



Backgrounder: Vessel Monitoring Systems

In 2003, the Council began using depth-based management for commercial and recreational groundfish fishing in order to avoid harvest of overfished groundfish species. This means that fishing is allowed or disallowed in certain depth zones. Depth-based management can be difficult to enforce with limited at-sea patrolling capabilities. In order to address this problem, managers are implementing “vessel monitoring systems,” or VMS. While VMS creates additional costs and responsibilities for both managers and fishermen, it allows more fishing than would otherwise be possible using current enforcement tools.



What is a Vessel Monitoring System?

A VMS system uses electronic transmitters, placed on fishing vessels, that transmit information about the vessel’s position to enforcement agencies via satellite. This allows someone on land, monitoring such transmissions, to determine if a vessel is in a closed area. There are several issues related to the implementation of VMS, including the variety of equipment types and associated costs, vessels’ ability to carry VMS, VMS operating requirements, vessel coverage, and collaboration with traditional enforcement techniques. However, as a new monitoring tool for West Coast groundfish fisheries, VMS will dramatically enhance rather than replace traditional techniques.

Background

To date, nearly 300 VMS units have been activated, generating more than 1.6 million position reports in conjunction with over 800 declaration reports. In September 2004, the Council began considering an expansion of VMS beyond the limited entry sectors included in the pilot program. The Council focused on including groundfish directed open access vessels in the next phase, as well as vessels in other fisheries such as Pacific halibut longline, salmon troll, and exempted trawl fisheries in California, which incidentally take groundfish or are subject to Rockfish Conservation Area restrictions.

In early 2005, National Marine Fisheries Service (NMFS) held eight meetings in coastal communities to provide the public with information on VMS and the potential expansion of the program into the open access groundfish fisheries. In April 2005, NMFS presented the Council with a draft environmental assessment analyzing the nine VMS coverage alternatives for the open access fishery. The Council recommended that further analysis be conducted, specifically that NMFS find ways to identify vessels that land insignificant amounts of groundfish and low-impact fisheries that might be exceptions to the VMS requirement. In addition, the Council expressed concerns about the cost of VMS systems being borne by industry. As a result, NMFS developed

three additional alternatives and broadened the analysis.

In June 2005, the Council approved measures to protect groundfish essential fish habitat. Although these measures were developed separately from the VMS program, VMS was considered as a way to monitor the new habitat protection areas.

In November 2005, the Council adopted a preferred alternative that greatly expands VMS requirements. The Council recommended VMS units for all commercial vessels that take and retain, possess or land Federally-managed groundfish species taken in Federal waters or in state waters prior to transiting Federal waters. Additionally, to enhance enforcement of closed areas for the protection of groundfish essential fish habitat, the preferred alternative requires VMS on all non-groundfish trawl vessels including those targeting pink shrimp, California halibut, sea cucumber, and ridgeback prawn.

Who does VMS apply to?

At present, VMS requirements only apply to some segments of the directed groundfish fishery. VMS units are required on limited entry trawl and limited entry fixed gear fleets (over 400 vessels). However, the Council has recommended VMS units for all commercial vessels that take and retain, possess or land Federally-managed groundfish species taken in Federal waters or in state waters prior to transiting Federal waters. Additionally, to enhance enforcement of closed areas for the protection of groundfish essential fish habitat, the Council recommended VMS on all non-groundfish trawl vessels including those targeting pink shrimp, California halibut, sea cucumber, and ridgeback prawn. The expanded VMS requirements are planned to coincide with regulations for protecting groundfish habitat, but are to be enacted no sooner than January 1, 2007.

NMFS is developing proposed regulations for the expanded VMS coverage recommended by the Council. The proposed rule will likely be published for public review in the spring or summer of 2007. VMS requirements will not likely be in effect before the fall of 2007.

NMFS office of Law Enforcement is planning public workshops to provide information on VMS requirements and equipment options. This schedule is designed to allow NMFS time to put the larger program into operation and to allow vessel owners time to purchase and install units. Additionally, fishermen with occasional commercial groundfish landings that primarily target non-groundfish species, such as salmon and tuna, will need to consider if the added costs of VMS are worth the extra revenue they receive from groundfish.

How much does VMS cost?

VMS transmitting units range in price from \$1,000 to \$5,800, with transmission costs of \$1.00 to \$5.00 per day. Transmission costs will likely increase with the length of the trip.

Who will pay?

Currently VMS costs are borne entirely by the vessel owners. The Council recommends that West Coast VMS requirements be Federally funded.

In January 2006, NOAA Assistant Administrator Bill Hogarth notified the eight Regional Fishery Management Councils that \$4.6M in Federal funds were available to reimburse vessel owners for VMS expenses. In February 2006, the Council sent a letter to Dr. Hogarth recommending mechanisms under which West Coast vessels could receive an equitable share of the available funds. In a July 21, 2006 Federal Register notice, NOAA announced these Federal funds were available to vessel operators and owners who purchased VMS equipment "for the purpose of complying with fishery regulations requiring the use of Vessel Monitoring Systems (VMS)

which became effective during FY 2006.” This provision excludes West Coast vessels as the existing program for limited entry vessels became effective in 2004 and the expanded program for open access vessels is anticipated to become effective in 2007. The Council will continue to recommend and pursue Federal funding of West Coast VMS requirements.

From a broader management perspective, the costs of VMS can be favorably compared to the cost of more aerial and at-sea surveillance needed to achieve the same level of monitoring.

What are the safety implications?

Although not primarily a safety device, VMS may contribute to increased vessel safety. Some VMS transceivers allow constant two-way communication between the vessel and shoreside monitors. If an accident were to occur, the recorded track of the vessel may aid rescue efforts. Some units are also capable of sending text messages or distress calls.

What types of VMS systems have been approved, and where can I get them?

A list of VMS systems and distributors is available on the Council website at <http://www.pcouncil.org/groundfish/gfvms.html>.

For more information:

- Council contact: Mike Burner, toll free (866) 806-7204
- NMFS Northwest Region contacts: Becky Renko or Yvonne deReynier, (206) 526-6140
- NMFS Northwest Region Law Enforcement: Dayna Matthews (360) 753-4409
- NMFS Northwest Region Enforcement website: www.nmfs.noaa.gov/ole/nw_northwest.html
- Council website on VMS: www.pcouncil.org/groundfish/gfvms.html

Last updated May 1, 2007