

April 8, 2008
File No.: 259040.00012/13685

VIA FACSIMILE

Office of the Information & Privacy Commissioner
P.O. Box 9038, Stn. Prov. Govt.
3rd Floor, 756 Fort Street
Victoria, B.C. V8W 1H2

**Attention: Carole Shave,
Registrar of Inquiries**

Dear Sirs/Mesdames:

Re: Inquiry under Part 5 of the *Freedom of Information and Protection of Privacy Act* (“FOIPPA”) between T. Buck Suzuki Environmental Foundation (“Applicant”) and the Ministry of Agriculture and Lands (“Public Body”) and Third Parties – OIPC File No.: F07-33524 – Public Body File Nos.: 292-30/AFF-04-041 and 292-30/AFF-04-042

We are counsel for third party Mainstream Canada (“Mainstream”) in this inquiry. We write in response to your communication of March 25, 2008 and acknowledge that initial submissions are now due by 12:00 noon on April 8, 2008.

This constitutes the initial submissions of Mainstream Canada.

A. FACTS

The Applicant's Requests

1. In August 2004, the Applicant made two Freedom of Information requests to the Public Body. The first request (AFF04.41) stated as follows:

Pursuant to sections 4, 5, 6 and 25 (see below) of the *Freedom of Information and Protection of Privacy Act*, we are requesting information derived from provincial monitoring or observations at aquaculture operations in the Broughton Archipelago. Specifically we are seeking an electronic (digital) copy of the most current database or

databases containing any of the following entries or fields, for the period from January 2002 until the present:

- Name and location of the aquaculture operation (including GIS or other geographical reference data showing location);
- Descriptions of the size or extent of aquaculture operations (including, but not limited to the numbers of pens, fish populations, species breakdown, and any date of monitoring or observation);
- Sea lice monitoring data (including but not limited to lice abundance, species and monitoring dates);
- Sea lice treatment measures (including the names of any products used and dates of use);
- Any instance of “fallowing” of finfish aquaculture operations;
- The numbers of escaped fish from each individual operation; and
- A complete listing of databases field headings or descriptions (entities and attributes) for the database where the above-described data is kept.

We request that the database (or data bases) be provided in a form readable by a publicly available common database program, and that the information be saved on CD-ROM (or like format). For further clarification, while we seek the names of aquaculture operations, we do not seek the names or personal information of any employees of those operations, or the names of any government employees or members of the public whose names or personal information may appear in the database. We consent to that information being excerpted.

Additionally, pursuant to FOIPPA, we request all records concerning:

- Sea lice monitoring protocols (including but not limited to sampling procedures and statistics);
- Population estimates for resident cutthroat and/or steelhead in the Broughton Archipelago (including both actual monitoring or estimates); and
- Monthly population estimates for juvenile salmon outmigration and adult spawner migration (including both actual monitoring and estimates).

2. The Applicant's second request to the Public Body (AFF04.42) stated as follows:

Pursuant to sections 4, 5, 6 and 25 (see below) of the *Freedom of Information and Protection of Privacy Act*, we are requesting information derived from provincial monitoring or observations at aquaculture operations in the Broughton Archipelago. Specifically we are seeking an electronic (digital) copy of the most current database or databases containing any of the following entries or fields, for the period from January 2002 until the present:

- Fish health zones;
- Name and location of the aquaculture operation (including GIS or other geographical reference data showing location);
- Descriptions of size or extent of aquaculture operations (including, but not limited to the numbers of pens, fish populations, species breakdown, and any date of monitoring or observation);
- Any instance of "fallowing" of finfish aquaculture operations;
- Monitoring results for pathogens (including pathogen name and dates of occurrence); and
- A complete listing of database field headings or descriptions (entities and attributes) for the databases where the above-described data is kept.

We request that the database (or data bases) be provided in a form readable by a publicly available common database program, and that the information be saved on CD-ROM (or like format). For further clarification, while we seek the names of aquaculture operations, we do not seek the names or personal information of any employees of those operations, or the names of any government employees or members of the public whose names or personal information may appear in the database. We consent to that information being excerpted.

