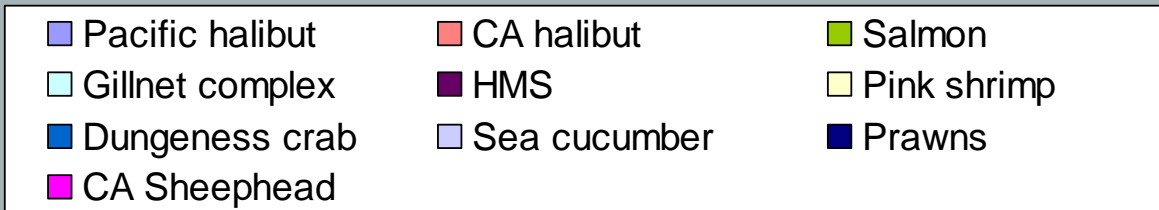
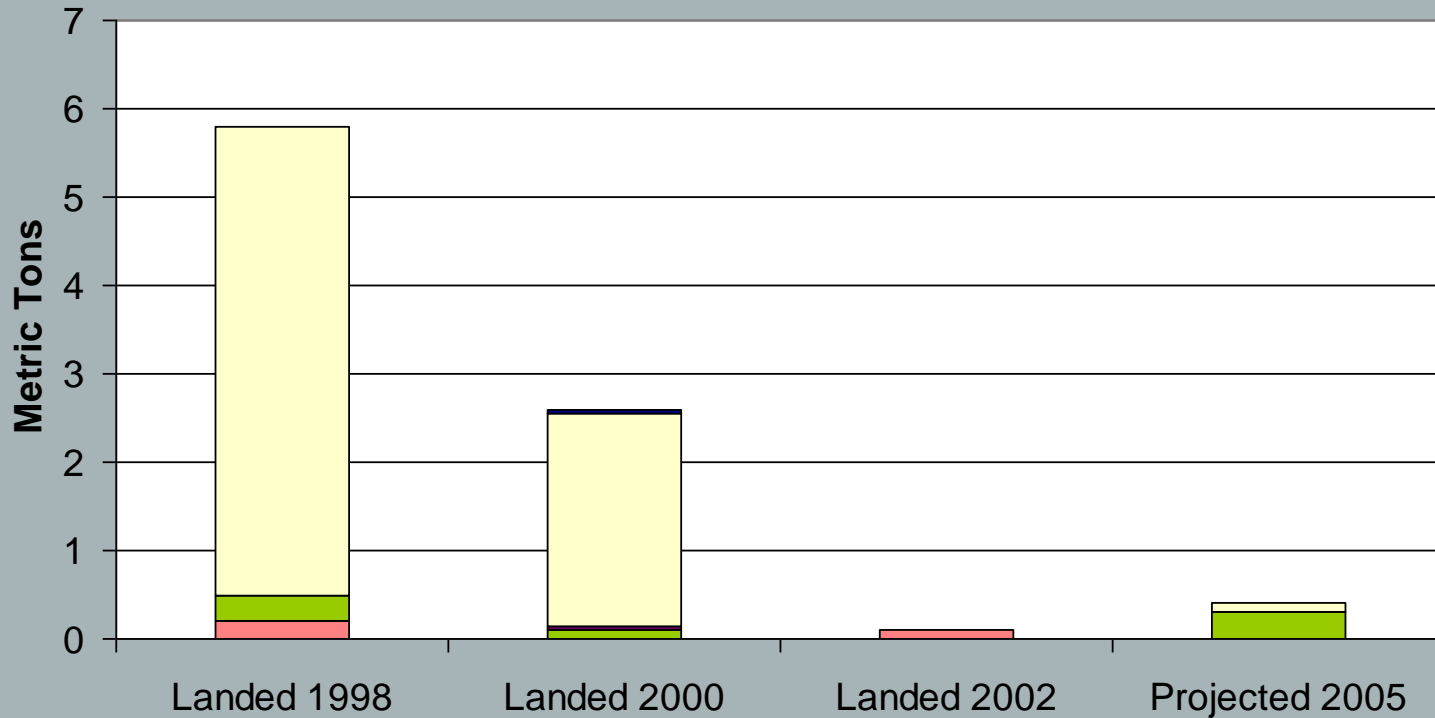
# Canary Impacts



