

HJR

28

<TARGET><BILL>HJR 28</BILL><SUBJECT>HJR
28</SUBJECT><COMM>HFSH29</COMM></TARGET>

ALASKA STATE LEGISLATURE



REPRESENTATIVE GERAN TARR

House Bill 258 and House Joint Resolution 28: Legislation to Protect Wild Alaska Salmon and the Commercial Fishing Industry during these Challenging Economic Times

Sponsor Statement

House Bill 258 and House Joint Resolution 28 are designed to protect our wild Alaska salmon and support our thriving, sustainable fisheries. HB 258 will prohibit the sale of genetically modified salmon, known as "Frankenfish," in the State of Alaska. HJR 28 denounces the recent approval of AquaBounty's AquAdvantage genetically engineered salmon. This is the first time the United States Food and Drug Administration has approved a genetically modified animal for human consumption.

The State of Alaska prides itself in producing the highest quality wild seafood. The commercial fishing industry is the largest private sector employer and annual seafood exports are worth over \$3.25 billion. Residents fill their freezers and smoke houses with healthy wild seafood. This industry and way of life would be jeopardized with the inevitable, accidental release of transgenic fish into the wild.

In addition to the impact to the commercial, sport and subsistence fishing, the long-term health effects of consuming genetically engineered salmon are unknown. A majority of state residents oppose the approval of the genetically engineered salmon and more than 2,000,000 nationwide submitted comments opposing the approval of AquaBounty's genetically engineered salmon. Additionally, 40 members of congress have voiced opposition.

HB 258, "An Act prohibiting the sale of genetically modified fish or fish product," would ban stores from selling the newly approved AquaBounty genetically engineered salmon and seafood products in Alaska. HJR 28 is designed to raise awareness about the importance of wild seafood and the commercial fishing industry while highlighting the concerns regarding the long term safety of consuming genetically engineered food products.

In the State of Alaska, where sustainable wild caught seafood is such an important part of life, prohibiting the sale of genetically modified fish and fish product and opposing the approval of genetically engineered salmon nationwide is the right thing to do for both consumers and the fishing industry.

LEGAL SERVICES

DIVISION OF LEGAL AND RESEARCH SERVICES
LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
FAX (907) 465-2029
Mail Stop 3101


State Capitol
Juneau, Alaska 99801-1182
Deliveries to: 129 6th St., Rm. 329

MEMORANDUM

February 5, 2016

SUBJECT: Corresponding whereas language
(CSHJR 28(FSH); Work Order No. 29-LS1213\H)

TO: Representative Louise Stutes
Attn: Reid Harris

FROM: Emily Nauman 
Legislative Counsel

Enclosed please find a resolution related to genetically engineered salmon. You requested that a resolve clause be added related to the delay of the appointment of the commissioner of the United States Food and Drug Administration. Generally, a resolve does not introduce new facts to the resolution; rather, it is supported by assertions in the whereas clauses. Therefore, a new whereas clause has been added to your resolution, noting that the state's congressional delegation has delayed the appointment of the United States Food and Drug Administration. Please review the change carefully to be sure it is consistent with the committee's intent.

If I may be of further assistance, please advise.

ELN:dla
16-111.dla

Attachment

**CS FOR HOUSE JOINT RESOLUTION NO. 28(FSH)
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-NINTH LEGISLATURE - SECOND SESSION**

BY THE HOUSE SPECIAL COMMITTEE ON FISHERIES

**Offered:
Referred:**

Sponsor(s): REPRESENTATIVES TARR, Kawasaki, Ortiz, Kreiss-Tomkins

A RESOLUTION

1 **Opposing the United States Food and Drug Administration's approval of AquaBounty**
2 **AquAdvantage genetically engineered salmon; urging the United States Congress to**
3 **enact legislation that requires prominently labeling genetically engineered products with**
4 **the words "Genetically Modified" on the product's packaging; and supporting the**
5 **efforts of the state's congressional delegation to delay the confirmation of the new**
6 **commissioner of the United States Food and Drug Administration until the United**
7 **States Food and Drug Administration agrees to require labeling for genetically**
8 **engineered salmon.**

9 **BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

10 **WHEREAS**, on November 19, 2015, the United States Food and Drug Administration
11 approved AquaBounty AquAdvantage genetically engineered salmon as safe for human
12 consumption; and

13 **WHEREAS** the approval is the first time in history that the United States Food and
14 Drug Administration has approved a genetically engineered animal for human consumption;

1 and

2 **WHEREAS** a large majority of state residents oppose the approval of genetically
3 engineered salmon by the United States Food and Drug Administration; and

4 **WHEREAS** more than 2,000,000 Americans opposed the United States Food and
5 Drug Administration's approval of genetically engineered salmon in the largest number of
6 comments the United States Food and Drug Administration has ever received on an action;
7 and

8 **WHEREAS** more than 65 retailers, including Costco, Safeway, and Target, have
9 announced that they have no plans to sell genetically modified salmon; and

10 **WHEREAS** more than 40 members of the United States Congress have expressed
11 opposition to the approval of AquaBounty AquAdvantage genetically engineered salmon; and

12 **WHEREAS** the state has bountiful fisheries that provide wild, natural, and sustainable
13 seafood; and

14 **WHEREAS** the accidental release of transgenic fish into the wild could devastate
15 native fish populations and ecosystems; and

16 **WHEREAS** a May 2013 McGill University research report detailed findings
17 demonstrating interbreeding between genetically modified salmon and brown trout could
18 occur, suggesting that the potential for similar hybridization between other closely related
19 species could pose risks for wild populations, including wild salmon; and

20 **WHEREAS** the research demonstrated that transgenic hybrid salmon can outcompete
21 with both wild salmon and genetically modified salmon, making hybridization relevant to risk
22 assessments; and

23 **WHEREAS**, each year, thousands of salmon escape from open water net pens into the
24 Pacific and Atlantic Oceans, demonstrating that escapement is a serious threat to wild fish
25 populations; and

26 **WHEREAS** the AquaBounty facility on Prince Edward Island is producing
27 genetically engineered fish eggs and sits adjacent to a water body that is directly connected to
28 the Saint Lawrence Seaway and the Atlantic Ocean; and

29 **WHEREAS** the proximity of the AquaBounty facility to the Saint Lawrence Seaway
30 and the Atlantic Ocean puts wild Atlantic salmon, which are listed under the Endangered
31 Species Act, at risk; and