3. On May 10, 2005, the Applicant clarified the two requests as follows:

AFF04.41

- (a) Sea lice monitoring data (including, but not limited to, lice abundance, weight, species and monitoring dates and corresponding name, MAFF reference or land file number and location) collected by employees of the provincial government under the Sea Lice Monitoring and Audit Program in the Broughton Archipelago (Health Zone 3-3);
- (b) Specifically, we are requesting the electronic database that was used to generate tables and graphs on sea lice abundance by species and size given to us at a meeting with Bud Graham and Joanne Constantine on Oct. 17, 2003, labelled "Audit Data". We request this data, as in our original FOI, from January 2002 to present; and
- (c) A complete listing of any database field headings or descriptions (entities and attributes) for the database where the above-described data is kept.

AFF04.42

- (a) Monitoring results for pathogens (including pathogen name and dates of occurrence) with the corresponding name and location of the salmon farming operation (or MAFF reference or land file number); and
- (b) A complete listing of any database field headings or descriptions (entities and attributes) for the database where the above-described data is kept.

For both requests, the Applicant requested an electronic copy of the information, i.e. an electronic copy of the database containing the information.

The Public Body's Response to the Requests

4. In respect of AFF04.41, the Public Body advised the Applicant that the records requested in (b) were not in its possession—the relevant information and database are held by the British Columbia Salmon Farmers Association (“BCSFA”). The Public Body also provided the Applicant with listings of the database field headings as requested in both AFF04.41 and AFF04.42. Thus, only (a) for each request is at issue in this inquiry.
5. The Public Body created reports from its database to respond to (a) in each request. However, on November 9, 2007, the Public Body informed the Applicant that it would be withholding all information that would link the information to specific sites or businesses pursuant to s. 21(1) of FOIPPA. Specifically, the Public Body claimed that the information was commercial or scientific information, supplied in confidence by the third parties, and that disclosure could reasonably be expected to result in similar information no longer being supplied to the Public Body when it is in the public interest that similar information continue to be supplied in the future.
6. On November 15, 2007, the Applicant requested an inquiry in this matter.
7. On January 21, 2008, the Applicant and the Public Body were issued a Notice of Written Inquiry and the Portfolio Officer's Fact Report. The Public Body subsequently provided Mainstream with this information in a letter dated January 24, 2008.

Mainstream Canada's Involvement

8. The information sought by the Applicant was supplied by Mainstream to the Public Body by way of:
 - (a) meetings between Mainstream staff and the Public Body whereby Mainstream staff verbally provided the information;
 - (b) Mainstream staff granting the Public Body access to its data records on site;
 - (c) fish carcasses collected with Mainstream's permission at Mainstream's sites by the Public Body for diagnostic testing; and
 - (d) live sea lice samples from live fish collected at Mainstream's sites by staff from both Mainstream and the Public Body with Mainstream's permission for diagnostic testing.

9. The information supplied to the Public Body via (a) and (b) is contained under the following headings in the database:

Fish Sampling

- Year and quarter
- Farm ID
- Date of sampling
- Site inventory
- Mortalities for dive
- Mortality Breakdown
 - Predators
 - Environment
 - Non Performers
 - Old/rotten
 - Silver
 - Other
- Open 'dialogue' box containing comments, clarifications, observations

Fish Health Events/Actions

- Last treatment
 - Prescription/non-prescription product(s)
 - Start/end date
 - Husbandry change to manage potential infectious disease
 - Reason for treatment/husbandry change

Health Events

- Diagnosis
- Action taken (if any)
- Treatment type
- Drug product
- Start date/end date
- Specific prescription information

This information contains pathogen data sought by the Applicant in request AFF04.42.

10. With the exception of sea lice audits (i.e. supply method (d), discussed further below), the remainder of the information within the database is derived from fish carcasses that are collected by the Public Body at Mainstream's sites (i.e. supply method (c)). This information is contained under the following headings in the database:

Virology

- Year/quarter
- Farm ID
- Date Submitted
- Way Bill
- Lab number
- Date received
- Virus results
 - IHNV
 - IPNV
 - ISA
 - VHS
 - Piscirickettsia.
- Fish ID (e.g. 4th silver carcass collected)
- Pen ID
- Pool ID

Bacteriology

- Year/quarter
- Farm ID
- Date Submitted
- Way bill
- Lab Number
- Date Received
- Number of fish
- Fish ID
- Pen ID
- Findings/Sensitivities
 - ERM:R
 - FFC:S
 - SSS:R
 - SXT:S
 - TET:S

Histology

- Year/quarter
- Farm ID
- Date Submitted
- Way Bill
- Lab Number

- Date Received
- Histology summaries made by histopathologist
- Comments
- Number of fish
- Morphology
 - Liver/spleen/heart
 - Basophilic cytoplasm/hepatitis/endocarditis

Clearly, this information contains pathogen data sought by the Applicant in request AFF04.42.

