

SCOMM

138:23

Alaska State Legislature

Senator Kim Elton
State Capitol, Room 115
Juneau, Alaska 99801-1182
465-4947 phone ♦ 465-2108 fax



Senator Gary Stevens
State Capitol, Room 103
Juneau, Alaska 99801-1182
465-4925 phone ♦ 465-3517 fax

MEMORANDUM

DATE: March 9, 2005

TO: Representative Gabrielle LeDoux, Co-Chair
Representative Bill Thomas, Co-Chair
House Special Committee on Fisheries

FROM: Senator Kim Elton and Senator Gary Stevens

SUBJ: Hearing Request for SB 25, an Act relating to labeling and identification of genetically modified fish and fish products.

We respectfully request a hearing for SB 25, amending section 17.20.040 of the Alaska Food, Drug, and Cosmetic Act to require Alaskan retailers to label genetically modified fish and shellfish, or food products containing genetically modified fish and shellfish when sold in retail.

This bill gives Alaska seafood consumers the ability to choose between genetically modified and non-genetically modified products. Additionally, SB 25 helps bolster the "purity" message that Alaskan seafood marketers have worked to convey, serving to further differentiate wild Alaskan seafood from seafood that has been either bred, or engineered by humans.

SB 25 is similar to legislation introduced in Oregon and California, and comes with the unanimous support of the Joint Legislative Salmon Industry Task Force.

We ask that you hear SB 25 at your earliest convenience.

Kim ✓
talk
to
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on
our
calendar

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SB 25 Sponsor Statement

"An Act relating to labeling and identification of genetically modified fish and fish products."

Transgenic foods are those in which the genetic structure has been altered at the molecular level by means that are not possible under natural conditions or processes. There has been widespread concern throughout the world over the largely unknown effects of transgenic, or genetically modified (GM) products on human and environmental health.

In an effort to address concerns raised by consumer, environmental, health, and Alaska fish marketing groups, SB 25 requires Alaska retailers to identify and label foods containing fish and shellfish, or fish and shellfish products that have been genetically modified.

The message that Alaska seafood is more natural than seafood that has been engineered or bred is a highly important marketing tool. This bill, by requiring a differentiation between GM and wild seafood helps highlight Alaska seafood as distinct from GM seafood, thereby doing away with any vagueness that may exist to the consumer when purchasing seafood without labeling, and reinforcing the natural message.

Many GM agricultural products are currently allowed on the U.S. market, and an application submitted by an aquaculture company for the use of a GM, growth-enhanced salmon is pending before the Food and Drug Administration's Center For Veterinary Medicine. The Pacific Fisheries Legislative Task Force *Fish Review* dated December 2004 reports that Aqua Bounty, a biotechnology company with offices in the United States and Canada, is planning to ask Canadian authorities for approval to use GM fish in Canada's fish farms.

Currently, legislation in the European Union, Japan, New Zealand, and Australia requires labeling on foods made from, or containing GM products. SB 25 is similar to legislation introduced in other states, such as Oregon and California, and it comes with the unanimous support of the Joint Legislative Salmon Industry Task Force, a committee comprised of legislators, seafood harvesters and seafood processors.

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465-4925 phone ♦ 465-3517 fax

SB 25

Recommended Witness/Interested Party/Teleconference request

Denny Kelso, assistant professor of environmental studies at UC Santa Cruz.
Will call in offnet from either (831) 459-3685 or (831) 477-0758.



THE CENTER FOR FOOD SAFETY

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WWW.CENTERFORFOODSAFETY.ORG

January 31, 2005

Senator Kim Elton
State Capitol, Room 115
Juneau, AK 99801-1182

Dear Senator Elton:

The Center for Food Safety is pleased to endorse Senate Bill No. 25 and your efforts for a mandatory labeling requirement to identify genetically engineered (GE) fish and shellfish. Because GE fish are being developed for commercial use, the potential release into the environment and the use of these fish as food is imminent. Therefore, Senate Bill No. 25 would give Alaskan consumers the right-to know whether their seafood is genetically altered.

