

Vessel Monitoring System Pilot for the 2011-12 North Coast Red Sea Urchin Fishery

Thank you for volunteering to pilot a Vessel Monitoring System (VMS) for the 2011-12 north coast red sea urchin fishery.

DFO will be evaluating several aspects of the Iridium VMS unit and would like your feedback on the system at the end of the season.

Why VMS?

The Department has received numerous complaints about the lack of monitoring for the north coast red urchin fishery since the On-Grounds Monitor program was suspended in 2007. Illegal harvest activity on the fishing grounds last season further highlighted this lack of monitoring.

Due to the large coastal area and the frequency of movement of the north coast urchin fleet, vessels can be difficult to find for fishery officers. Time and money are wasted in efforts to locate vessels in the fleet. The VMS will send near real-time location information to fishery managers and fishery officers, making planning enforcement patrols more efficient.

What is VMS and how does it work?

VMS is a satellite based, near real time, positional tracking system. These devices consist of a Global Positioning System (GPS) and a satellite data transmitter that provides information on vessel name and location. Data from the VMS is sent to a satellite, relayed to a station on the ground and then sent to the designated vessel-monitoring centre in near real time. **Your location data will be kept confidential by the Department.** Access to your VMS location data will be made available to fishery officers and fishery managers and will be used for planning enforcement patrols and for in-season management purposes. D&D Pacific Fisheries may be given access for in-season management use.

VMS Pilot Program Requirements:

- The VMS must be the DFO approved Iridium system by ROM communications. This system has the most reliable satellite coverage and is accepted into the existing VMS data system already established by the Department.
- The vessel(s) equipped with the VMS must be a vessel actively engaged in fishing (not a live-aboard).
- Both North Coast fleets must have at least one vessel equipped with a VMS. Exception: Designated Non-VMS areas.
- Vessels equipped with the VMS must check that the system is operational prior to commencing fishing activity.
- If the VMS stops working for any reason, the fleet must cease fishing activity unless there is another vessel in the fleet with a VMS. When a VMS stops transmitting, email alerts are sent to fishery managers and fishery officers.

- If a fleet does not have at least one vessel with a functioning VMS, fishing activity may be suspended by closing the area.
- The VMS unit must stay on for the entire red urchin season unless the vessel has ceased fishing for the remainder of the season.
- For the pilot program the VMS unit may be installed by the vessel owner/operator.

VMS Program Evaluation

At the end of the 2011-12 season the Department will be evaluating the VMS pilot. Some of the aspects that will be evaluated include:

- How well did the VMS work on open skiffs? How did you keep the system waterproof? If there were any issues, could any solutions be suggested?
- The Iridium VMS unit is equipped with a back-up battery that allows it to continue to operate in the event of a power failure or a period of vessel inactivity. Did you have any issues with the battery back up system?
- In general how reliable is the Iridium VMS unit? To your knowledge did it cease functioning at any time during the season?