11. In regards to supply method (d), the information is derived entirely from sea lice samples that staff from Mainstream and the Public Body handled jointly during sea lice audits. During these audits, 60 live fish are gathered from 3 pens. Mainstream staff assesses the sea lice found on 30 of those fish, and the Public Body's staff assesses the sea lice found on the other 30. Both groups make notes of the information and the Public Body ultimately inputs this information into the database under the following headings:

Sea Lice Monitoring and Auditing

- Farm Code
- Sampled by
- Date sampled
- Pen ID

Fish number

- Number of gravid female
- Adult female
- Adult males
- Pre-adult males and females
- Chalimus
- Caligus
- Comments
- General comments

The database also includes information regarding sea lice counts per fish, sea lice species and any sea lice treatments that Mainstream may have utilized within the previous 3 months.

12. The information Mainstream supplies to the Public Body is not identified in the database per se as "Mainstream, site ____". Rather, the information is assigned a

Farm Code and that code is linked to the BCF number assigned to Mainstream pursuant to its license. The BCF number is subsequently linked to the names and locations of Mainstreams sites. We submit that it would not be difficult for the Applicant to determine which site the information sought relates to because the BCF numbers are easily obtained.

B. MAINSTREAM CANADA'S POSITION

13. Section 21 of the FOIPPA requires the head of a public body to refuse to disclose any information that would harm the business interests of a third party. This is precisely what the Public Body has done in this case. Consequently, the burden of proof rests with the Public Body—it must demonstrate that the Applicant has no right of access to all or part of the information sought.

14. Section 21(1) sets out a three-part test for determining whether disclosure is required. The disclosure exception will not apply unless all three elements of the s. 21(1) test are established. Section 21(1) reads:

21 (1) The head of a public body must refuse to disclose to an applicant information

(a) that would reveal

(i) trade secrets of a third party, or

(ii) commercial, financial, labour relations, scientific or technical information of or about a third party,

(b) that is supplied, implicitly or explicitly, in confidence, and

(c) the disclosure of which could reasonably be expected to

(i) harm significantly the competitive position or interfere significantly with the negotiating position of the third party,

(ii) result in similar information no longer being supplied to the public body when it is in the public interest that similar information continue to be supplied,

(iii) result in undue financial loss or gain to any person or organization, or

(iv) reveal information supplied to, or the report of, an arbitrator, mediator, labour relations officer or other person or body appointed to resolve or inquire into a labour relations dispute.

(2) The head of a public body must refuse to disclose to an applicant information that was obtained on a tax return or gathered for the purpose of determining tax liability or collecting a tax.

- (3) Subsections (1) and (2) do not apply if
 - (a) the third party consents to the disclosure, or
 - (b) the information is in a record that is in the custody or control of the archives of the government of British Columbia or the archives of a public body and that has been in existence for 50 or more years.

15. The Public Body has refused the Applicant access to the records sought because it believes that:
- (a) the information would reveal “commercial, financial, labour relations, scientific or technical information of or about a third party” (ss. 21(1)(a)(ii));
 - (b) was “supplied, implicitly or explicitly, in confidence” (ss. 21(1)(b)); and
 - (c) it is reasonable to expect that the disclosure of this information would result in similar information no longer being supplied to the Public Body when it is in the public interest that similar information continue to be supplied (ss. 21(1)(c)(ii)).
16. In addition to the above subsections, we further submit that the Public Body is required to refuse the Applicant access to the records sought because disclosure would result in “undue financial loss” for Mainstream (ss. 21(1)(c)(iii)).

Section 21(1)(a)(ii): Scientific or Technical Information of a Third Party

17. In **Order No. 56-1995**, the Commissioner stated the following in regards to “scientific” and “technical” information as it is defined in ss. 21(1)(a)(ii):

In my judgment, environmental test results fall within the meaning of “technical” information in this section.

...