GE fish present a host of serious risks to humans and the environment. Human health effects include the potential for toxicity, allergenicity, and antibiotic resistance. As for the environmental impacts, the risk of biological contamination from GE fish is particularly acute, since GE fish may be raised in net pens from which they can easily escape and breed with native strains. The harm of such interbreeding would be severe. A Purdue University study concluded that the release of GE fish could cause the extinction of an entire fish species in a matter of a few generations. The National Academy of Sciences also issued a report warning that GE fish that escape could wreck havoc on the environment.

Despite these potentially irreversible human health and environmental risks, there is a profoundly disturbing lack of federal regulation of marine biotechnology. As such, we applaud your leadership on this issue and hope the Alaskan legislature can step into the void by ensuring that consumers are aware of genetically engineered seafood products through a mandatory labeling requirement.

Sincerely,

Tracie Letterman
Fish Program Director



United Southeast Alaska Gillnetters

P.O. Box 23378, Ketchikan, AK 99901 Phone & Fax (907) 247 2471 Email: usa_gillnetters@att.net

January 29, 2005

The Honorable Gary Stevens
The State Senate
State Capitol, Room 103
Juneau, Alaska 99801

Send Via Fax to: 465-3517

Dear Senator Stevens,

The United Southeast Alaska Gillnetters (USAG) is an association of about 150 small business owners who catch salmon by drift gillnetting in Southeast Alaska and market salmon throughout the United States. Many of our members also participate in other fisheries such as crab, shrimp, longline, and dive fisheries. USAG strongly supports SB 25 which requires the labeling of genetically modified (GM) fish and fish products sold in the State of Alaska. We believe the Alaskan consumer wants to know and has the right to know if the fish and seafood products they are considering buying for their families have been genetically modified. This is in part a marketing issue as we believe that Alaska wild-caught seafood is the best and most healthy in the world and the Alaska consumer will choose it over a genetically modified product if they are given that information about the respective products. More than that, some GM fish may have attributes that allow those fish to be raised and brought to market at a price point with which quality wild fish cannot compete. If these GM fish are not labeled, the cost conscious consumer may choose the GM product on the basis of price, whereas if that consumer knew it was a GM product, they may not purchase it.

Thank you for introducing this legislation and for your continuing support for our seafood industry.

Yours truly,

Kenneth Duckett
Executive Director

cc: Senator Elton Via Fax to: 465-2108
Senator Bunde, Chair Senate Labor & Commerce Via Fax to: 465-3871

Southeast Alaska Fishermen's Alliance

9369 North Douglas Highway
Juneau, AK 99801

Phone 907-586-6652

Fax 907-523-1168



E-mail: seafa@gci.net

January 31, 2005

Senate Labor & Commerce Committee
Senator Con Bunde, Chair
Alaska State Legislature, State Capitol
Juneau, AK 99801-1182

RE: Support for SB 25

The Southeast Alaska Fishermen's Alliance supports SB 25, which would require genetically modified fish or fish products to be labeled. The Joint Legislative Salmon Industry Task Force offered unanimous support for this legislation last year although it failed to make it through the process.

It is important that Alaska have this type of labeling law in place prior to the advent of genetically modified fish or fish products make it into the marketplace. Aqua Bounty has already applied to the United States FDA and Canadian officials for the permits to grow genetically modified fish in fish farms. By being proactive on labeling requirements you help differentiation between genetically altered fish or fish products and our natural wild Alaskan fish in the marketplace. This allows us the use of an important marketing tool.

The Southeast Alaska Fishermen's Alliance is a non-profit membership organization located in Juneau representing our members involved in salmon, crab, shrimp and longline fisheries of Southeast Alaska.

Respectfully,

A handwritten signature in black ink, appearing to read 'Kathy Hansen', with a long horizontal flourish extending to the right.

Kathy Hansen
Executive Director

The Seattle Times

seattletimes.com

Tuesday, June 08, 2004, 12:37 A.M. Pacific

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Research fuels fear of gene-altered fish

By Sandi Doughton

Seattle Times staff reporter

In a head-to-head battle for food, normal coho salmon lose out to their genetically engineered cousins, says a new study that adds to the controversy over what critics call "frankenfish."

Not only did the aggressive, gene-modified salmon gobble up most of the feed when raised in tanks with ordinary salmon, but they also gobbled up their weaker competitors — including their own type, British Columbia scientists reported in yesterday's online edition of the Proceedings of the National Academy of Sciences.