1 **WHEREAS** the long-term human health effects of consuming genetically engineered
2 salmon are unknown;

3 **WHEREAS** the state's congressional delegation has delayed the confirmation of the
4 new commissioner of the United States Food and Drug Administration until the United States
5 Food and Drug Administration agrees to require labeling for genetically engineered salmon;

6 **BE IT RESOLVED** that the Alaska State Legislature opposes the United States Food
7 and Drug Administration's approval of AquaBounty AquAdvantage genetically engineered
8 salmon; and be it

9 **FURTHER RESOLVED** that the Alaska State Legislature urges the United States
10 Congress to enact legislation that requires prominently labeling genetically engineered
11 products, including AquaBounty AquAdvantage genetically engineered salmon, with the
12 words "Genetically Modified" on the product's packaging, as required by state law; and be it

13 **FURTHER RESOLVED** that the Alaska State Legislature fully supports the efforts
14 of the state's congressional delegation to delay the confirmation of the new commissioner of
15 the United States Food and Drug Administration until the United States Food and Drug
16 Administration agrees to require labeling for genetically engineered salmon.

17 **COPIES** of this resolution shall be sent to the Honorable Barack Obama, President of
18 the United States; the Honorable Joseph R. Biden, Jr., Vice-President of the United States and
19 President of the U.S. Senate; the Honorable Tom Vilsack, United States Secretary of
20 Agriculture; Stephen Ostroff, M.D., Acting Commissioner of Food and Drugs; and the
21 Honorable Lisa Murkowski and the Honorable Dan Sullivan, U.S. Senators, and the
22 Honorable Don Young, U.S. Representative, members of the Alaska delegation in Congress.

Explanation of Changes between Version W and Version A of HJR 28

1. Page 2, Line 12 – The word “inevitable” is deleted

2. Page 2, Lines 14-23, deleted and replaced with this-

WHEREAS a May 2013 McGill University research report detailed findings

demonstrating interbreeding between genetically modified salmon and brown trout could occur suggesting that the potential for similar hybridization between other closely related species could pose risks for wild populations, including wild salmon;
and

WHEREAS the research showed that transgenic hybrid salmon can outcompete both wild and genetically modified salmon, making hybridization relevant to risk assessments;
and

WHEREAS, each year, thousands of salmon escape from open water net pens into the Pacific and Atlantic Oceans, demonstrating that escapement is a serious threat to wild fish populations;
and

WHEREAS the AquaBounty facility on Prince Edward Island, is producing genetically engineered eggs and sits adjacent to a water body that is directly connected to the Saint Lawrence Seaway and the Atlantic Ocean; and

WHEREAS, the proximity of the AquaBounty facility to this waterway puts at risk wild Atlantic salmon, which are listed under the Endangered Species Act;
and

3. Page 3, Lines 2-5, deleted (this will lead to changing the title by deleting page 1, Line 4 “and encouraging” through the end of the title on Line 6)

29-LS1213\W
Nauman
2/3/16

CS FOR HOUSE JOINT RESOLUTION NO. 28()
IN THE LEGISLATURE OF THE STATE OF ALASKA
TWENTY-NINTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES TARR, Kawasaki

A RESOLUTION

1 **Opposing the United States Food and Drug Administration's approval of AquaBounty**
2 **AquAdvantage genetically engineered salmon; and urging the United States Congress to**
3 **enact legislation that requires prominently labeling genetically engineered products with**
4 **the words "Genetically Modified" on the product's packaging.**

5 **BE IT RESOLVED BY THE LEGISLATURE OF THE STATE OF ALASKA:**

6 **WHEREAS**, on November 19, 2015, the United States Food and Drug Administration
7 approved AquaBounty AquAdvantage genetically engineered salmon as safe for human
8 consumption; and

9 **WHEREAS** the approval is the first time in history that the United States Food and
10 Drug Administration has approved a genetically engineered animal for human consumption;
11 and

12 **WHEREAS** a large majority of state residents oppose the approval of genetically
13 engineered salmon by the United States Food and Drug Administration; and

14 **WHEREAS** more than 2,000,000 Americans opposed the United States Food and
15 Drug Administration's approval of genetically engineered salmon in the largest number of

1 comments the United States Food and Drug Administration has ever received on an action;
2 and

3 **WHEREAS** more than 65 retailers, including Costco, Safeway, and Target, have
4 announced that they have no plans to sell genetically modified salmon; and

5 **WHEREAS** more than 40 members of the United States Congress have expressed
6 opposition to the approval of AquaBounty AquAdvantage genetically engineered salmon; and

7 **WHEREAS** the state has bountiful fisheries that provide wild, natural, and sustainable
8 seafood; and

9 **WHEREAS** the accidental release of transgenic fish into the wild could devastate
10 native fish populations and ecosystems; and

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12 demonstrating interbreeding between genetically modified salmon and brown trout could
13 occur, suggesting that the potential for similar hybridization between other closely related
14 species could pose risks for wild populations, including wild salmon; and

15 **WHEREAS** the research demonstrated that transgenic hybrid salmon can outcompete
16 with both wild salmon and genetically modified salmon, making hybridization relevant to risk
17 assessments; and

18 **WHEREAS**, each year, thousands of salmon escape from open water net pens into the
19 Pacific and Atlantic Oceans, demonstrating that escapement is a serious threat to wild fish
20 populations; and

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22 genetically engineered fish eggs and sits adjacent to a water body that is directly connected to
23 the Saint Lawrence Seaway and the Atlantic Ocean; and

24 **WHEREAS** the proximity of the AquaBounty facility to the Saint Lawrence Seaway
25 and the Atlantic Ocean puts wild Atlantic salmon, which are listed under the Endangered
26 Species Act, at risk; and

27 **WHEREAS** the long-term human health effects of consuming genetically engineered
28 salmon are unknown;

29 **BE IT RESOLVED** that the Alaska State Legislature opposes the United States Food
30 and Drug Administration's approval of AquaBounty AquAdvantage genetically engineered
31 salmon; and be it

1 **FURTHER RESOLVED** that the Alaska State Legislature urges the United States
2 Congress to enact legislation that requires prominently labeling genetically engineered
3 products, including AquaBounty AquAdvantage genetically engineered salmon, with the
4 words "Genetically Modified" on the product's packaging, as required by state law.