...I agree with the third party that the words “scientific” and “technical” would surely include information that is the result of scientific environmental sampling...

18. Similarly, in **Order No. 57-1995**, the Commissioner stated:

In my judgment, the intent of the reference to “scientific” or “technical” information in this section is to protect internal secrets of a company.

19. Moreover, in both **Order No. 56-1995** and **Order No. 57-1995** the Commissioner stated that the words “scientific” and “technical” cover “test data of the third party conducted...to evaluate the efficiency of a process or actual conditions during a product run.” We submit that the information at issue in this application (i.e. sea lice and pathogen monitoring data) is clearly test data compiled to evaluate the actual conditions in existence at the Mainstream sites during a production run. We further submit that the information could equally be characterized as “scientific environmental sampling”, “environmental test results” and/or “internal [Mainstream] secrets”. Thus, we submit that the information is “scientific” or “technical” information as defined by ss. 21(1)(a)(ii).

Section 21(1)(b): Information Supplied in Confidence

20. The second part of the s. 21(1) test requires the Public Body to show that the information in issue was “supplied, implicitly or explicitly, in confidence.” The cases have frequently discussed the question of whether the information was “supplied” by the third party separately from the question of whether it was supplied “in confidence”. Accordingly, we will discuss the question of confidentiality first.

In Confidence

21. In **Order No. 01-39**, the Commissioner stated the following in regards to information supplied “in confidence”:

Information is supplied, explicitly or implicitly, in confidence within the meaning of s. 21(1)(b) of the *Act* if, in all circumstances, it can be objectively regarded as having been provided in confidence with the intention that it be kept confidential.

And that:

The Freedom of Information and Protection Privacy Policy and Procedures Manual, Ministry of Government Services, Information and Privacy Branch, Vol. 1...sets out some factors relevant to the determination of confidentiality (at Section C.4.12, pp. 13-4). They include:

- the existence or lack of an explicit statement of confidentiality, request for confidentiality, confidentiality agreement, or other objective

evidence which indicates the parties' understanding that the information would be kept confidential;

- the type of information, including whether it would normally be kept confidential by the third party; and
- whether the information was supplied voluntarily by the third party, informally requested by the public body or required by the public body, where failure to supply the information would have negative consequences for the third party.

The *Manual* also states that the confidentiality requirement in s. 21(1)(b) means that the information is provided with an expectation that its privacy be maintained.

...

...the focus of the confidentiality assessment is on whether the information in the disputed records was provided in confidence and whether, assessed objectively, it can be said that there was a reasonable expectation that it be maintained in confidence.

22. Similarly, in **Order 01-36**, the Commissioner stated that when there is no express promise or agreement to hold information in a confidential manner, the circumstances must be considered to determine if, on an objective basis, it can be said that the information was supplied *implicitly* in confidence. The circumstances to be considered include whether the information was:

1. communicated to the public body on the basis that it was confidential and that it was to be kept confidential;
2. treated consistently in a manner that indicates a concern for its protection from disclosure by the affected person prior to being communicated to the public body;
3. not otherwise disclosed or available from sources to which the public has access;
4. prepared for a purpose which would not entail disclosure.

23. We submit that although there was no explicit written confidentiality agreement between Mainstream and the Public Body, the circumstances are such that the information Mainstream supplied to the Public Body can be objectively regarded as having been provided in confidence with the intention that it be kept confidential.
24. First, given the public and contentious nature of the debate surrounding farmed salmon, Mainstream has consistently treated the information in a manner that denotes a concern for its protection from disclosure. Mainstream ensures that this information is stored in a safe and secure manner at its offices by restricting access to the server it is stored on to a select group of Mainstream employees.
25. Second, for the purposes of the database, the information is supplied to the Public Body on a voluntary basis. In this regard, we wish to draw the Commissioner's attention to the "Letter of Understanding Regarding Fish Disease Reporting and Provincial Fish Health Database" (the "LOU") (Exhibit #1) which was agreed between the Ministry of Agriculture, Food and Fisheries (the "BCMAFF") (i.e. the Public Body) and the British Columbia Salmon Farmers Association ("BCSFA") in January 2001. The LOU was developed "in recognition of the commitment of BCMAFF and BCSFA to the implementation of the provincial Salmon Aquaculture Policy...."
26. The purpose of the LOU is to "document how information will be reported from all freshwater hatchery facilities and marine fish farm sites ("Fish Culture Facilities") to the fish health database (the "Database") and from the Database to BCMAFF". Procedurally, the salmon farms provide the information to the BCSFA, who in turn provide the information to the BCMAFF.
27. Most important to this inquiry are the provisions in the LOU that outline the confidential nature of the relationship between the salmon farms and the BCSFA, and the BCSFA and the BCMAFF. In regards to the salmon farms and the BCSFA, the LOU provides, in part:

The BCSFA will ensure individual company data confidentiality by providing a Nondisclosure agreement between itself and the industry Database participants and by providing strict security and encryption protocols in the Database.