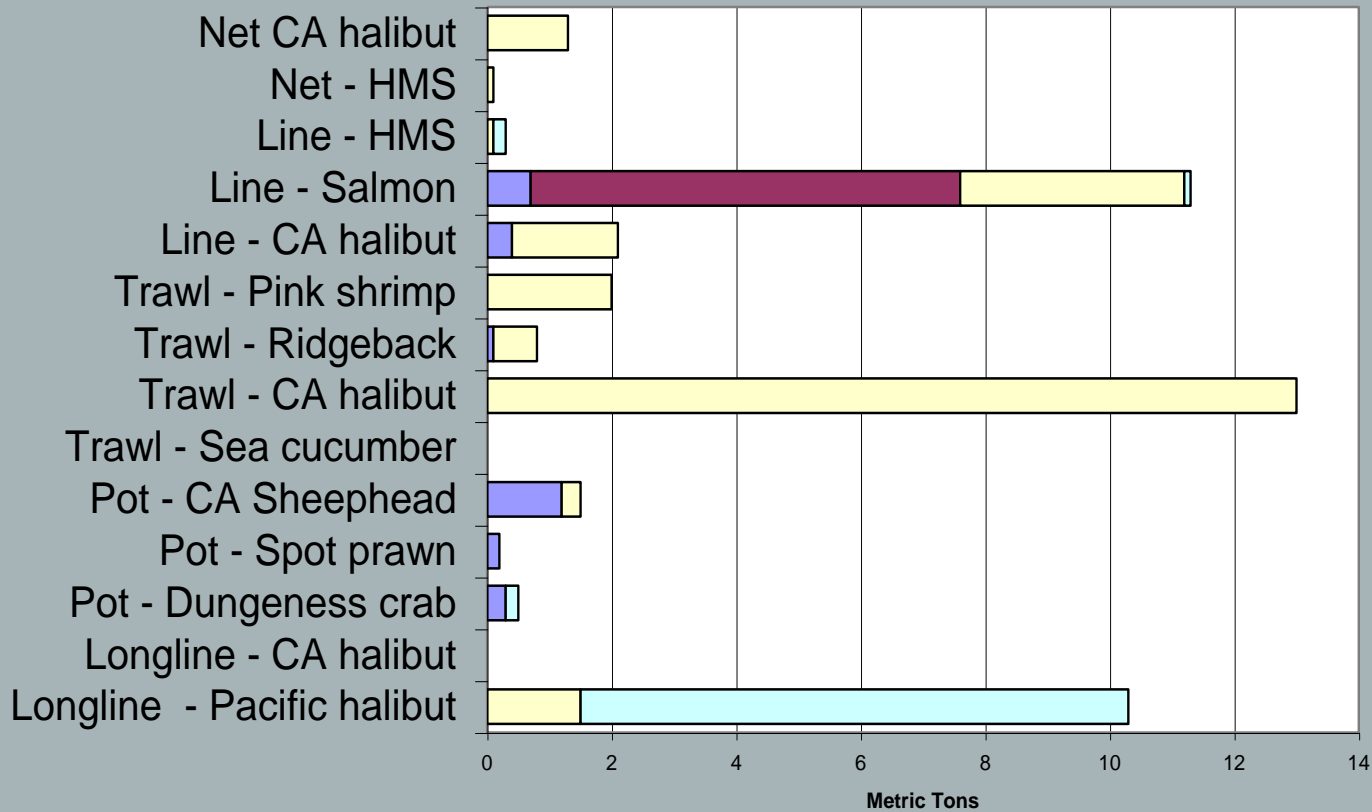
# Bocaccio Impacts



# Widow Impacts



# Landed catch by species depth group, Incidental OA fisheries, 2004



■ Nearshore

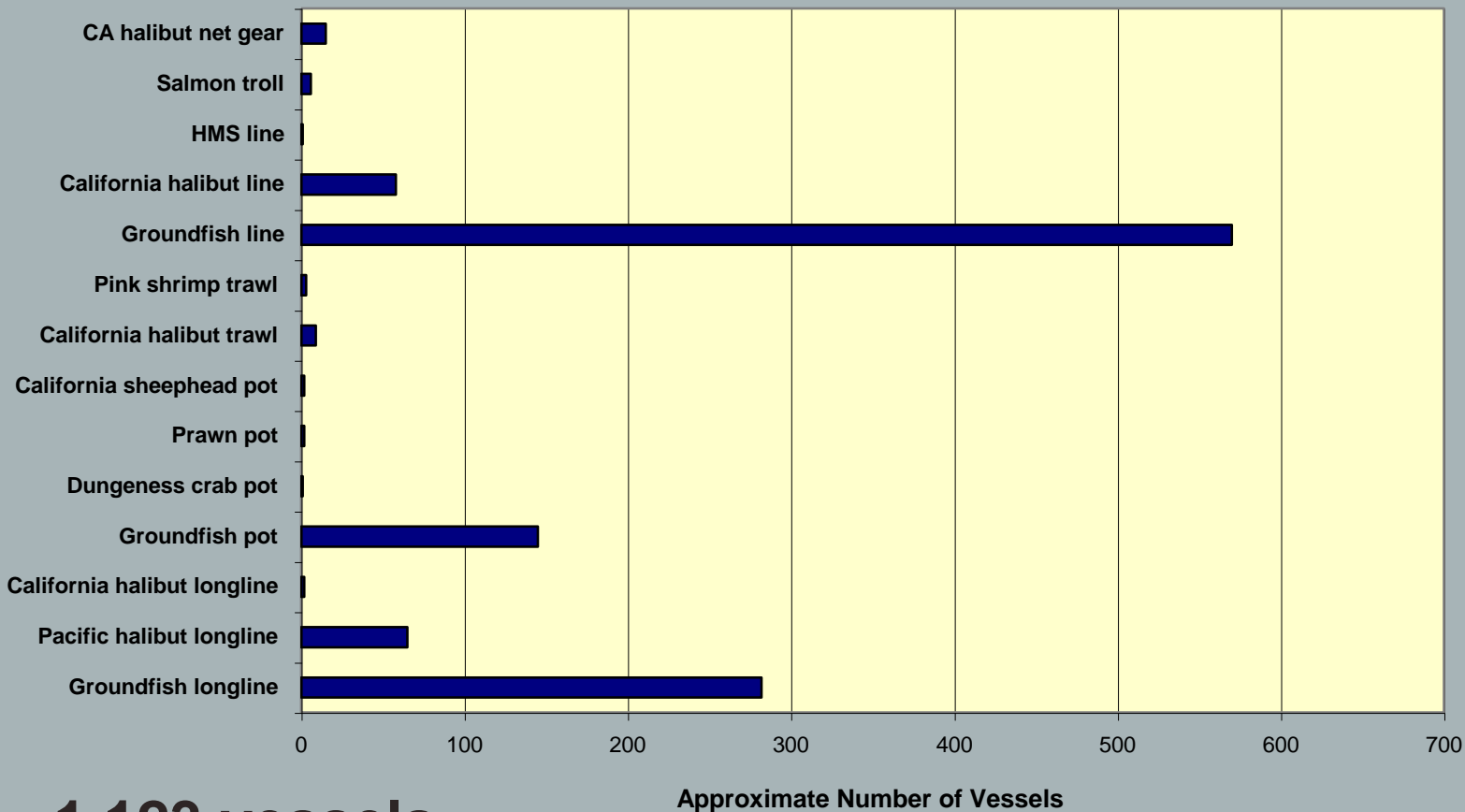
■ Pelagic

■ Shelf

■ Slope



# Alternative 9 - Directed OA fisheries & vessels landing more than a minimal amount of groundfish - all incidental vessels landing more than 500 lb of groundfish in a year

