Healthy Rivers, Healthy Communities

Presenting current research in the Goulburn Broken Catchment

Development of Best Practice Environmental Management Guidelines for the Salmonid Aquaculture Industry

Fiona Gavine and Brendan Larkin

Primary Industries Research Victoria, Department of Primary Industries, Snobs Creek / Fiona.gavine@dpi.vic.gov.au

Abstract:

The freshwater salmonid aquaculture industry is the most valuable sector of the Victorian aquaculture industry. It has been established for over 20 years and produces juvenile fish for restocking rivers as well as market sized fish for human consumption. However, there have been concerns that effluents and other waste streams from salmonid aquaculture can have an impact on the environment in which the farms are located. Since these farms are reliant on high quality water and are often located in relatively pristine environments, it is important for industry to demonstrate to the wider community that it takes its environmental performance seriously and is operating in a responsible and sustainable manner. This paper will present the process for developing Best Practice Environmental Management Guidelines with industry and government agencies as well as the key areas that could deliver improvements in environmental performance.

Key Findings:

- The guidelines identified environmental issues associated with the salmonid aquaculture industry in Victoria through extensive consultation with industry and various Regulatory Authorities.
- Best practice measures that industry could implement to reduce environmental impacts were defined and documented as well as data collection and reporting requirements to substantiate environmental performance.
- The role of Environmental Management Systems (EMS) in assisting farmers to assess their current environmental performance, plan for future improvements and demonstrate compliance with environmental objectives was evaluated. Key elements that should be included in an EMS for salmonid farmers were documented.

Implications:

• During the course of the project it became clear that there was very little recent data on actual impacts of the salmonid aquaculture industry on the environment - especially the receiving waters of the Goulburn river and tributaries which supports around 85% of the industry. A study has been proposed to conduct a risk assessment for salmonid aquaculture on the Goulburn river which, if funded, will be used to develop site-specific key performance indicators for trout farms on the Goulburn river and key tributaries.

Further Reading:

 Gavine, F. Larkin, B., Ingram, B. and Edwards, M. 2004 (In press). Best Practice Guidelines for the Salmonid Aquaculture Industry. Department of Primary Industries, Fisheries Victoria Research Report Series No.24, Snobs Creek, Victoria.