5 **COPIES** of this resolution shall be sent to the Honorable Barack Obama, President of
6 the United States; the Honorable Joseph R. Biden, Jr., Vice-President of the United States and
7 President of the U.S. Senate; the Honorable Tom Vilsack, United States Secretary of
8 Agriculture; Stephen Ostroff, M.D., Acting Commissioner of Food and Drugs; and the
9 Honorable Lisa Murkowski and the Honorable Dan Sullivan, U.S. Senators, and the
10 Honorable Don Young, U.S. Representative, members of the Alaska delegation in Congress.

Fiscal Note

State of Alaska
2016 Legislative Session

Bill Version: HJR 28
Fiscal Note Number: _____
() Publish Date: _____

Identifier: HJR28-sess-02-03-16
Title: OPPOSING GM SALMON
Sponsor: TARR
Requester: House Fisheries

Department:
Appropriation:
Allocation:
OMB Component Number: 0

Expenditures/Revenues

Note: Amounts do not include inflation unless otherwise noted below. (Thousands of Dollars)

	FY2017	Included in	Out-Year Cost Estimates				
	Appropriation Requested	Governor's FY2017 Request	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
OPERATING EXPENDITURES	FY 2017	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants & Benefits							
Miscellaneous							
Total Operating	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Fund Source (Operating Only)

None							
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Positions

Full-time							
Part-time							
Temporary							

Change in Revenues

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Estimated SUPPLEMENTAL (FY2016) cost: 0.0 *(separate supplemental appropriation required)*
(discuss reasons and fund source(s) in analysis section)

Estimated CAPITAL (FY2017) cost: 0.0 *(separate capital appropriation required)*
(discuss reasons and fund source(s) in analysis section)

ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency?
If yes, by what date are the regulations to be adopted, amended or repealed?

Why this fiscal note differs from previous version:

Initial version. One page. Zero note.

Prepared By: Jessica Geary
Division: LAA
Approved By: Pam Varni
Agency: LAA

Phone: (907)465-6626
Date: 02/03/2016 05:44 PM
Date: 02/03/2016

Alaska Dispatch News

Published on *Alaska Dispatch News* (<http://www.adn.com>)

[Home](#) > FDA approves genetically modified salmon for human consumption

Mary Clare Jalonick | Associated Press

November 19, 2015

Main Image:

[salmon1\[PHOTO.68818 - 10/21/2011 16:39:03\]](#) ^[1]

Main Image Caption:

A genetically modified salmon and traditional farmed Atlantic salmon of the same age.

WASHINGTON — The Food and Drug Administration on Thursday approved genetically modified salmon, the first such altered animal allowed for human consumption in the United States.

The Obama administration had stalled in approving the fast-growing salmon for more than five years amid consumer concerns about eating genetically modified foods. But the agency said Thursday the fish is safe to eat. ^[2]

"There are no biologically relevant differences in the nutritional profile of AquAdvantage Salmon compared to that of other farm-raised Atlantic salmon," the agency said in announcing the approval.

AquAdvantage Salmon is engineered by the Massachusetts-based company AquaBounty. Ron Stotish, the company's CEO, said in a statement that the fish is a "game changer that brings healthy and nutritious food to consumers in an environmentally responsible manner without damaging the ocean and other marine habitats."

The fish grows twice as fast as normal salmon, so it reaches market size more quickly. It has an added growth hormone from the Pacific chinook salmon that allows the fish to produce growth hormone all year long. The engineers were able to keep the hormone active by using another gene from an eel-like fish called an ocean pout that acts like an "on" switch for the hormone. Typical Atlantic salmon produce the growth hormone for only part of the year.

Bernadette Dunham, director of the FDA's Center for Veterinary Medicine, said the agency "has thoroughly analyzed and evaluated the data and information" submitted by AquaBounty. To approve an engineered animal for human consumption, the agency reviews a company's data and must determine that the food is safe to eat, that the engineering is safe for the fish and that the company's claim — in this case, faster growth — is accurate.

Because there are no material differences between an engineered and a normal salmon, the FDA says the law does not require the fish to be labeled as engineered. That means once the salmon reach stores, consumers may not even know they are eating them. AquaBounty says that genetically modified salmon have the same flavor, texture, color and odor as the conventional fish.

The FDA released separate guidance Thursday that would set guidelines for retailers that do want to label the salmon as engineered.

Under pressure from activists who oppose genetically modified foods, some retailers have pledged not to sell the salmon at all. And it's still unclear whether the public will have an appetite for the fish. Genetic engineering is already widely used for crops, but the government until now has not allowed the consumption of modified animals. Although the potential benefits and profits are huge, some people have ethical qualms about manipulating the genetic code of other living creatures.

Critics call the modified salmon a "frankenfish." They worry that it could cause human allergies and the eventual decimation of the natural salmon population if it escapes and breeds in the wild.

"There's no place on our dinner plates for genetically engineered fish," said Lisa Archer of the environmental advocacy group Friends of the Earth. "We will continue to work to ensure the market, from grocery retailers to restaurants, continues to listen to majority of consumers that don't want to eat this poorly studied, unlabeled, genetically engineered fish."

The salmon has also faced opposition in Congress. Alaska Sen. Lisa Murkowski, a Republican, has vehemently opposed the approval, saying the engineered salmon could harm her state's wild salmon industry.

Murkowski said Thursday she's "livid" at the FDA approval.

Murkowski and the other members of Alaska's congressional delegation criticized the decision in a joint news release.

Murkowski said it's imperative that proposals she's offered to mandate the labeling of genetically modified fish become law.

U.S. Rep. Don Young said the FDA was embarking on a science experiment with what he calls its "harebrained" decision. Both he and U.S. Sen Dan Sullivan said that, at a minimum, the fish should be labeled.

The FDA said the fish "would not have significant environmental impact." The agency said the salmon can be raised only in land-based, contained hatchery tanks in two facilities in Canada and Panama, and that other facilities in the U.S. or elsewhere cannot breed the salmon for human consumption.

The agency said there are "multiple and redundant levels of physical barriers" in the facilities to prevent the escape of fish. The fish would be bred to be female and sterile, so if any did escape, they would not be able to breed.

The agency said it will inspect the facilities, as will the Canadian and Panamanian governments.

Source URL: <http://www.adn.com/article/20151119/fda-approves-genetically-modified-salmon-human-consumption>

Links:

[1] <http://www.adn.com/image/salmon1photo68818-10212011-163903>

[2] <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm473249.htm>

My Turn: FDA wrong on Frankenfish

Juneau Empire (AK) - December 16, 2015

- Author/Byline: REPS. DON YOUNG and PETER DEFAZIO, FOR THE JUNEAU EMPIRE.
- Section: Opinion

Despite overwhelming opposition from scientists, consumers and fishermen, the product commonly referred to as "Frankenfish" could unknowingly be your choice for dinner as early as 2017.