28. In regards to the BCSFA and the BCMAFF, the LOU provides, in part:

Based on information reported to the Database, the BCSFA and/or its agents will provide quarterly amalgamated reports on the health of cultured salmon to BCMAFF. The database will summarize the above health information quarterly and amalgamate it by zone. The zones chosen for reporting are the fish health zones established by the federal Department of Fisheries and Oceans (DFO) and are based on watersheds for stocking purposes. These zones will also be used for the proposed Fisheries and Oceans wild fish surveillance program making it easier for future inclusion of this information in the Database. **Reporting based on zone has been established to protect the confidentiality of the clients and proprietary information.**

29. Lastly, and most importantly, the last paragraph of the LOU provides that the information collected “through the auditing and surveillance program will also be confidential with no public reporting of the findings for the same time period.” The sea lice and pathogen data at issue in this inquiry was in fact collected pursuant to the auditing and surveillance program. Clearly, then, Mainstream, the BCSFA and the Public Body agreed that the information sought by the Applicant in this inquiry would be treated with the utmost confidence.
30. Furthermore, we submit that Mainstream’s management has, at all times, since its inception, provided this manner of information to the Public Body pursuant to an expectation of confidentiality.
31. The confidentiality contents of Exhibit “A” to the affidavit of Chris Ledger further supports the requirement of Mainstream that their information be held in confidence and the Public Body’s willingness to accede to that requirement.
32. Lastly, this information is not otherwise disclosed or available from sources to which the public has access. The information is held in a secure and confidential manner by three entities: Mainstream, the Public Body, and the BCSFA.

Information was “Supplied”

33. In **Order No. 01-39**, the Commissioner stated the following in regards to the meaning of supplied in ss. 21(1)(b):

...the information will be found to be supplied if it is relatively “immutable” or not susceptible of change.

34. The Commissioner made similar comments in **Order F06-20**:

...the concept of “supply” is intended to capture truly immutable third-party business information.

35. Lastly, in **Order No. F05-29**, the Commissioner stated the following in regards to information which has been created or generated by a public body from information which was provided to it by a third party:

It is well established that information created or generated by a public body is not “supplied” within the meaning of s. 21(1)(b), unless it would inferentially disclose underlying information that was, in fact, supplied to the public body in confidence.

36. We submit that the sea lice and pathogen monitoring data at issue in this inquiry is raw, immutable scientific and technical data, and therefore was “supplied” to the Public Body as required by s. 21(1)(b). We submit that the information derived from fish carcasses and from sea lice removed from live fish as described in paragraph 11 above is “supplied” in the true sense of the word by Mainstream. The data would not be available to the Public Body unless Mainstream provided the fish and carcasses from which the information was extracted. We further submit that even if the Commissioner finds that some of the sea lice and pathogen information sought was in fact “created” or “generated” by the Public Body, the nature of the database (i.e. the use of Farm Codes and BCF Numbers discussed above) would inferentially disclose that the underlying information was supplied to the Public Body by Mainstream. Indeed, that is what the Applicant is seeking here: the sea lice and pathogen data for the specific farms listed in the database.

Section 21(1)(c)(ii): Similar Information No Longer Being Supplied

Section 21(1)(c)(iii): Undue Financial Loss

37. In regards to the s. 21(1)(c) test, we assert that if the Public Body is forced to disclose the information sought by the Applicant, Mainstream will no longer

supply similar information to the Public Body when it is in the public interest that similar information continue to be supplied. This is due to the presence of organizations, like the Applicant, which seek to undermine the viability of salmon farming companies like Mainstream and the harm which such information in the wrong hands can do.

