

*Science, Service, Stewardship*



# HMS Vessel Monitoring Systems (VMS)

May 13, 2010

**NOAA  
FISHERIES  
SERVICE**

NOAA



# Vessel Monitoring Systems

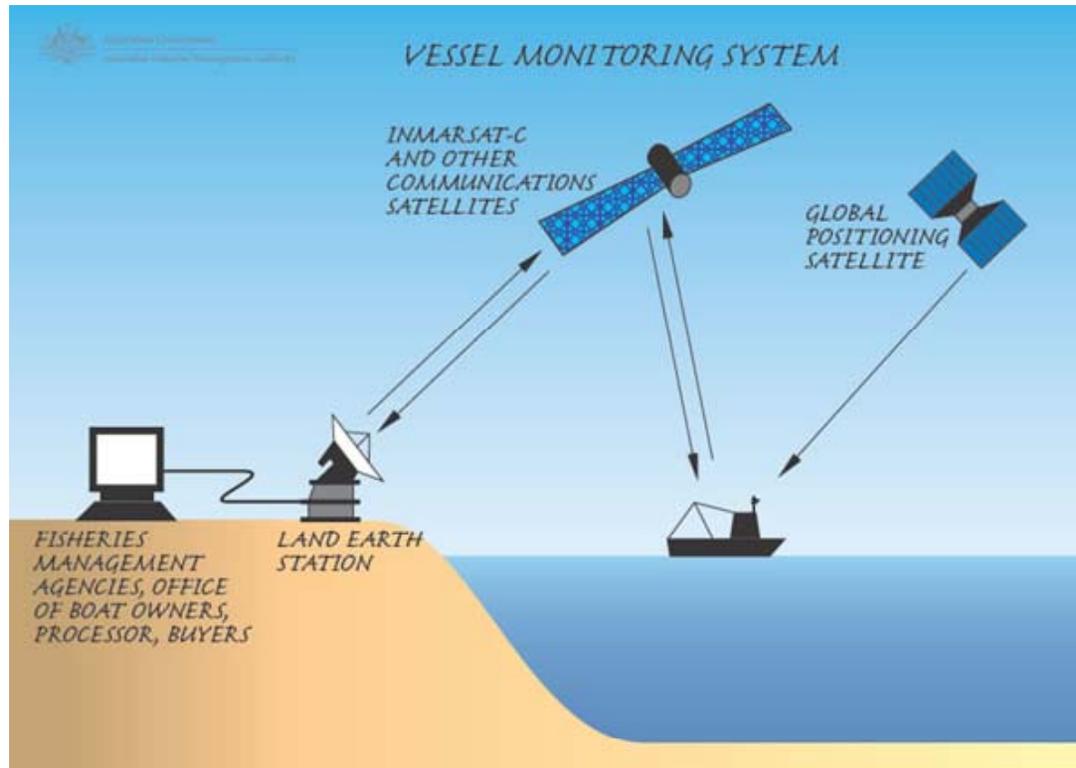


Image copied May 10, 2010 from <http://www.afma.gov.au/information/students/methods/images/vms.jpg>



# VMS Overview

VMS provides law enforcement a tool to assist agencies in the monitoring, control, and surveillance of managed fisheries

- Enhances enforcement of time and area regulations with greater coverage
- Provides evidence for documenting both violations and compliance
- Provides surveillance patrol flexibility
- Documents the position of vessels, then analyzes and presents the information for response
- Provides logbook verification



# VMS Overview

VMS also provides:

- Safety: Certain models can send distress calls from VMS unit
- Communications: secure, inexpensive telex, email or fax
- Weather and distress monitoring
- Data transmission: send catch reports, etc.
- Navigation: send position from VMS unit to navigational display
- Potential exculpatory evidence



# VMS Overview

VMS does not:

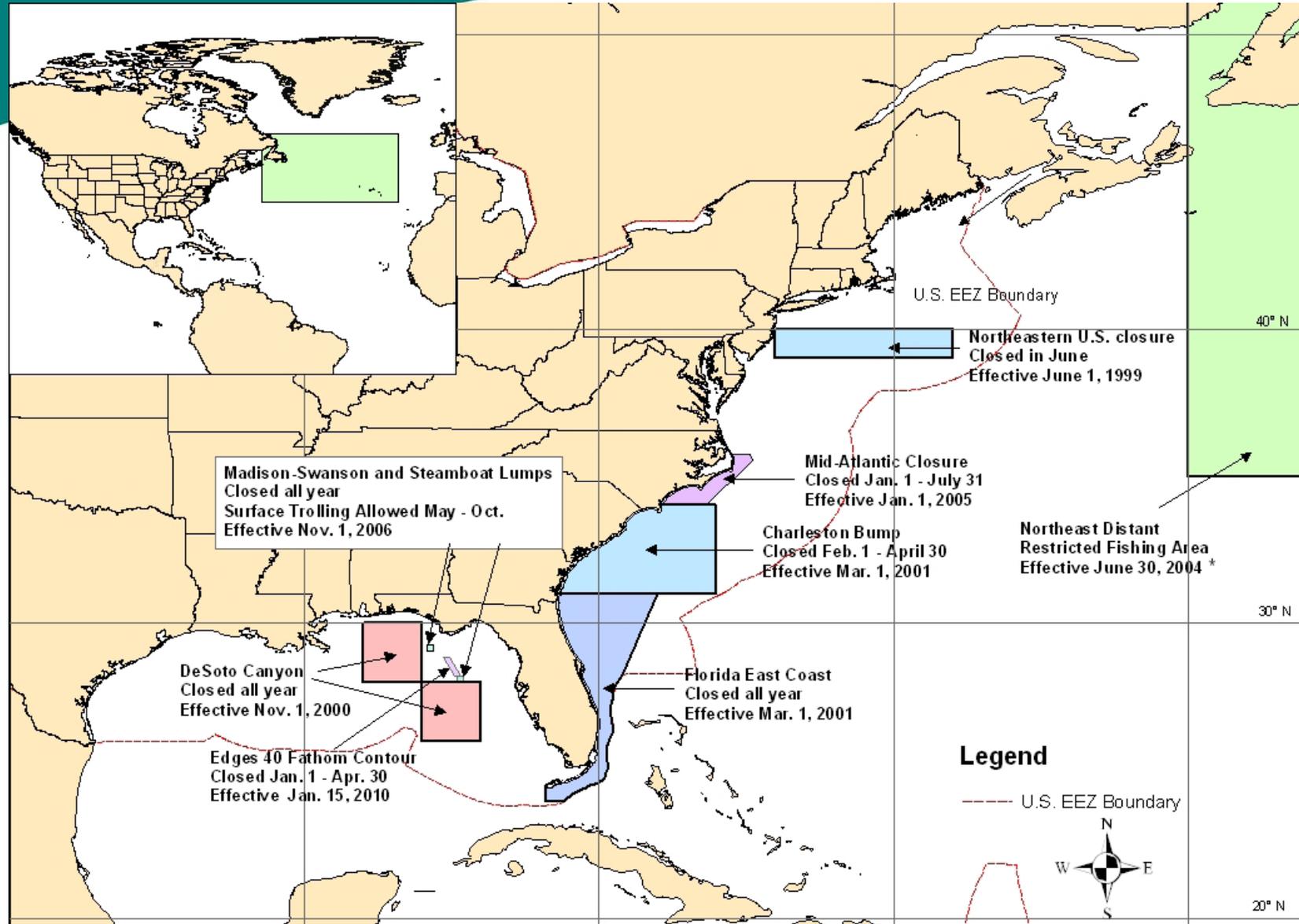
- Eliminate need for traditional air & sea surveillance
- Reduce overall enforcement costs
- Reduce investigators' work load



# HMS VMS requirements

- **2003 September 1:** Permitted HMS vessels away from port with pelagic longline gear on board
- **2004 November 15:** Vessels issued a directed shark LAP that are away from port with a gillnet on board during the right whale calving season specified in the Atlantic Large Whale Take Reduction Plan
- **2005 January 1:** Vessels issued a directed shark LAP that are away from port with bottom longline gear on board, are located between 33°00 'N lat. and 36°30'N lat., and the mid-Atlantic shark closed area is closed to bottom longline fishing

# HMS Closed Areas





# HMS VMS requirements

- Must have NMFS-approved VMS devices installed and operating whenever leaving port, from 2 hours prior to departure until returning to port
- While at sea, the unit must operate without interruption
- After a fishing trip during which interruption of automatic position reports has occurred, the vessel's owner or operator must replace or repair the VMS unit prior to the vessel's next trip
- Repair or reinstallation of a VMS unit or installation of a replacement, including change of communications service provider, shall be in accordance with the checklist provided by NMFS and require the same certification



# HMS VMS requirements

- Vessels subject to the VMS requirements must allow NMFS, the USCG, and their authorized officers and designees access to the vessels' position data obtained from the VMS at the time of or after its transmission to the vendor or receiver, as the case may be.
- Position reports are secure from vessel to end user. Enforcement's database and monitors are secure.



# Current VMS Systems

- Four VMS units are currently type-approved for use in HMS fisheries
  - Thrane & Thrane TT-3026D "Gold Package" - Sold and serviced by GMPCS Personal Communications: (FR / Vol. 69, No. 73 / Apr. 15, 2004) <http://www.gmpcs-us.com/vms-information.htm>
  - SkyMate Stellar ST2500 (with messaging terminal) [http://www.skymate.com/user\\_groups/commercial\\_fishing.html](http://www.skymate.com/user_groups/commercial_fishing.html)
  - Faria Watchdog 750 (with messaging terminal) (FR / Vol. 72, No. 38 / Feb. 27, 2007) <http://vmstracking.fariawatchdog.com/> this is the most modern and functional of the VMS HMS.
  - CLS America - Thorium TST-100 (only provides ship's position info via iridium) <http://www.clsamerica.com/solutions/fisheries-management.html>



# Reimbursement for VMS System Purchases

- On a [July 21, 2006 Federal Register notice](#), NOAA announced 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 VMS which became effective during FY 2006.
- In 2008, NMFS announced revisions allowing up to \$3100 reimbursement towards the purchase of a VMS unit to comply with fishery regulations requiring the use of a VMS unit.



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- In 2008, NMFS announced revisions allowing up to \$3100 reimbursement towards the purchase of a VMS unit to comply with fishery regulations requiring the use of a VMS unit.
- Currently, HMS fishers are not eligible for this reimbursement as the requirements for HMS VMS predate FY 2006



# Concerns with present HMS VMS Requirements

- HMS VMS are not required to be installed by a certified marine electrician
- The targeted HMS cannot be identified
- The HMS fishing gear in use cannot be determined
- The older units do not indicate whether they are powered on or off
- The older units are limited in functionality



# Options to Address Concerns

NMFS is considering several options to address issues:

- Require approved installers
- Report gear and/or targeted HMS through VMS at start of trip
- Newer VMS units indicate powered status
- Increase functionality such as messaging, utilization of less expensive services, report landings, increased safety options, etc.
- Enable HMS fisherman to be eligible for reimbursements for equipment purchases
- Others?