For those unfamiliar with genetically engineered salmon, these products are nothing short of science fiction, recently being described as a scene from the newest "Jurassic Park" film. Genetic material from an ocean pout, an eel-like fish known for its immunity to sub-freezing waters, would be spliced with that of a Chinook (King) salmon and an Atlantic salmon. The resulting organism would grow to the size of an Alaskan king salmon in roughly half the time.

The marketplace approval of AquaBounty Technologies's GE salmon represents a major failure on the part of the FDA. For starters, the approval process failed to consider many of the negative consequences associated with GE fish. This disingenuous process, which followed the same standards for approving a new drug for animal use, never truly considered the risks associated to our wild salmon species, our ocean ecosystems and the U.S. fishing economy. To make matters worse, the FDA's decision explicitly stated that these products would not be required to be labeled as genetically engineered, leaving many American consumers in the dark.

Together, with our colleagues and a large number of American retailers and consumers, we have opposed the FDA's approval of GE salmon. These efforts have included numerous pieces of legislation to ban such products from ever reaching market and others to ensure American consumers have access to clear and transparent labeling of these GE products.

In today's global marketplace, a consumer's access to accurate ingredient information is paramount. Clear and accurate GMO labeling requirements attempt to mitigate the risks of market confusion or rejection by countries that have no interest in purchasing the hybrid organisms. Confusion among consumers about what type of salmon or seafood are genetically engineered could significantly deter shoppers from purchasing these products altogether. Ultimately, we must protect the nation's sustainable, wild-caught seafood industry from the irreparable harms a full-on market rejection of salmon as a safe and nutritious food item would cause.

Most recently, Congress has pursued legislative efforts to block states such as Alaska and Oregon from instituting mandatory labeling requirements of GE fish and seafood. Proponents of this legislation, the so-called Safe and Accurate Food Labeling Act, have coalesced around the idea of adding language to an upcoming omnibus spending bill. These efforts would significantly undermine a state's right to develop labeling laws within their own jurisdictions and preempt efforts to give consumers the right to know their fish products were genetically engineered. Given the FDA's recent approval of Frankenfish, we believe this is the last thing Congress should be pursuing.

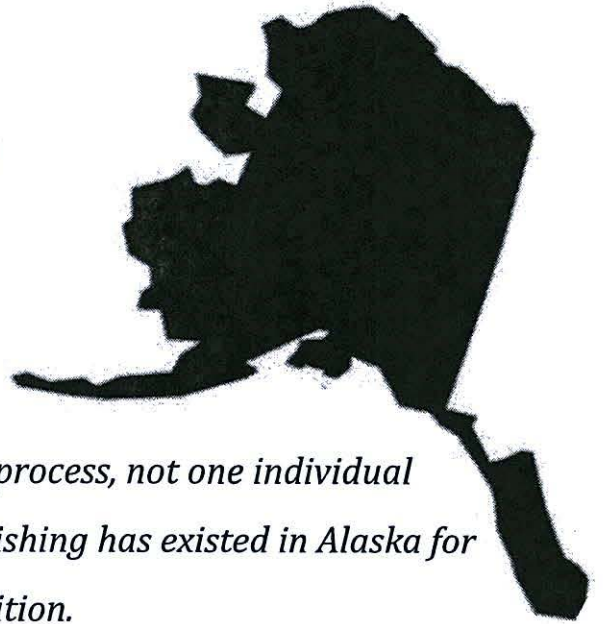
Together, we have introduced bipartisan legislation in the House that would allow American consumers to decide for themselves. HR 913, the Genetically Engineered Food Right-to-Know Act, will give consumers a clear choice when deciding which products to serve at the dinner table. The bill would require the FDA to clearly label food that has been genetically engineered or contains any genetically engineered ingredients, unless the information is clearly disclosed.

We look forward to you joining our cause to defeat the FDA's disastrous decision to approve GE salmon and at the very least our common sense proposal to give Americans the right to know what they are eating.

- Rep. Don Young, R-Alaska, has been Alaska's at-large representative since 1973. He sits on the Natural Resources and the Transportation committees. Rep. Peter DeFazio, D-Oregon, has represented Oregon's 4th Congressional District since 1987. He sits on the Transportation Committee.

- Record: f075be7bbe46ed45d1554abfdc6f51f213d2b7d
- Copyright: Copyright, 2015, Juneau Empire

Say No To Frankenfish



In Alaska, we're fighting for our livelihood. Frankenfish pose a significant threat to our way of life. Throughout this entire process, not one individual has come out in support of GM salmon. Salmon fishing has existed in Alaska for generations, and Frankenfish threaten that tradition.

Benefits to Alaskan Seafood

- Alaska seafood is naturally high in essential vitamins.
- 2012: 124 million salmon were harvested totaling \$505 billion.
- Jobs: Approximately 70,000
- In total, gross earnings for Alaskan fisherman is \$285 billion.
- Alaska leads the world in sustainable fishery management practices.

Why Alaskans oppose Frankenfish

- Insufficient consultation with National Marine Fisheries Service
- Threat to human health consumer confidence in salmon
- Erode the strength of wild seafood industry
- No requirement for labeling GM Salmon

Who's fighting GM Salmon in Alaska?

- U.S. Senator Mark Begich
- U.S. Senator Lisa Murkowski
- U.S. Representative Don Young
- Alaska Governor Sean Parnell
- United Fisherman of Alaska
- Alaska Trollers Association
- Alaska Glacier Seafoods
- Pickled Willy's
- Sea Beef
- Wild Alaskan Seafood Company
- International Seafoods of Alaska
- Petersburg Vessel Owners Assn
- Cordova District Fishermen United
- Southeast Alaska Guide Organization
- Commercial Fishermen
- City and Borough of Yakutat
- Haines Borough

