


ESMOC: Protecting Great Lakes waters

The Enbridge Straits Maritime Operations Center (ESMOC) represents a new, unprecedented level of maritime monitoring capability for a commercial company. With trained staff working around the clock, the ESMOC coordinates an overlapping array of marine safety systems in Michigan's Straits of Mackinac to prevent an anchor strike on our Line 5 dual pipelines, which currently travel across the bottom of the Straits, until a replacement section of Line 5 is housed securely within the Great Lakes Tunnel.




1 **Wireless communication**

Enbridge has invested in a 24/7 marine monitoring and alert system, which identifies vessels entering the Straits and sends a safety message, notifying the crew of the “no anchor” zone.




2 **Radio communication**

ESMOC contacts larger shipping vessels by radio, to confirm their anchor is stowed, when visual or infrared inspection is not possible.




3 **Radar**

High-resolution radar scanners for target detection and tracking, providing the ESMOC with enhanced situational awareness under all maritime conditions. Added ice detection and wave monitoring systems provide real-time data for the local operational area.



4 **High-definition video feeds**

The ESMOC team monitors video feeds from a series of multiple high-definition cameras being installed at strategic locations throughout the Straits.



5 **Weather monitoring tools**

Weather monitoring tools continually transmit wind speed and wave height data to the ESMOC. When waves reach 8 ft or greater for a sustained period, Enbridge voluntarily idles the Line 5 Straits crossing.