38. For example, articles available on the Applicant's website state as follows:
- (a) "Growing evidence indicates that open net-cage salmon farms allow **diseases and parasites** to transfer from farmed to wild salmon. High fish density leads to cramped conditions inside salmon farms, **encouraging disease and sea lice infestations**" (Exhibit #2).
 - (b) "Our tourism association members see the juvenile pinks migrating. Before they hit the farms they are free of lice. Once they pass the farms, **they become infected**" (Exhibit #3).
 - (c) "In Norway, **they found that the impact of diseases and parasites**, which may have been relatively small on salmon species in the wild, **suddenly became magnified** in the densely populated netpens used by the salmon companies. ...

Certainly improvements in salmon aquaculture have been made since then, but fundamental problems and risks remain: **the transfer of disease to wild fish, environmental degradation under farm sites, high levels of antibiotic use**, and colonization of local streams by escaped farm salmon. ...

Some of the **worst fears of disease transfer were realized in 2002**, when pink salmon returns to rivers in the Broughton Archipelago collapsed, **following two years of severe lice outbreaks. The lice population had exploded in the area's salmon farms, and had infected the juvenile pink salmon as they passed the farms on their migration out to sea**" (Exhibit #4).

39. Additionally, the Applicant is a member of the Coastal Alliance for Aquaculture Reform ("CAAR"). Articles with the following headings are found on the CAAR website (www.farmedanddangerous.org):
- (a) "Cancer-contaminated BC farmed salmon must be destroyed" (Exhibit #5).

- (b) “Why you should think twice about eating farmed salmon” (Exhibit #6).
 - (c) “Salmon Farming and Human Health” (Exhibit #7).
40. We submit that if the Applicant and groups like it are in possession of information that would suggest or confirm the presence of pathogens and/or sea lice in any quantity, and particularly in significant quantities, it is clear that they would use this information to damage Mainstream’s business. The public would not be interested in buying fish that they are told are infected with pathogens or were raised in an environment conducive to the presence of pathogens and/or sea lice or contain carcinogenic material. It is axiomatic that Mainstream’s business would suffer as a result. Consequently, Mainstream would no longer provide the Public Body with the pathogen and sea lice monitoring data it currently supplies voluntarily with the expectation that it will remain confidential.

C. SUMMARY

41. Given the foregoing, we submit that the all three elements of s. 21(1) are met, and therefore the Public Body is required to refuse the Applicant’s request for access to the sea lice and pathogen monitoring data found in the database. Specifically, we submit that the information in the database:
- (a) is clearly “scientific environmental sampling” and/or “environmental test results” designed to identify the “actual conditions” in existence at Mainstream’s sites, and therefore falls within the definition of “scientific” and “technical” found in ss. 21(1)(a);
 - (b) was, on an objective assessment, supplied “in confidence” as that term has come to be defined in ss. 21(1)(b). That is, Mainstream treated the information in a safe and secure manner at its offices; it supplied the information to the Public Body voluntarily; it has, since its inception, always supplied the information with an expectation of confidentiality shared by the Public Body; and the information is not otherwise available to the public;
 - (c) is immutable and/or would inferentially disclose underlying information that was, in fact, supplied to the Public Body by Mainstream, and was therefore “supplied” as that term has come to be defined in ss. 21(1)(b);
 - (d) if disclosed to the Applicant (and other groups with which it is affiliated), would be used to undermine the viability of the salmon farming industry

and cause Mainstream undue financial harm (ss. 21(1)(c)(ii)).
Consequently, Mainstream would no longer supply similar information to
the Public Body when it is in the public interest that similar information
continue to be supplied (ss. 21(1)(c)(iii)).

Yours truly,

FASKEN MARTINEAU DuMOULIN LLP



N.K. Trerise

NKT/mec

MAR-26-2002 TUE 11:12 AM RAYMOND DAGENAIS CA

FAX NO. 2861934

To: 2502860042

P. 2/16

P. 04

LETTER OF UNDERSTANDING REGARDING FISH DISEASE REPORTING AND PROVINCIAL FISH HEALTH DATABASE

AMONG:

The Ministry of Agriculture, Food and Fisheries

("BCMAFF")

AND:

The British Columbia Salmon Farmers Association

AS OF:

("BCSFA")

January 23, 2001

This Letter of Understanding has been developed in recognition of the commitment of BCMAFF and BCSFA to the implementation of the provincial Salmon Aquaculture Policy (the "Policy"), which is in keeping with the recommendations of the 1997 Environmental Assessment Review of aquaculture.