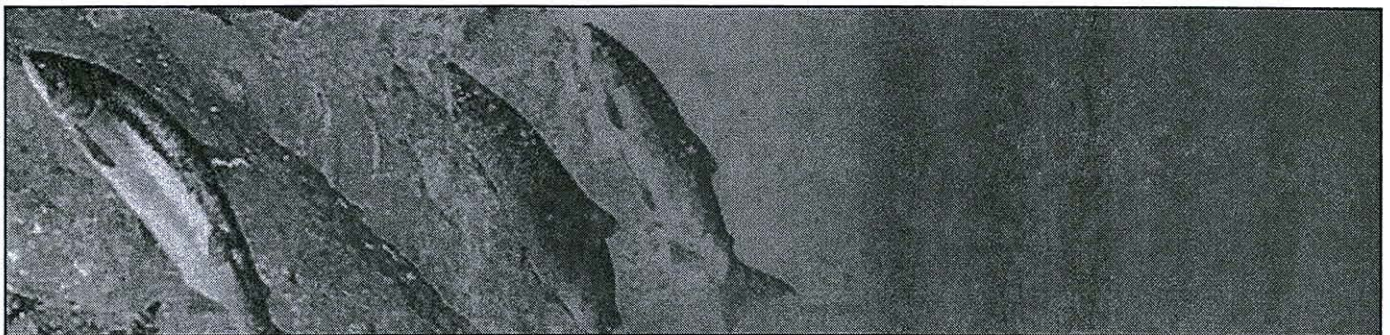
Say No To Frankenfish

Concerns for Alaskan Fishermen

Alaska fishermen are concerned that if genetically modified salmon is allowed to be sold in the U.S., then coastal communities will suffer job losses and economic hardship due to consumer confusion about the wholesomeness of salmon in general.

In the Cordova Fishing District alone, there are over 800 fishermen and their families that rely on the fishing industry for their livelihood. Continued sustainability and productivity of Alaska's wild salmon runs is very important, and without that resource, their lives would be completely changed.

In Petersburg, there are over 100 commercial fishermen and businesses rely on the fishing industry to some degree. Throughout the state, from fishermen to processors to retailers and wholesalers, the fishing industry has a huge impact. Economically, the fishing industry is second only to oil and gas development. Throughout this entire process, not one individual has come out in support of genetically modified salmon.



Jan 12 2016

Murkowski Continues Fight Against Frankenfish, Moves to Block FDA Commissioner Nominee

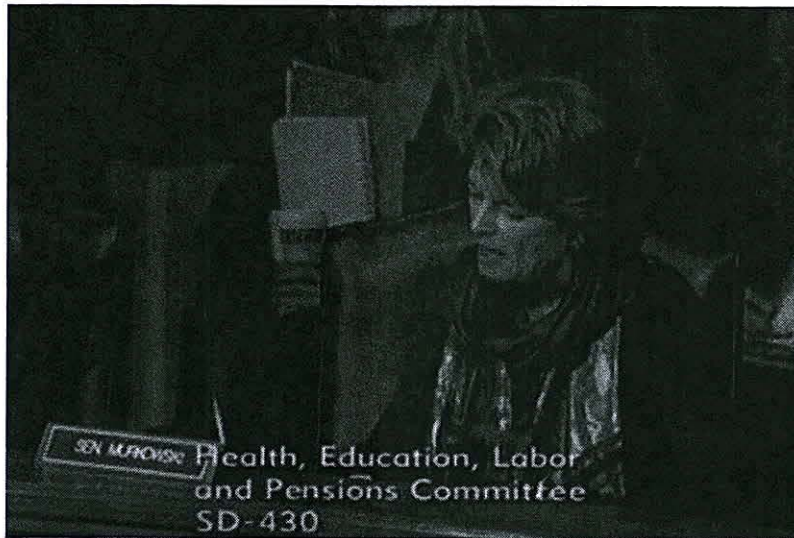
Senator: "Voluntary Labeling of GE Salmon is Not Adequate"

U.S. Senator Lisa Murkowski (R-Alaska) continued her fight against genetically engineered (GE) salmon by announcing in the Senate Health, Education, Labor, and Pensions (HELP) Committee that she would block confirmation proceedings of the nominee to be FDA Commissioner, Dr. Robert Califf, on the Senate floor if her concerns are not resolved. Murkowski made clear that she intends to block Dr. Califf's confirmation until she receives assurance from the FDA that it will require mandatory labeling of GE salmon as it becomes available for human consumption.

In today's HELP committee executive session, Senator Murkowski voted to move Dr. Califf's nomination forward to be considered by the full Senate, saying:

"Dr. Califf's nomination hearing was just 2 days before the FDA made its announcement that they were going to move forward with allowing genetically engineered fish for the first time for human consumption. I have to admit I was really taken aback that he was not direct with me. He clearly knows that's a priority of Alaskans and certainly this Senator. I said at that time I need to have an understanding of where the FDA is going on this issue and I would put a hold on his nomination as it moves forward. We cannot put a hold on anybody until they have moved out of committee. That's what we're doing here today.

"What I would like to make clear to my colleagues is that we have attempted to address some of the issues that I have raised through the appropriations bill that we moved forward in December. We included language that would require the FDA to not allow the introduction into interstate commerce of any product containing genetically engineered salmon until the FDA publishes final labeling guidelines. I want the assurances that in fact is what is going to happen. I want to make sure that the FDA knows that voluntary labeling guidelines really are not sufficient. It does not comply with what is now law. I want to make sure, be very, very certain, that when we are talking about these genetically engineered fish for human consumption, voluntary labeling is not adequate. So I'm going to be pushing for further conversations with Dr. Califf on this. I will vote to move him out of committee today, but I just want my friends and colleagues to be on notice that I have these concerns and I would like to get them resolved before his name moves forward to the Senate floor."



(Click image to watch video.)

Background: Last November the FDA announced its approval of genetically engineered salmon for human consumption. Murkowski has long been adamantly opposed to the approval of GE salmon, and in response to this announcement inserted a provision in the appropriations process to require mandatory labeling of Frankenfish. At that time she also announced that she would block the confirmation of Dr. Califf to be FDA Commissioner.

Murkowski is chairman of the Senate Energy and Natural Resources Committee and the Interior Appropriations Subcommittee.

Permalink: <http://www.murkowski.senate.gov/public/index.cfm/2016/1/murkowski-continues-fight-against-frankenfish-moves-to-block-fda-commissioner-nominee>

The New York Times | <http://nyti.ms/1O5tEOF>

BUSINESS DAY

Genetically Engineered Salmon Approved for Consumption

By **ANDREW POLLACK** NOV. 19, 2015

Federal regulators on Thursday approved a genetically engineered salmon as fit for consumption, making it the first genetically altered animal to be cleared for American supermarkets and dinner tables.