The results were often dramatic population crashes, with only one or two of the genetically modified fish surviving in tanks that originally held 50 animals, said lead author Robert Devlin of Fisheries and Oceans Canada.

"When food supplies are low, transgenic (genetically modified) fish have a very significant effect on the population," he said, adding the caveat that laboratory experiments may not predict what would happen if bioengineered salmon escaped into the environment.

But that's a question that needs to be answered soon.

Massachusetts-based Aqua Bounty Farms has asked the U.S. Food and Drug Administration for approval to market what could be the first transgenic food fish: Atlantic salmon that grow twice as fast as normal fish. Aqua Bounty hopes to raise its transgenic salmon in coastal net pens in the United States and market the eggs around the world, said Joseph McGonigle, vice president for external affairs. "We are constantly hearing from companies that are interested in it," he said.

Faster-growing salmon would cut costs dramatically for fish farmers and lead to lower prices in the supermarket, McGonigle said.

Consumer groups, commercial fishermen and some scientists say studies such as Devlin's show the potential ecological consequences of unleashing man-made breeds of fish.

"We should not be taking a risk like this at a time when native salmon stocks are already in trouble," said Doug Gurian-Sherman, senior scientist at the Center for Food Safety, a consumer group based in Washington, D.C.

A 2002 National Academy of Sciences report expressed moderate concern that genetically engineered fish might pose risks to consumers if, for example, a person who was allergic to scallops ate fish with a scallop gene spliced into its DNA. But experts agreed that the biggest danger is that some of the gene-modified fish would inevitably escape into the environment.



Ⓢ enlarge STEVE RINGMAN / THE SEATTLE TIMES

Although gene-modified fish grow much faster than normal coho salmon, they don't get much bigger at maturity, researchers say.

Hundreds of thousands of Atlantic salmon have escaped into Northwest waters from salmon farms over the past several years when floating pens were ripped apart by storms or marauding sea lions.

The worst-case scenario involving transgenic fish is the "Trojan gene" hypothesis proposed by Purdue University geneticist William Muir: Genetically engineered salmon outcompete normal fish for food and mates, leading to less-hardy hybrids and the eventual extinction of the entire wild population.

McGonigle says the net pens would hold only sterile females, eliminating the possibility that escapees could breed in the wild. Several other studies, including some in Devlin's lab, have shown that the genetically engineered fish aren't likely to survive well outside of captivity because they're more susceptible to disease and oblivious to predators.

"We realize we have no chance of getting approval unless we can clearly demonstrate these fish are completely sterile, and they represent no genetic threat and no behavioral threat, in terms of competition for resources," he said.

Washington's Fish and Wildlife Commission banned genetically engineered fish from marine net pens, but the state has no rules that bar them from land-based tanks or fresh water, said John Kerwin, who manages the state's hatchery program. Oregon has similar restrictions, while California bans the creatures entirely — including the fluorescent Glo Fish, a genetically engineered aquarium fish that went on sale last year.

Devlin's research for the Canadian government is attempting to unravel the possible impacts of genetically engineered food fish before they're approved.

"We're just starting to gather the kinds of laboratory information which we hope will provide us with understanding about these animals," he said.

He works with coho salmon that overproduce growth hormone as a result of genetic tinkering. Aqua Bounty's Atlantic salmon were engineered in a similar way, using genes from chinook salmon and a species called ocean pout.

In both cases, the genetically engineered fish grow much faster than ordinary fish but don't get much bigger at maturity.

At 1 year of age, Devlin's gene-engineered fish are 10 times the size of ordinary coho.

For the study reported yesterday, Devlin and his colleagues manipulated the amount of food available to the fish. When food was abundant, normal and genetically modified fish coexisted well. It was only when

food was scarce that competition turned deadly for the normal fish.

While populations made up only of normal fish were able to ride out food shortages, mixed populations invariably crashed.

But the experiments also revealed another wrinkle: Populations made up of only genetically engineered fish also crashed when food supplies were low.

Does that mean transgenic fish might pose little risk if they escaped into the environment because they would die out when food supplies drop?

It's possible, Devlin said.

