

Proposed Expansion of the West Coast VMS Program into the Open Access Fishery

VMS as an enforcement tool was first proposed during discussion of depth based management strategies at the June 2002 Council meeting. The West Coast VMS Program was established at the September 2002 Council meeting with the establishment of Rockfish Conservation Areas. Rational for requiring VMS was based upon these elements: ensuring the integrity of the RCAs; effective enforcement of RCAs using traditional methods is particularly difficult; boundaries are defined by numerous points of latitude and longitude; management measures allow some gear types and target fishing in all or a portion of the conservation areas; and scarce state and Federal resources limit enforcement.

VMS became required for Limited Entry Trawl and Fixed Gear vessels on January 1, 2004. Through the first quarter of 2005 there are 310 Limited Entry permitted vessels with activated VMS units installed. More than 3.1 million position reports have been logged into the VMS database. 1150 groundfish declarations have been made for vessels fishing in the Rockfish Conservation Areas (RCA).

NMFS and the states held eight public meetings, between January 10, 2005 and March 5, 2005 to provide the interested public with information regarding the current VMS systems, the expansion of the VMS program into the open access groundfish fisheries, and to provide information about how and when to provide comments to NMFS and the Council. These meetings occurred in communities with relatively high open access groundfish landings: Westport, WA; Astoria, OR; Port Orford, OR; Fort Bragg, CA; Morrow Bay, CA; San Francisco, CA; and Los Alamitos, CA.

Estimated number of vessels under each Alternative by gear and target fishery

Under agenda Item B.5.b, NMFS Report April 2005, **Expanded Coverage of the Program to Monitor Time-Area Closures in the Pacific Coast Groundfish Fishery**, there are nine alternatives for consideration. Alternatives 2-7, all propose an implementation date of October 2005.

Unlike limited entry, which has a Federal permit requirement, open access operates under state permits. A Federal nexus needs to exist to impose a Federal regulatory requirement. In this case, the Federal nexus is a two-prong test. Did the fishing occur in Federal waters and was groundfish taken and retained or possessed? Both criteria need to be met to create the Federal nexus.

Reading across the page and down, Alternatives 2 through 5b were originally developed and prioritized by the Ad Hoc VMS Committee in October of 2002. During those discussions, the committee prioritized longline, pot, trawl, and line gear, as risks to overfished rockfish. Alternatives 2 through 5a build across gear types per that risk assessment.

The Enforcement Consultants developed alternative 5b in the fall of 2003. Alternatives 6a and 7 were developed by the GAP at the September 2004 Council meeting, and Alternative 6b was developed by the Ad Hoc VMS Committee at its last meeting in October of 2004.

Estimated number of vessels under each Alternative, by gear and target fishery

Gear	Target Species	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5A	Alt 5B Enf. Consult	Alt 6A Gap Majority	Alt 6B VMS Committee	Alt 7 Gap Minority
Longline	Groundfish		131	131	131	131	131	131	131	131
	Pac. Halibut		31	31	31	31	31	49	49	49
	CA Halibut		1	1	1	1	1	1	1	1
	HMS		2	2	2	2		2	2	2
Pot	Groundfish			37	37	37	37	37	37	37
	Dungeness crab			45	45	45		45	45	45
	Prawn/shrimp			8	8	8	8	8	8	8
	Sheephead			8	8	8	8	8	8	8
Trawl	CA Halibut				17	17	17	34	34	34
	Sea Cucumber				6	6	6	14	14	14
	Ridgeback Prawn				18	18	18	32	32	32
Line	Groundfish					738	738	738	738	724
	CA Halibut					105	105	105	105	105
	HMS					12		12	12	12
	Salmon Troll						177	177	43-134	177
Net	CPS							3	3	3
Other	Other							4	4	4
	TOTAL	0	165	263	304	1,159	1,277	1,400	1,266- 1,357	1,378

The most recent analysis of groundfish landings by non-recreational commercial fishing vessels is a rolling average of the past four years where statistics are available, compiled by NMFS NW Region. The following table shows the categories and number of vessels per category that have landed groundfish.

Summarized from Table 4.3.3.5, page 95, Number of vessels and exvessel revenues per vessel

		Number of vessels landing groundfish	Per vessel exvessel revenue of <u>groundfish</u> (\$)	Per vessel exvessel revenue <u>all fish</u> taken with identified gear (\$)
Longline	Groundfish	131	6,331	6,900
	Pac. Halibut	31	799	5,974
	CA Halibut	1	133	3,263
Pot	Groundfish	37	8,809	9,584
	Dungeness crab	45	2,555	74,275
	Prawn/shrimp	8	1,674	140,990
	Sheephead	8	1,584	47,357
Trawl	Sea cucumber	6	153	19,742
	CA halibut	17	729	12,050
	Ridgeback Prawn	18	740	41,750
Line	Groundfish	738	2,639	2,688
	CA halibut	105	225	184,367
	HMS	12	969	5,330
	Salmon troll (coastwide)	177	173	34,713
	Salmon troll (north only)	(134)	(176)	(29,251)
Net	CPS	3	358	67,026
Other	-----	4	114	31,240

Table 4.3.3.6 summarizes the number of vessels by groundfish ex-vessel revenue group. The take and retention or possession of groundfish would trigger the VMS requirement under all the various categories of vessels. Given a universe of 1345 open access vessels, vessels delivering 0-\$1000 of groundfish annually total 864 vessels, or 65% of the open access fleet; vessels delivering \$1000-2000 of groundfish total 149 vessels, or 11% of the open access fleet; vessels delivering \$2000-3000 of groundfish total 82 vessels, or 6% of the open access fleet; and vessels delivering over \$3000 of groundfish total 253 vessels, or 19% of the open access fleet.