The approval by the Food and Drug Administration caps a long struggle for AquaBounty Technologies, a small company that first approached the F.D.A. about approval in the 1990s. The agency made its initial determination that the fish would be safe to eat and for the environment more than five years ago.

The approval of the salmon has been fiercely opposed by some consumer and environmental groups, which have argued that the safety studies were inadequate and that wild salmon populations might be affected if the engineered fish were to escape into the oceans and rivers.

“This unfortunate, historic decision disregards the vast majority of consumers, many independent scientists, numerous members of Congress and salmon growers around the world, who have voiced strong opposition,” Wenonah Hauter, executive director of Food & Water Watch, said in a statement.

Within hours of the agency’s decision on Thursday, one consumer advocacy group, the Center for Food Safety, said it and other organizations

would file a lawsuit challenging the approval.

The AquaAdvantage salmon, as it is known, is an Atlantic salmon that has been genetically modified so that it grows to market size faster than a non-engineered farmed salmon, in as little as half the time.

“The F.D.A. has thoroughly analyzed and evaluated the data and information submitted by AquaBounty regarding the AquaAdvantage salmon and determined that they have met the regulatory requirements for approval, including that food from the fish is safe to eat,” Bernadette Dunham, director of the agency’s Center for Veterinary Medicine, said in a statement.

F.D.A. officials said on Thursday that the process took so long because it was the first approval of its kind. People involved in the application suspect that the Obama administration delayed approval because it was wary of a political backlash.

The officials said the fish would not have to be labeled as being genetically engineered, a policy consistent with its stance on foods made from genetically engineered crops. However, it issued draft guidance as to wording that companies could use to voluntarily label the salmon as genetically engineered or to label other salmon as not genetically engineered.

Despite the approval, it is likely to be at least two years before any of the salmon reaches supermarkets, and at first it will be in tiny amounts.

Ronald Stotish, the chief executive of AquaBounty, which is majority-owned by Intrexon Corporation, said he was delighted and somewhat surprised by the approval after all this time. “We had no indication that approval was imminent,” he said in an interview.

Mr. Stotish declined to say what the plans were for bringing the fish to market, other than that the salmon would not be in stores immediately because it would take about two years for even these fast-growing salmon to

reach market size. It is also not likely there will be much of the salmon on the market because the approved production facility, which is in Panama, has the capacity to produce only about 100 tons of fish a year — a tiny amount compared with the more than 200,000 tons of Atlantic salmon the United States imports each year.

Mr. Stotish said he did not know if approval was still needed from Panama to export the fish.

It is not clear how well the salmon will sell. Some leading supermarkets have already said, in response to the vocal opposition, that they have no plans to sell it.

The fish are supposed to be raised inland in contained tanks to lessen the chances that they will escape into the wild. AquaBounty and its supporters say this will also be less stressful on the environment than using pens in the ocean. And it could eventually allow the fish to be raised in the United States, rather than being imported, as most farmed Atlantic salmon is.

For now, however, the fish are being raised in Panama, from eggs produced in Prince Edward Island, Canada. If the salmon were bred or raised elsewhere, for marketing to Americans, that would require separate approvals.

However, moving beyond Canada and Panama seems to be the plan, according to a regulatory filing by AquaBounty a year ago. It said at that time that after winning F.D.A. approval it would look to build a hatchery in the United States and expand the one in Canada to sell more eggs to fish farmers, who would then grow the salmon to market size. AquaBounty said it might also grow salmon from the eggs itself. In addition to the United States, it said it eventually hoped to sell the salmon in Canada, Argentina, Brazil and China.

The approval could help other efforts to develop genetically modified animals. Scientists and biotechnology industry executives have complained that the long, unexplained delay in approving the salmon was a deterrent to

the field. Several other attempts to develop genetically engineered animals for consumption, like a pig whose manure would be less polluting, have fallen by the wayside.

Now, however, there has been a surge of interest in developing new genetically altered farm animals and pets because new techniques, including one known as Crispr-Cas9, allow scientists to edit animal genomes rather than add genes from other species. That has made it far easier to create altered animals.

Scientists in China, for instance, recently created goats with more muscle and longer hair. Researchers in Scotland used gene editing to create pigs resistant to African swine fever. It is not yet clear whether animals created this way would fall under F.D.A. regulation.

The AquAdvantage salmon contains a growth hormone gene from the Chinook salmon and a genetic switch from the ocean pout, an eel-like creature, that keeps the transplanted gene continuously active, whereas the salmon's own growth hormone gene is active only parts of the year. The company has said the fish can grow to market weight in 18 to 20 months, compared with 28 to 36 months for conventionally farmed salmon.

Opponents of the fish say that if the bigger fish were to escape, they could outcompete wild salmon for food or mates. Among the opponents have been members of Alaska's congressional delegation, who say they are worried about the effects on the image and health of wild salmon.

"This harebrained decision goes to show that our federal agencies are incapable of using common sense," Representative Don Young, a Republican, said in a statement.

But some scientists have dismissed these concerns. William Muir, a professor of animal sciences at Purdue University, said the fish posed no risk to the environment. "In contrast, the current practice of using wild caught

salmon as a food source is not sustainable; our oceans are overfished," he said in a statement. "This development provides a safe and sustainable alternative."

The F.D.A. said on Thursday that there were multiple physical barriers in the Canada and Panama facilities to prevent any escape. The salmon are also made sterile to prevent reproduction in the event they do escape, although the sterilization technique is not foolproof.

The F.D.A. regulates genetically engineered animals as veterinary drugs, using the argument that the gene inserted into the animal meets the definition of a drug. Critics have branded this an inadequate solution intended to squeeze a new technology into an old regulatory framework. They say the F.D.A. is not as qualified as other government agencies to do environmental assessments. The White House is now reviewing the entire framework for regulating genetically engineered products.

The F.D.A. said that to approve the salmon, it determined that the fish was safe to eat, that the inserted genetic elements did not harm the fish itself, and that the company had adequately proved that the salmon grew faster.

AquaBounty, which is based in Maynard, Mass., has long struggled to raise enough money to stay in business. It is now about 60 percent owned by Intrexon, a company started by the biotechnology entrepreneur Randal J. Kirk to pursue synthetic biology, a term for sophisticated genetic engineering.

Intrexon has also acquired the company that developed a recently approved genetically modified apple resistant to browning and a British company working on genetically modified insects, such as mosquitoes that might be tested in the Florida Keys as a way to prevent dengue fever. Shares of Intrexon rose nearly 4 percent Thursday, closing at \$36.65.