"If you had a small population, where the fish couldn't migrate out of the area, transgenic fish might eat themselves out of house and home and there would be no risks," he said.

But on the other hand, if numbers boomed when food was plentiful, the bioengineered fish could devastate normal fish in the cutthroat competition that would ensue.

McGonigle says he hopes to have an FDA ruling within the next two years, but the target date has been pushed back repeatedly.

Because of regulations to protect businesses, the agency's evaluation process is largely secret, leading critics to call for a new system that is open and gives more authority to environmental and wildlife agencies.

"FDA has absolutely no experience with these kinds of issues," said Gurian-Sherman, the Center for Food Safety scientist. "And we know nothing about what they're doing."

Sandi Doughton: 206-464-2491 or sdoughton@seattletimes.com

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Salmon Spawn Rainbow Trout

Scientists in Japan have engineered Asian salmon to produce the eggs and sperm of North American trout, an unprecedented bit of reproductive manipulation that may someday allow researchers to recruit common critters to replenish dwindling endangered species.

The team dissected newly hatched embryos of rainbow trout and removed small batches of "primordial germ cells." Those eventually become eggs or sperm in response to signals they receive from the developing fish.

The researchers, from the Tokyo University of Marine Science and Technology, injected those germ cells into newly hatched Pacific salmon embryos. Some of the cells made their way into the developing ovaries and testes of the recipient salmon, where they matured into rainbow trout eggs and sperm.

A year later, the team collected the milt – the cloud of sperm that male fish release into the water at maturity – of one of those salmon and mixed it with trout eggs. The result was a crop of purebred baby trout, sired by a salmon. (That salmon also produced salmon sperm, which when mixed with trout eggs created hybrid fish that did not survive.)

Other scientists have transplanted primordial germ cells from one fly species to another and from one bird species to another, resulting in the growth of sperm and eggs of one species inside the sex organs of the other. But the new experiment, described in the Aug. 5 issue of the journal *Nature*, marks the first such success in fish and the first to create progeny in any species.

Rainbow trout are plentiful, but the technique could help rare species. For example, salmon take one year to become sexually mature while trout take two, suggesting endangered species may be aided through reproduction by faster-breeding species.

-- Rick Weiss

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Both sides in fight over genetically modified fish are hoping this big one does not get away

By MARK HUME

UPDATED AT 2:21 PM EST

Friday, Dec 10, 2004

VANCOUVER -- They are swimming lazily in a few fish tanks right now, but Atlantic salmon that were developed in Canada may soon be the focus of the next big fight over genetically modified food.

To critics, the salmon designed to grow up to six times as fast as ordinary farmed salmon, are freaks of nature -- Frankenfish that shouldn't be allowed out of the lab.

Proponents say they're a remarkable creation that will help feed an increasingly hungry world and can reduce the environmental impact of fish farming by producing bigger fish, in less time, with less food.

"There's no question that this is the way things will go . . . this is the way salmon and many other fish will be grown in the future," Joseph McGonigle, the vice-president of Aqua Bounty Technologies, said yesterday.

His company, which has offices in the United States and Canada, has developed a fish that has trademark protection. Aqua Bounty has applied to the U.S. Food and Drug Administration for approval to market the salmon and is preparing to make a similar application in Canada, perhaps next year.

The first genetically modified fish approved in North America appeared on the market last year. The GloFishtm, a pet that glows in the dark, was cleared for sale in the United States with little opposition. Some shipments were made to Canada but have stopped pending a review by Environment Canada.

But the AquAdvantage salmon is a more complicated product; it is meant for human consumption, and it could survive in the wild.

"If these salmon get into fish farms, it will only be a matter of time before they get out," the Sierra Club's Vicky Husband said. "All you need is to have one escape and then they are interbreeding with the wild populations. It's horrific. We say absolutely no way to these fish."

Theresa Rothenbush of the Raincoast Conservation Society, said "consumers would be in shock if this fish was to ever get to market."

Mr. McGonigle said much of the criticism he hears is unfair and the Frankenfish label makes him bristle. "It's just silly. This is professional spin-doctoring going on."

AquAdvantage salmon are like any other Atlantic salmon, except for the genetic change that allows them to grow more rapidly, he said.

