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November 22, 2010

Division of Dockets Management (HFA-305)
5630 Fishers Lane, Rm 1061
Rockville, MD 20852

RE: Docket No. FDA-2010-N-0385
Labeling of AquaAdvantage genetically engineered salmon

The Institute for Fisheries Resources (IFR) is a non-profit 501(c)(3) organization with headquarters in San Francisco, California. Established in 1993 by the Pacific Coast Federation of Fishermen's Associations (PCFFA), IFR is responsible for carrying out the fishery research and conservation needs of working fishing men and women.

We strongly oppose the approval of genetically engineered salmon and urge FDA to reject GE salmon. GE salmon pose serious risks to wild populations of fish and any approval of GE fish will have direct and indirect effects on wild stocks as well as wild fisheries. Before approval the FDA's should also address the potential economic impacts that would result from GE salmon approval and the unintended escape of GE salmon.

As the AquaBounty transgenic salmon is the first genetically engineered (GE) animal intended for human consumption, the importance of thorough human health studies and consumer opinion cannot be understated. This animal should not be approved for human consumption until and unless further study, including a full environmental impact statement, indicates that they are safe for consumers, wild salmon populations and the environment.

SHOULD FDA DECIDE TO APPROVE THE AQUADVANTAGE GE SALMON DESPITE OVERWHELMING OPPOSITION, CLEAR, MANDATORY LABELING IS AN ABSOLUTE MUST when marketing to fish farmers, fish retailers and food companies, restaurants, and when marketed to consumers to allow consumers to make informed purchasing decisions, and to avoid confusion in the marketplace.

We urge the FDA to consider the impact of not labeling on the ability of the US to sell salmon to other nations and US customers. Without labeling, all US farmed salmon (if the AquaAdvantage Salmon is permitted to be grown in the US) will be seen as genetically engineered. This will damage sales for all US salmon products. Labeling would allow those

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nations and consumers who wish not to buy genetically engineered products, a clear choice in the market place.

According to a recent [Food & Water Watch poll](#) conducted by Lake Research Partners, 91% of Americans felt FDA should not introduce GE fish and meat into the marketplace. Additionally, a [Consumer Reports poll](#) shows that 95% of respondents said they thought food from genetically engineered animals should be labeled. You can view our updated overview of recent polls [HERE](#).

Millions of farmed salmon have escaped from open-water net pens, outcompeting wild populations for resources and straining ecosystems. A potential escape of GE salmon will both directly and indirectly affect the livelihoods of the tens of thousands of salmon fishermen and fishing communities in the U.S. and will have ripple effects throughout markets.

The seafood industry in Alaska is the largest private sector employer creating 56,600 direct and 22,000 indirect jobs annually, more jobs than oil and gas and mining combined.ⁱ In 2007, the overall value of the Alaska seafood industry alone was over \$1.5 billion paid to fishermen and \$3.6 billion at the wholesale level. Total 2007 exvessel value for the non-Indian commercial salmon fisheries within Washington, Oregon and California was \$11.6 million.ⁱⁱ Research published by Andrew Dyke and U. Rashid Sumaila note that wild fisheries can have significant economic impacts in other sectors as well, such as agriculture, forestry, manufacturing and financial services, observing that “changes in the fishing industry could affect livelihoods in and the viability of many economic sectors.” The researchers found that regionally, every \$1 of fisheries-sector output supports more than \$3 of output throughout the North American economy.ⁱⁱⁱ

The American Sportfishing Association (ASA), the trade association representing the sportfishing industry, released economic information indicating that a full recovery of California’s Central Valley Chinook salmon runs can potentially provide \$5.7 billion in new economic activity for the state and the creation of 94,000 new jobs. It is estimated that the current shutdown of the salmon fishery is costing California \$1.4 billion in lost economic activity and 23,000 jobs in both the commercial and recreational saltwater fishing sectors.^{iv} As ASA suggests, reinvestment in wild fisheries could generate thousands of new jobs and billions of dollars in revenue. Similar investment to restore native Atlantic salmon fisheries in the Northeast could have the same effect in generating new jobs and additional revenue.

Additionally, the forage and fishmeal demands of salmon farms have additional indirect effects on fisheries and place an additional stress on wild stocks that is difficult to quantify.

We strongly urge you to stop the approval process immediately to allow for review and examination of the various concerns associated with genetically engineered animals including economic and environmental impacts.

Sincerely,



Sara Randall

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Director of Programs

ⁱ Northern Economics of Anchorage (January 2009) *The Seafood Industry in Alaska's Economy*. Commissioned by the Marine Conservation Alliance, At-sea Processors Association and the Pacific Seafood Processors Association.

ⁱⁱ Pacific Fishery Management Council. 2008. *Review of 2007 Ocean Salmon Fisheries*. (Document prepared for the Council and its advisory entities.) Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 200, Portland, Oregon 97220-1384

ⁱⁱⁱ Dyck, A.J. and U.R. Sumaila. 2010. Economic impact of ocean fish populations in the global fishery.

Journal of Bioeconomics. DOI: 10.1007/s10818-010-9088-3 [See attached summary by PEW Environment Group]

^{iv} See "Economic Data Supports Efforts to Recover California's Salmon Fisheries" (August 2009) Commissioned by the American Sportfishing Association and produced by Southwick Associates.

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