A version of this article appears in print on November 20, 2015, on page A1 of the New York edition with the headline: Genetically Engineered Salmon Declared Ready for U.S. Plates .

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UNITED FISHERMEN OF ALASKA

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February 3, 2016

Representative Louise Stutes, Chairman
House Special Committee on Fisheries
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

RE: Support for CSHJR 28, opposing FDA approval of genetically modified salmon and urging labeling.

Dear Chairman Stutes and Committee Members,

UFA is on record with the U.S. Food and Drug Administration (FDA) in opposition to approval of genetically modified salmon for production and consumption in the U.S., and we have strongly requested that FDA regulations require that salmon or any other genetically modified seafood products be clearly labeled as such.

Alaska leads the world in sustainable fishery management practices and we have gone to great effort and expense to differentiate our seafood products in the marketplace. We are very concerned that if genetically modified salmon is allowed to be sold in the U.S. at all, or not labeled clearly, Alaska fishermen and coastal communities will suffer job losses and economic hardship due to consumer confusion about the wholesomeness of salmon in general.

United Fishermen of Alaska represents 35 Alaska Commercial fishing organizations, and hundreds of individual fishermen and related businesses. We support CS HJR 28 and applaud the State Legislature for your dedication to Alaska's fisheries and our position in the global marketplace.

Sincerely,

Jerry McCune
President

CC: Representative Geran Tarr

MEMBER ORGANIZATIONS

Alaska Bering Sea Crabbers • Alaska Independent Fishermen's Marketing Association
Alaska Independent Tendermen's Association • Alaska Longline Fishermen's Association • Alaska Scallop Association • Alaska Trollers Association
Alaska Whitefish Trawlers Association • Armstrong Keta • At-sea Processors Association • Bristol Bay Reserve • Cape Barnabas Inc.
Concerned Area "M" Fishermen • Cook Inlet Aquaculture Association • Cordova District Fishermen United • Douglas Island Pink and Chum
Freezer Longline Coalition • Golden King Crab Coalition • Groundfish Forum • Kenai Peninsula Fishermen's Association
Kodiak Regional Aquaculture Association • North Pacific Fisheries Association • Northern Southeast Regional Aquaculture Association
Petersburg Vessel Owners Association • Prince William Sound Aquaculture Corporation • Purse Seine Vessel Owner Association
Seafood Producers Cooperative • Southeast Alaska Herring Conservation Alliance • Southeast Alaska Fisherman's Alliance
Southeast Alaska Regional Dive Fisheries Association • Southeast Alaska Seiners • Southern Southeast Regional Aquaculture Association
United Catcher Boats • United Cook Inlet Drift Association • United Southeast Alaska Gillnetters • Valdez Fisheries Development Association



Southeast Alaska Fishermen's Alliance

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February 4, 2016

Representative Louise Stutes, Chairman
House Special Committee on Fisheries
Alaska State Legislature
State Capitol
Juneau, AK 99801-1182

RE: Support for CSHJR 28, opposing FDA approval of genetically modified salmon and urging labeling.

Dear Chairman Stutes and Committee Members,

Southeast Alaska Fishermen's Alliance (SEAFA) is in support of CSHJR 28 opposing the approval of genetically engineered salmon and urging the prominent labeling of genetically modified salmon. We appreciate the current version of the resolution that shows the opposition across the country to GE salmon and the possible environmental harmful effects of genetically modified or farmed fish on the native populations of salmon.

Southeast Alaska Fishermen's Alliance is a non-profit, multi-gear, multi-species commercial fishing association representing over 300 small businesses involved in the fishery industry particularly the salmon, crab, shrimp and longline fisheries of Southeast Alaska.

Sincerely,

Kathryn L Hansen
Executive Director

Support HJR 28
PO Box 232 Petersburg, AK 99833

(907) 772-9323

Petersburg Vessel Owner's Association
email:pvoa@gci.net

February 3, 2016

Representative Louise Stutes
Chair, House Special Committee on Fisheries
Alaska State Legislation
State Capitol
Juneau, AK 99811-1182
Email: Rep.Louise.Stutes@akleg.gov

RE: PVOA Supports HJR 28-Opposing the United States Food and Drug Administration's approval of AquaBounty AquaAdvantage genetically engineered salmon

Dear Chair Stutes and Committee Members,

Petersburg Vessel Owner's Association (PVOA) is composed of almost 100 members participating in a wide variety of species and gear type fisheries. An additional thirty businesses supportive to our industry are members. Our members fish throughout Alaska from Southeast to the Bering Sea. Targeted species include salmon, herring, halibut, sablefish, cod, crab, and shrimp.

PVOA's mission statement is to:

"Promote the economic viability of the commercial fishing fleet in Petersburg, promote the conservation and rational management of North Pacific resources, and advocate the need for protection of fisheries habitat."

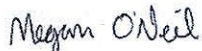
As our mission statement reads, PVOA's main focus is on the conservation and management of our State's fishery resources. **Petersburg Vessel Owner's Association supports HJR 28 that would prohibit the sale of genetically modified salmon in Alaska and urge the U.S. Congress to enact legislation requiring proper labeling of genetically engineered seafood.**

Alaska is a world leader in sustainable wild fishery management. Fishing and seafood processing jobs are the largest job sector in Petersburg and many other costal communities in Southeast Alaska. PVOA has three major concerns with genetically modified salmon:

1. The long-term affects of consuming genetically modified salmon are not yet known.
2. Our fisheries would be endangered if transgenic fish escaped into the wild.
3. If genetically modified salmon is sold in the U.S. unlabeled, Alaska fishermen and coastal communities will suffer economically from miss-informed consumers.

PVOA supports HJR 28 and appreciates the Alaska State Legislatures support and protection of the Alaska fisheries resource.

Respectfully,



Megan O'Neil
Executive Director
CC: Representative Geran Tarr

UNITED SOUTHEAST ALASKA GILLNETTERS

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February 2, 2016

Representative Geran Tarr
Room 409 Capitol Bldg., Juneau, AK, 99801
1 (907) 465-3424
rep.geran.tarr@akleg.gov

Dear Representative Tarr and interested others:

United Southeast Alaska Gillnetters, an Alaska fisherman's organization representing 473 salmon gillnet permit holders and their families, strongly SUPPORTS House Bill 258 and House Joint Resolution 28.

