

## **Additional Information on the Environmental Sustainability of Tropical Aquaculture in the Northern Territory.**

**For out-of-session submission to the Sessional Committee on Environment and Sustainable Development:**

**The following information is submitted for consideration by the committee in addition to information already supplied in writing and in person.**

### **Aquaculture Licensing:**

In accordance with the Fisheries Act 1988 all aquaculture operations in the NT must hold a licence to operate. The licence is issued by the Fisheries Division of the Department of Regional Development, Primary Industry, Fisheries and Resources ('Fisheries') and is only issued after all other requirements and entitlements such as land or sea tenure, environmental assessment, an Environmental Management Plan (EMP), waste discharge licence, Development Consent and sacred sites clearance, have been obtained.

Fisheries helps new applicants through the government approvals process by offering case management to assist liaison between the proponent and other agencies such as the Department of Natural Resources, Environment, Arts and Sport (NRETAS) for environmental assessment, EMP and waste discharge, and the Department of Planning and Infrastructure for development assessment, crown leases etc.

### **Environmental Assessment:**

When an applicant submits a Notice of Intent to establish an aquaculture farm, this information is forwarded to NRETAS who use the submitted information as the basis to establish the appropriate level of environmental assessment.

### **Perceptions of Aquaculture:**

The Department is actively working to provide factual information on the real environmental impacts of tropical aquaculture. Impacts of aquaculture can tend to be exaggerated and /or the wrong risks attributed to the industry.

This is not to say that aquaculture has no impact, however it is fair to say that correctly sited and managed aquaculture ventures generally present low or manageable environmental risk. The pearling industry in particular has often been given an environmental risk status higher than is warranted. Numerous scientific environmental studies of pearling highlight its benign nature.

**Port Hurd Barramundi Farm:**

As presented during the verbal briefing, the Port Hurd barramundi farm, operated by Marine Harvest, ceased to operate in 2006.

The environmental monitoring conducted during the farm's operation (some five years) did not show any adverse environmental impacts from the farm. Of note during the monitoring program was the fact that the nutrients discharged from the farm were virtually undetectable less than 200 metres away from the farm. This implies the nutrients were assimilated and dispersed extremely rapidly. There was also no detectable build-up of solid wastes from the farm at any stage.

The well publicised release of fish as a result of storm surge at the Port Hurd farm was investigated by officers of the Department in 2006. It was found that the majority of escaped fish stayed in the immediate vicinity of the aquaculture cages. Many of the escaped fish were caught by a commercial barramundi fisher and others (the smaller fish) were consumed by natural predators (including larger barramundi) in the area. Populations of bait fish and prawn species appeared to be unaffected by the escaped fish (likely due to the fact that the fish were trained to a pellet diet not a live diet).

Recent anecdotal evidence from Port Hurd reported by recreational fishers indicates that the wild barramundi population appears to have returned to pre-release numbers, some 18 months after the release. A follow-up survey of Port Hurd by Departmental Officers is planned for December 2008.

**Small-scale aquaculture**

As noted by the Member for Nelson during the presentation on aquaculture to the committee, small-scale aquaculture, in particular the breeding of ornamental fish and plants, shows promise for further development. Licensing for small-scale aquaculture currently comes under the same rules and approvals process as large-scale aquaculture. It is proposed to review small-scale aquaculture licensing with a view to simplify, as much as possible, the licensing process for small-scale ventures.

Additional Information prepared November 27, 2008

Glenn Schipp  
Director of Fisheries Development  
DRDPFR  
8999 2213