Has he ever eaten one?

"I have. I've had them smoked. They are absolutely indistinguishable from any other farmed fish. . . They are perfectly good-looking fish. I mean they are normal."

The AquAdvantage salmon were developed by Canadian scientists trying to help farmed Atlantic salmon survive winter. Those experiments, which involved introducing fish anti-freeze protein genes into Atlantic salmon from flounders, led to a growth breakthrough when genes from Chinook salmon (a Pacific species) and pout (a type of cod) were introduced.

In the early stages of life, the AquAdvantage salmon grow four to six times as fast as unaltered fish. They then slow down and approach the normal rate of growth. The early growth spurt could allow fish farmers to get fish to market size in 18 months rather than 36 months.

AquAdvantage salmon are found only in experimental fish tanks in the company hatchery in Prince Edward Island and at Memorial University in Newfoundland. A similar type of genetically modified salmon is also under study in a federal government lab in Vancouver.



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Industry leery of genetically altered fish

■ **SALMON:** Would fast-growing "Frankenfish" imperil wild stocks?

By **MATT VOLZ**
The Associated Press

JUNEAU — Producers of a genetically modified salmon that would speed the fish's growth to maturity expect their nine-year federal application to sell the fish in the United States to be decided within a year.

That has renewed concern among commercial fishermen who, competition aside, wonder what would happen if the genetically modified fish escaped their pens and mingled with wild salmon.

"They show up in rivers in Alaska, they show up in our fishing nets and already we fear Atlantic salmon as an invasive species in our productive salmon spawning waters," said Mark Vinsel of the United Fishermen of Alaska. "When you add in the genetically modified fish, I think the concerns are multiplied."

Genetically modified, or transgenic, fish are already being denounced by fishermen and anti-fish-farming states such as Alaska as unhealthy, uneconomic and dangerous to native species of salmon.

See Page B-2, **DESIGNER FISH**

B-2 Wednesday, March 9, 2005

Anchorage Daily News

DESIGNER FISH: *Altered salmon*

Continued from B-1

"I'd prefer if you'd call it Frankenfish," said Alaska Sen. Kim Elton, a Democrat from Juneau. "We don't know what additional challenges might accrue because people are changing the genetics of fish."

A transgenic fish's genetic structure is changed at the molecular level, in this case to allow a mature salmon to grow from an egg in 14-16 months instead of the 22-30 months it takes wild salmon to grow. If approved, it would be the first genetically modified animal allowed for food consumption in the United States.

The earliest that genetically modified salmon could hit U.S. and Canada markets would be the next decade, after permits for selling and raising the fish in both countries are approved.

Aqua Bounty Technologies, based in Waltham, Mass., is nine years into the application process with the Food and Drug Administration, and spokesman Joe McGonigle said he expects a decision within a year.

FDA spokeswoman Rae Jones acknowledged by e-mail Aqua Bounty's pending application, but said: "We cannot provide any information about if or when it will be approved, nor can we provide any information about where it is in the approval process."

Aqua Bounty plans to sell genetically modified fish eggs to fish farms. McGonigle said the concerns of interbreeding with wild salmon are unfounded — sterilized transgenic fish could actually reduce the chance of an invasive species hurting the wild salmon populations of the Pacific Northwest.

"You're sitting at the epicenter of hostility to salmon farming," McGonigle said of Alaska. "The single most significant issue is the risk of interbreeding. The only way you can control that is to sterilize the fish."

Sterile or not, Vinsel said, an escaped transgenic fish would still be competing with wild fish for food and to mate.

"I can't honestly take that seriously," McGonigle said, saying the number of wild salmon that

return to native streams outnumber the farmed fish many times over.

McGonigle said he does not expect the genetically modified salmon to compete directly with wild salmon in the market, but contends the products can coexist. Consumer and price tiers will likely be established, with wild salmon at the top and the less expensive and more plentiful transgenic fish at the bottom.

The genetically modified salmon would make it easier for fish farmers to have better control of their stocks and even out periods of gluts and scarcity, McGonigle said.

"Nobody wants to see the prices fall, not to where it becomes difficult for people to make a living," he said.