Summarized from Table 4.3.3.6, page 98, Number of vessels by groundfish exvessel revenue group

		0-\$1000	\$1000-\$2000	\$2000-\$3000	>\$3000
Longline	Groundfish	33	18	13	68
	Pac. Halibut	21	6	2	1
	CA Halibut	1	0	0	0
Pot	Groundfish	10	4	4	20
	Dungeness crab	28	5	2	11
	Prawn/shrimp	6	1	0	1
	Sheephead	7	1	0	1
Trawl	Sea cucumber	6	0	0	1
	CA halibut	13	3	0	2
	Ridgeback Prawn	13	4	1	0
Line	Groundfish	429	105	59	146
	CA halibut	104	0	0	1
	HMS	10	1	1	1
	Salmon troll (coastwide)	176	1	0	0
	Salmon troll (north only)	(134)	(0)	(0)	(0)
Net	CPS	3	0	0	0
Other	-----	4	0	0	0
Total		864	149	82	253

VMS Unit Costs: VMS Unit cost incorporates the following components.

- Base Unit Costs
- Professional Installation Cost
- Vessel Computer cost if at sea catch reporting or other electronic data transfer is required.

Base Unit Costs for West Coast type approved units are as follows.

MTU Vendor	Model Number	MTU Cost
Satamatics	SAT101	\$1,000
Skymate/Stellar	ST2500G	\$1,200
Thrane and Thrane	3026	\$1,700
Thrane and Thrane	3022	\$2,500

Professional Installation Cost: \$200 per unit.

Vessel Computer: \$1,300 per vessel.

The range of VMS unit costs are categorized in three configurations from \$1,200 to \$3,800.

The following table summarizes the range of VMS costs.

Category of Vessel	\$1,200 per unit cost	\$2,500 per unit cost	\$3,800 per unit cost
Longline - groundfish directed a/	157,200	327,500	497,800
Longline - Pacific Halibut directed b/	37,200	77,500	117,800
Longline - CA Halibut c/	1,200	2,500	3,800
Pot - groundfish directed	44,400	92,500	140,600
Pot - Dungeness crab d/	54,000	112,500	171,000
Pot - prawn/shrimp e/	9,600	20,000	30,400
Pot - sheephead g/	7,200	15,000	22,800
Trawl - spot prawn f/	7,200	15,000	22,800
Trawl - CA Halibut g/	20,400	42,500	64,600
Trawl - Sea Cucumber h/	7,200	15,000	22,800
Trawl - Ridgeback Prawn i/	21,600	45,000	68,400
Line gear - groundfish directed j/	885,600	1,845,000	2,804,400
Line gear - CA halibut directed k/	126,000	262,500	399,000
Line gear - HMS l/	14,400	30,000	45,600
Line gear - Salmon troll (coastwide) m/	212,400	442,500	672,600
Net gear - CPS	3,600	7,500	11,400
Other gears	4,800	10,000	15,200
	\$1,614,000	\$3,362,500	\$5,111,000

VMS Communication Costs: The analysis of VMS communication costs is based on the following factors.

- Low cost communication package \$15.99/month (position reports only for 15 days of fishing per month) = \$192/year.
- 24 hour position reporting at \$2/day (8 cents per report) = \$730/year.

The following table summarizes the annual VMS communication costs based on the foregoing two scenarios.

Category of Vessel	Annual Communication Costs \$ 192 per year	Annual Communication Costs \$730 per year
Longline - groundfish directed a/	25,152	95,630
Longline - Pacific Halibut directed b/	5,952	22630
Longline - CA Halibut c/	192	730
Pot - groundfish directed	7,104	27010
Pot - Dungeness crab d/	8,640	32850
Pot - prawn/shrimp e/	1,536	5840
Pot - sheephead g/	1,152	4380
Trawl - spot prawn f/	1,152	4380
Trawl - CA Halibut g/	3,264	12410
Trawl - Sea Cucumber h/	1,152	4380
Trawl - Ridgeback Prawn i/	3,456	13140
Line gear - groundfish directed j/	141,696	538740
Line gear - CA halibut directed k/	20,160	76650
Line gear - HMS l/	2,304	8760
Line gear - Salmon troll (coastwide) m/	33,984	129210
Net gear - CPS	576	2190
Other gears	768	2920
	258,240	981,850

Total Open Access VMS Costs based on a 1,400 vessels fleet, (Alternative 6b).

\$1,200 Low	\$1,200 High	\$2,500 Low	\$2,500 High	\$3,800 Low	\$3,800 High
\$1,614,000	\$1,614,000	\$3,362,500	\$3,362,500	\$5,111,000	\$5,111,000
268,800	1,022,000	268,800	1,022,000	268,800	1,022,000
\$1,882,800	\$2,636,000	\$3,631,300	\$4,384,400	\$5,379,800	\$6,133,000

Conclusion

Given the number of open access vessels delivering less than \$1000 in ex-vessel value of groundfish (864, Table 4.3.3.6), and the initial cost of the VMS unit set at \$1,200, we anticipate a significant reduction of those participating in the Open Access Fishery under a VMS requirement, and project the high participate category reflected under Alternative 6b to be more in the range of 800 vessels, rather than 1,400.