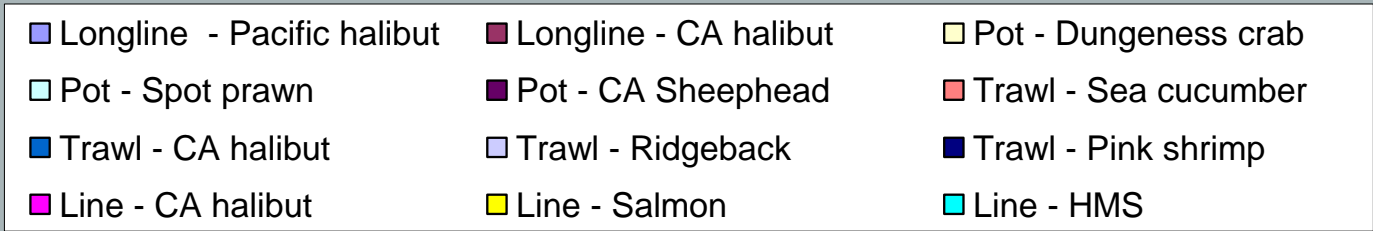
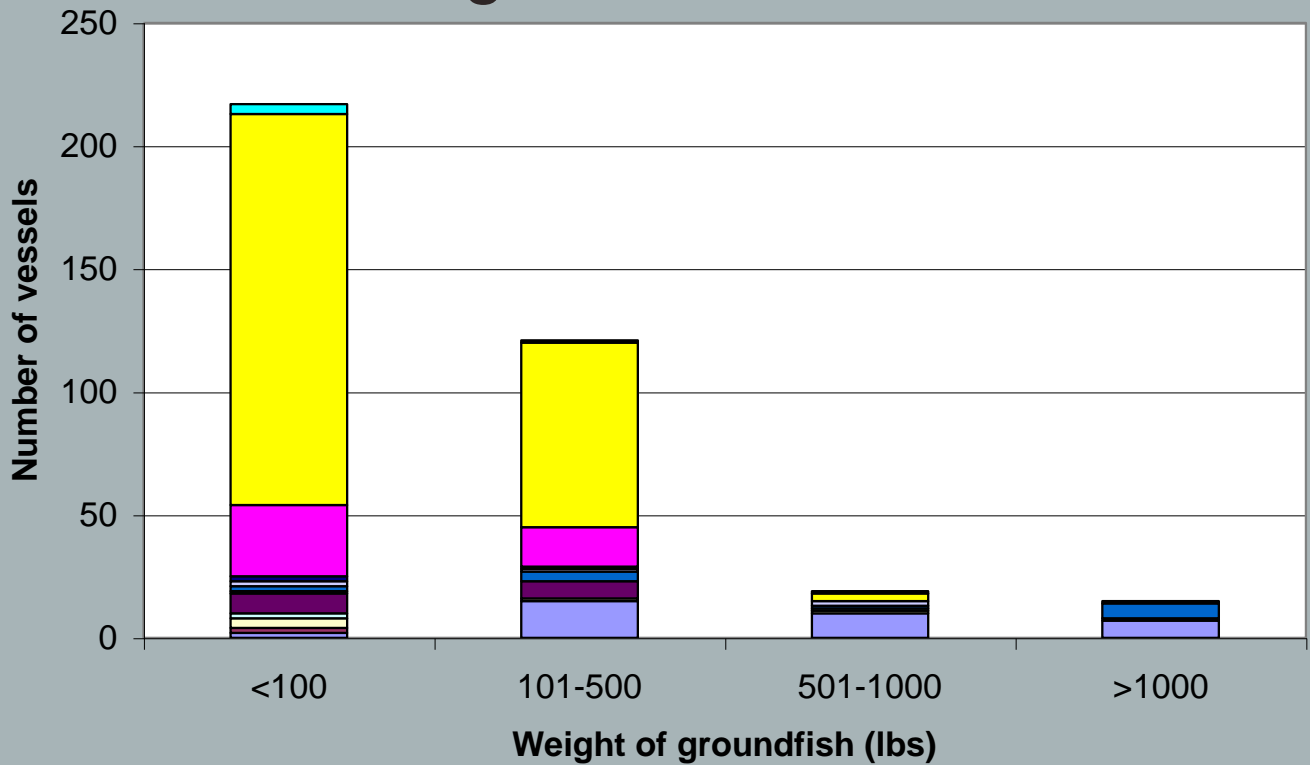


**1,123 vessels**

Approximate Number of Vessels



# Incidental OA fisheries, number of vessels grouped by annual landed weight of groundfish, 2004



# Alternative 10 - No Action Alternative -- No VMS requirements. Discontinue use of RCA management. Adjust trip limits and seasons accordingly.

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## Example trip limit tables In EA:

- Reduce opportunity for shelf species with no opportunity for shelf rockfish
- Shelf species allowed to be landed only with selective gears
- Nearshore species limits similar to 2005
- Lingcod limits reduced to prevent targeting in shelf areas
- DTS limits similar to 2005 except that sablefish limits would be reduced to prevent targeting in shelf areas
- Closures may be necessary if trip limits alone are not enough