Passing HB 258 makes the selling of genetically engineered fish and fish products in Alaska impossible and passing HJR 28 would support our disapproval of genetically engineered salmon via AquaBounty. The gillnetters of Southeast Alaska fish for wild Alaska salmon throughout southeast and sell their high quality, healthy catch around the world. Last year, it was valued at over \$18.8 million. Genetically modified salmon threatens the wild Alaska salmon and seafood markets by confusing consumers and potentially harming wild salmon runs and ecosystems.

Although AquaBounty plans to initially produce its salmon in Panama, the company will reportedly pursue production options closer to its market, the United States. We do not support the production of genetically modified salmon in our state or our country and appreciate our state's constitution that bans farmed salmon production. Past experiences, such as Asian carps' invasion into the rivers of the Mississippi, Illinois and Missouri, show us that containment systems are not always foolproof and can be extremely damaging to an area's ecology, economy and way of life. The risks to Alaskans and to salmon eaters around the world are too great to proceed with this experiment.

The world is watching Alaska's reaction to the national FDA's approval of genetically modified salmon and AquaBounty. Alaska needs to pass these bills to protect the integrity of its seafood and show the world they can trust our seafood brands.

Thank you for your consideration,



Cynthia Wallesz
Executive Director

Testimony of:

**L. Val Giddings, Senior Fellow
Information Technology and Innovation Foundation**

**Before the
Alaska House Special Committee on Fisheries**

Regarding:

**House Joint Resolution 28:
Denouncing the recent FDA approval of AquaBounty's
AquAdvantage genetically engineered salmon**

And:

**House Bill 258:
An Act Prohibiting the Sale of a Genetically
Modified Fish or Fish Product**

Juneau, Alaska

February 4, 2016

Thank you Chairman Stutes for inviting me to testify on an issue with more than just symbolic significance. The innovative biotechnology involved in genetically engineering salmon promises to bring healthy and affordable food within reach for countless consumers with lower environmental impact than traditional ocean-farmed salmon. At the same time, this salmon promises dramatically to reduce the potential for potential negative impacts on wild populations that has sometimes been seen as a byproduct of raising farmed salmon large scale sea pens.

According to the Sponsor's Statement, House Bill 258 and House Joint Resolution 28 are "designed to protect our wild Alaska salmon and support our thriving, sustainable fisheries. HB 258 will prohibit the sale of genetically modified salmon... in the State of Alaska. HJR 28 denounces the recent approval of AquaBounty's AquaAdvantage genetically engineered salmon."¹

Two main claims are advanced to justify the proposed legislation: "This industry and way of life would be jeopardized with the inevitable, accidental release of transgenic fish into the wild... [and] the longterm health effects of consuming genetically engineered salmon are unknown."²

These claims are and objectively false. Alaska's fishing industry and way of life are impervious to any possible threat from a fish that will be grown in contained, closed circuit, terrestrial facilities located inland, thousands of miles from Alaska, far from any connecting waterways, and dedicated to raising sterile fish.

The species recently approved by FDA for human consumption is Atlantic salmon, *Salmo salar*, a species that is not native to Alaskan waters.³ AquaBounty's salmon has been approved to be grown in only two facilities—one on Prince Edward Island, Canada, and the other in the highlands of central Panama. In more than 25 years of research and development there has never been an escape of transgenic fish from either facility. If an escape were to take place, the fish are adapted and dependent on the conditions in which they are raised to such an extent that they would quickly expire in the hostile, wild environments where these facilities are located.⁴ But even in the remote event they were to survive in the wild, however, the fish would pose no threat to existing populations because they are sterile and incapable of reproducing.

¹ Alaska House Joint Resolution 28, "Sponsor Statement", Representative Geran Tarr, <http://www.akdemocrats.org/index.php?bill=HJR28>, accessed February 3, 2016.

² Ibid.

³ U.S. Food and Drug Administration, "AquAdvantage Salmon," November 19, 2015, <http://www.fda.gov/AnimalVeterinary/DevelopmentApprovalProcess/GeneticEngineering/GeneticallyEngineeredAnimals/ucm280853.htm>.

⁴ U.S. Food and Drug Administration, "AquAdvantage® Salmon Environmental Assessment In support of an approval of a New Animal Drug Application related to AquAdvantage Salmon, which are triploid, hemizygous, all-female Atlantic salmon (*Salmo salar*) bearing a single copy of the α -form of the opAFP-GHc2 recombinant DNA construct at the α -locus in the EO-1 α lineage," November 12, 2015, <http://www.fda.gov/downloads/AnimalVeterinary/DevelopmentApprovalProcess/GeneticEngineering/GeneticallyEngineeredAnimals/UCM466218.pdf>.

As to the long-term health effects of eating transgenic salmon, the scientific consensus is that they are the same as the long-term effects of eating non-transgenic salmon, because they are substantially equivalent and functionally indistinguishable because they are identical and indistinguishable with respect to every characteristic relevant to health, safety, and nutrition.⁵

Some have claimed the health effects of eating transgenic salmon cannot be known without dedicated, long-term human feeding studies. But toxicologists and epidemiologists have long agreed that such long-term feeding studies are unnecessary, as reported by the US General Accounting Office:

Monitoring the long-term health risks of GM foods is generally neither necessary nor feasible, according to scientists and regulatory officials we contacted. In their view, such monitoring is unnecessary because there is no scientific evidence, or even a hypothesis, suggesting that long-term harm (such as increased cancer rates) results from these foods. Furthermore, there is consensus among these scientists and regulatory officials that technical challenges make long-term monitoring infeasible.⁶

European Food Safety Authorities recently reaffirmed this consensus, noting that they “did not find any indication that a routine performance of 90-day feeding studies with whole food / feed would provide additional information on the safety of [GM foods] when compared to the compositional comparison of the GM variety.”⁷

Alaskans are known for their independence, self-reliance, and skepticism of over-regulation. This is a case where the science and broad public interest are firmly on the side of letting innovation proceed.

⁵ U.S. Food and Drug Administration, “FDA Has Determined That the AquAdvantage Salmon is as Safe to Eat as Non-GE Salmon,” November 19, 2015, <http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm472487.htm>.

⁶ US General Accounting Office, GAO-02-566, 2002.

⁷ European Commission, Community Research and Development Information Service (CORDIS), “New insights on the safety of GM organisms - An EU-funded project has undertaken extensive feeding trials to further inform the debate on the safety of mandatory GM animal feeding studies in advance of an expected 2016 EU re-evaluation,” Jan 28, 2016, http://cordis.europa.eu/news/rcn/124740_en.html.