In Alaska, lawmakers are already preparing for the introduction of genetically modified fish to the market. A bill by Elton and state Sen. Gary Stevens, a Republican from the fishing community of Kodiak, would require labeling genetically modified fish.

Elton says his proposal is complementary to past legislation that required farmed fish to be labeled in Alaska restaurants and shops. Those bill were products of a legislative salmon task force for which the goal was to protect one of the state's biggest industries.

"Hopefully, it sets a pattern," Elton said. "As frequently happens, if one state does something, another state says, 'That's a good model.'"

Elton and Stevens' bill has passed the state Senate and is being considered by the state House.

Aqua Bounty says foods produced through biotechnology are not required to be labeled unless an allergen is introduced, the nutritional content is altered or the result of modification is a new food item.

But the company plans to require its licensees to label their fish, saying consumers are more likely to accept the fish if they have the facts, and for brand recognition.

"Branding is essential for our fish, or for Alaska or for anyone else," McGonigle said.



"THAT MUST BE ONE OF THOSE FARMED SALMON
WE'VE BEEN HEARING ABOUT."

R.
Shall...

FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: 2
Bill Version: SB 25
(S) Publish Date: 2/9/05

Revision Date/Time (Note if correction): _____ Dept. Affected: LAW
Title "An Act relating to labeling and identification of RDU CIVIL
genetically modified fish and fish products." Component Environmental
Sponsor Senator Elton
Requester Senate Resources Committee Component No. _____

Expenditures/Revenues

(Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()						
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FUND SOURCE

(Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type-Do not abbreviate)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2005) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal: ☐

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: (Attach a separate page if necessary)

This bill amends the Alaska Food, Drug, and Cosmetic Act, AS 17.20.040 by adding genetically modified fish or fish product to the list of misbranded food, unless conspicuously labeled or identified as such. Legislation at the federal level already prohibits the sale of any genetically modified foods.

Passage of this legislation will have no fiscal impact on the Department of Law.

Prepared by: Kathryn Daughhetee, Director
Division: Administrative Services Division
Approved by: Kathryn Daughhetee for Gregg D. Renkes, Attorney General
Agency: Department of Law

Phone 465-3673
Date/Time 2/2/05 3:07 PM
Date 2/2/2005

FISCAL NOTE

STATE OF ALASKA
2005 LEGISLATIVE SESSION

Fiscal Note Number: 1
 Bill Version: SB 25
 (S) Publish Date: 2/9/05

Revision Date/Time (Note if correction): _____ Dept. Affected: Environmental Conservation
 Title Genetically modified fish RDU Environmental Health
 Component Food Safety and Sanitation
 Sponsor Senator Elton
 Requester (S) Labor & Commerce Component No. 2343

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Personal Services	0.0	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0	0.0
Contractual	0.0	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0	0.0
Land & Structures	0.0	0.0	0.0	0.0	0.0	0.0
Grants & Claims	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0

CAPITAL EXPENDITURES						
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CHANGE IN REVENUES ()	0.0	0.0	0.0	0.0	0.0	0.0
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FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1003 GF Match	0.0	0.0	0.0	0.0	0.0	0.0
1004 GF	0.0	0.0	0.0	0.0	0.0	0.0
1005 GF/Program Receipts	0.0	0.0	0.0	0.0	0.0	0.0
1037 GF/Mental Health	0.0	0.0	0.0	0.0	0.0	0.0
Other (Specify Type--Do not abbreviate)	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2005) cost: 0.0

Mark this box (X) if funding for this bill is included in the Governor's FY 2006 budget proposal: ☐

POSITIONS

Full-time	0	0	0	0	0	0
Part-time	0	0	0	0	0	0
Temporary	0	0	0	0	0	0

ANALYSIS: (Attach a separate page if necessary)

Under current federal rules, genetically modified fish and fish products cannot be used or sold in the United States. Under the current FDA rules, this bill will have no fiscal impact on the department. Should the FDA allow the sale and use of genetically modified fish and fish products in the future, increased inspection and compliance resources will be required to comply with the provision of this bill.

Prepared by: Kristin Ryan, Director Phone (907) 269-7644
 Division: Environmental Health Date/Time 1/28/05 4:04 PM
 Approved by: Kurt Fredriksson Date _____
 Agency: Department of Environmental Conservation