

IMPACT



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Aquaculture Effluent Task Force

The Situation

Following a lawsuit and consent decree, EPA announced in 2000 the decision to promulgate national effluent limitations and guidelines for aquaculture facilities. The proposed rule EPA published in 2002 provided insignificant environmental benefits, but placed a significant economic burden upon small aquaculture businesses. EPA's economic analysis of the proposed rule's impact indicated an estimated 44% of flow-through aquaculture facilities would go out of business. In addition, all of the aquaculture facilities within scope of the proposed rule were already regulated through the National Pollutant Discharge Elimination System (NPDES) permit.

Our Response

In response to EPA's decision, the Joint Subcommittee on Aquaculture, which reports to the National Science and Technology Council's Committee on Science, formed the Aquaculture Effluent Task Force (AETF). The AETF was chaired by USDA's Cooperative State Research, Education, and Extension Service and included participation by 12 federal agencies, all national aquaculture associations, three aquaculture professional societies, and environmental organizations. The AETF provided technical consultations, scientific reviews of draft materials, and current knowledge of diverse aquaculture production systems, species management, and sources of data and research information. The estimated in-kind support of AETF's efforts has exceeded \$550,000.

University of Idaho Extension chaired the Trout Production Flow-through Systems Subgroup,

coordinated and developed the response to EPA's rulemaking on behalf of the AETF, United States Trout Farmers Association, Idaho Aquaculture Association, and other state trout associations. Idaho is the number one trout producing state in the nation, accounting for 70% of domestic trout production. The rulemaking consistently focused on flow-through systems and the greatest economic costs associated with the rulemaking fell upon trout growers.

Outputs (given to EPA) generated by this effort include:

- Engle, C.R., S. Pomerleau, **G. Fornshell**, J.M. Hinshaw, D. Sloan, & S. Thompson. 2004 (*in press*). The Economic Impact of Proposed Effluent Treatment Options for Production of Trout *Oncorhynchus mykiss* in Flow-through Tanks. *Aquacultural Engineering*.
- MacMillan, J.R., R. Schnick, & **G. Fornshell**. 2004 (*under review*). Volume of Antibiotics Sold (2001 and 2002) in US Domestic Aquaculture Industry. *Perspectives in Veterinary Medicine*.
- Tucker, C., S. Belle, C. Boyd, **G. Fornshell**, J. Hargreaves, S. LaPatra, S. Summerfelt, & P. Zajicek. 2003. Best Management Practices for Flow-through, Net-Pen, Recirculating, and Pond Aquaculture Systems. 98 pages.
- Hinshaw, J.M. & **G. Fornshell**. 2002. Effluents from Raceways. Pages 77-104 in *Aquaculture and the Environment in the United States*. J.R. Tomasso (editor). U.S. Aquaculture Society, A Chapter of the World Aquaculture Society, Baton Rouge, Louisiana.

Program Outcomes

On June 30, 2004 EPA signed the final rule and on August 23, 2004 the final rule was published in the Federal Register. The final rule is quite different from the proposed rule EPA published in September 2002. There are no numeric limitations and no monitoring requirements. The final rule requires Best Management Practices (BMPs) and applies to approximately 242 facilities nationwide, including about 55 facilities in Idaho. The efforts of the AETF were effective in persuading EPA to promulgate science-based effluent limitations and guidelines. The financial impact of the final rule for Idaho fish farmers is for all practical purposes nil. The current NPDES discharge permit for Idaho fish farmers has required BMPs since 1999. The financial impact for aquaculture facilities, both commercial and non-commercial, outside of Idaho is estimated at \$1.1 million, a reduction of about \$2 million compared to the original requirements in the proposed rule. EPA's estimated monetized benefit ranges from \$66,000 to \$99,000.

For More Information

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