## Recommendation to require VMS on Trawl Vessels

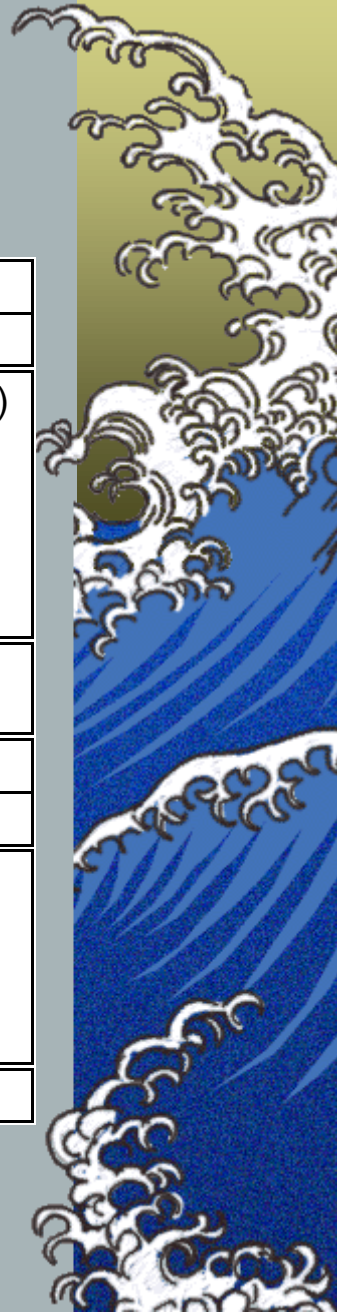
- The Council may choose to include trawl with any one alternative when it makes its final recommendations.
- If the preferred alternative is different from those analyzed here, the new alternative would be included in the EA prior to NMFS' final decision on the action.





# Estimated per vessel cost for VMS

Per Vessel Costs - Year 1		
Expense	Low	High
VMS unit	\$1,000	\$2,500 (\$3,800 with PC)
Installation	\$120	\$200
Installation reports	\$3	\$3
Transmission	\$192	\$730
Declaration reports	\$0	\$0
	<b>\$1,315</b>	<b>\$3,433</b>
Per Vessel Costs - Subsequent Years		
Expense	Low	High
Annual maintenance	\$60 (self )	\$160
Replacement	\$250	\$625
Transmission	\$192	\$730
Declaration reports	\$0	\$0
	<b>\$502</b>	<b>\$1,515</b>



# Projected VMS Costs to the fleet, by fishery and gear

<b>Costs to the Fleet</b> <b>(Thousands of dollars)</b>					
<b>Gear</b>	<b>Fishery</b>	<b>Vessels</b>	<b>Year 1</b>	<b>Subsequent years,</b>	<b>2004 exvessel value of</b>
			<b>VMS unit \$1000, installation \$200, transmission \$192</b>	<b>maintenance \$60, replacement \$250, transmissions \$192</b>	<b>groundfish (Thousands of dollars)</b>
Longline	Groundfish	282	393	142	1,411
	Pacific halibut	65	90	33	29
	CA Halibut	2	3	1	--
Pot	Groundfish	145	202	73	988
	Dungeness crab	21	29	11	1
	Prawn/shrimp	6	8	3	--
	Sheephead	21	29	11	7
Trawl	CA Halibut g/	40	56	20	36
	Sea cucumber	14	19	7	--
	Ridgeback prawn	23	32	12	1
	Pink shrimp	54	75	27	0
Line	Groundfish	590	821	296	2,504
	CA halibut	58	81	29	6
	HMS	10	14	5	0
	Salmon troll (coastwide)	234	326	117	20
	Salmon troll (excludes yellowtail or)	176	245	88	13
Net	HMS	25	35	13	3
	CA halibut	47	65	24	7

Each of the alternatives identifies and estimated number of vessels that are likely to be affected by the VMS requirement. These values are based on the average level of participation from 2000 to 2004, except for pink shrimp which was based on 2003-2004. It is important to point out that these values may not be the actual number of vessels that would continue to use a particular gear type if VMS requirements were adopted.

# Approximate number of vessels that would continue to land groundfish if a VMS system is required

Gear	Fishery	Number of Vessels Remaining With VMS						5-year average without VMS a/
		2000	2001	2002	2003	2004	5- year Average	
Longline	Groundfish	78 - 165	71 - 158	64 - 146	80 - 177	60 - 126	71 - 154	282
	Pacific Halibut	9	5	6	14	20	11	38
Pot	Groundfish	52 - 83	49 - 82	50 - 80	56 - 96	48 - 70	51 - 82	145
	Dungeness Crab	0	0	1	1	1	1	21
	Prawn	2	4	4	2	1	3	6
	California Sheephead	5	9	7	2	8	6	21
Trawl	California Halibut	10	10	9	1	6	7	23
	Pink Shrimp	45	38	28	1	1	23	33
	Ridgeback Prawn	6	5	3	2	1	3	13
Line	Groundfish	85 - 272	107 - 254	97 - 252	77 - 223	106 - 239	94 - 248	590
	HMS	0	0	0	0	0	0	10
	Salmon	1	4	3	0	2	2	234
	California Halibut (Line and Longline)	1	3	0	3	4	2	60
Net	CPS - Net	0	0	0	0	0	0	

a/ Vessel numbers represent those that landed groundfish

