

# Clean and green marine machine





Patrolling the gateway to a world heritage listed island brings special environmental responsibilities to the usual duties of the Queensland's Water Police.

That's why a major refit of Hervey Bay Water Police vessel SW Gill has placed environmental impact, emission reduction and fuel economy at the top of the modification list.

"Protecting the environment is everybody's concern and the Water Police have an important role in ensuring sensitive environmental issues pertaining to the operation of police vessels are closely monitored," said Officer in Charge Marine Technical Section Senior Sergeant Owen Finlay.

"We are very well aware of our environmental responsibilities and are determined to be seen leading the way by doing the right thing."

Hervey Bay is home to a diverse marine ecology and is internationally recognised as the gateway to work heritage-listed Fraser Island.

Water Police operations in this pristine natural sanctuary extend out as far as the Great Barrier Reef and patrols can be lengthy.

Along with sister ships PG Kidd and George Doyle, the SW Gill was commissioned in 2002.

The SW Gill was due for replacement in 2009 at an expected cost of \$1.5 million.

When the Police Service instead committed to a \$265,000 refit of the 12-metre aluminium catamaran the specifications demanded fitting an environmentally friendly and compliant toilet treatment system, a new bilge and fire fighting system.

The SW Gill was powered by petrol Mercruiser stern-drives but after careful consideration and extensive research by the Marine Technical Section, the full refit of the vessel included replacing the petrol engines with diesel powered engines.

The new vessels will be powered by advanced fourstroke diesel technology.

"These new engines meet the stringent American EPA Tier 2 exhaust specifications for all present and future emission requirements," Senior Sergeant Finlay said.

"They also provide better fuel efficiency through electronic monitoring and control and

are already being proven within the present marine environment."

The old Mercruiser engines and drives were replaced with electronic Cummins diesels and new generation, military spec Konrad drives.

The refit will significantly improve fuel consumption, reduce maintenance downtime, increase reliability, widen the operational scope for the vessel, reduce emissions and extend the operational life of the vessel by five to seven years.

The refit also included sandblasting and re-painting the hull and superstructure and fitting a diesel powered 240 volt generator.

"Significantly, the Marine Technical Section has undertaken the refit in-house, further reducing extensive costs to the service," Senior Sergeant Finlay said.

"The outcome is a safe, seaworthy and professional police vessel providing effective and efficient policing capabilities to the Hervey Bay community."

The Marine Technical Section is part of the Specialist Services Branch - Operations Support Command and manages the acquisition and maintenance of all Queensland Police vessels.

Although only a small team, the seven Marine Technical Section staff combined has extensive expertise, experience and qualifications in all aspects of the marine industry and Police Service.