As part of the fish health component of the Policy, the Province stated that a comprehensive database will be developed to improve the quality and availability of health information for cultured salmon stocks. The Province will publish an annual report to improve public access to, and communication of, aggregated fish health information.

1. Purpose of Letter of Understanding

The purpose of this Letter of Understanding is to document how information will be reported from all freshwater hatchery facilities and marine fish farm sites ("Fish Culture Facilities") to the fish health database (the "Database") and from the Database to BCMAFF. The Database is being developed by the BCSFA as an 8-month pilot project with funding assistance from the Office of the Commissioner for Aquaculture Development (OCAD) for technical development to June 2001. This LOU will also document the framework for the BCMAFF's program for fish health surveillance of the industry fish culture facilities and auditing of records for consistency with the fish health information reported in quarterly reports to BCMAFF from the Database.

2. Database Structure and Fish Health Reporting

Background:

The BCSFA will develop the Database to house information from all Fish Culture Facilities. The BCSFA will develop the framework for reporting information to the Database system. The BCSFA will ensure individual company data confidentiality by providing a Nondisclosure agreement between itself and the industry Database participants and by providing strict security and encryption protocols in the Database. In this way ownership of the Database and the aggregate industry information will belong to the BCSFA.

The Database will be a Web enabled system in which the Internet provides a wide area network and "on-line" access for authorized users from multiple geographic locations. The system will be structured with restricted access and a series of "firewalls" to maintain individual company confidentiality.

3. Information Provided to the Database

Fish Culture Facilities will provide the Database site-by-site information on inventories and percentage mortality broken down by findings attributed to cause. Inventory data will be used to calculate the total percent mortality and the percentage of mortality by finding. The Fish Culture Facilities will also provide specific information on infectious diseases and the various disease(s) which have a confirmed veterinary diagnosis. Individual Company information is proprietary business information and it will be kept strictly confidential to the BCSFA Database. However, amalgamated information on specific confirmed diagnoses and rates of mortality will be used toward the BCMAFF quarterly reporting requirements.

4. Reporting to BCMAFF

Based on information reported to the Database, the BCSFA and/or its agents will provide quarterly amalgamated reports on the health of cultured salmon to BCMAFF. The database will summarize the above health information quarterly and amalgamate it by zone. The zones chosen for reporting are the fish health zones established by the federal Department of Fisheries and Oceans (DFO) and are based on watersheds for stocking purposes. These zones will also be used for the proposed Fisheries and Oceans wild fish surveillance program making it easier for future inclusion of this information in the Database. Reporting based on zone has been established to protect the confidentiality of the clients and proprietary information. The summary health information will be compiled in the Database and reported by the BCSFA or their agents quarterly per zone to the provincial Chief Veterinarian.

It is anticipated that building the Database structure will take six months with completion anticipated by June 2001. This will be followed by a one-year testing and evaluation period to analyze the functioning of the Database. At least four large industry companies and several of the public hatchery facilities have agreed to provide fish health information to test the Database. There will be no public reporting of the Database findings during the one-year evaluation period. At the end of the one-year evaluation period (June 2002), the BCSFA will provide a final report to the Province reviewing the performance of the database system and agreement reached with BCMAFF on the quarterly reporting format. This one-year evaluation period is contingent on a six month interim program review (December 2001) by the BCSFA to BCMAFF to determine if an additional six months of review and non-reporting is required.

5. BCMAFF Auditing and Surveillance Program

The BCMAFF Provincial Fish Health Veterinarian will also conduct an on-site audit of and an active surveillance program to verify the accuracy of data provided to BCMAFF from the BCSFA's fish health Database. This program will be structured to sample fish at randomly selected farms within specified fish health zones (as above).

The BCMAFF auditing and surveillance program will be a multi-stage sampling system. The unit of concern will be the Fish Culture Facility, with the selection of sites being weighted to reflect the percentage of hatcheries or farms in that zone. The information will provide a "snapshot" of the reasons for loss of the stocks in that particular zone and can be compared to the reported quarterly information on the causes of mortality findings and the confirmed veterinary diagnoses provided from the Database.

Subsequent to completion of the Database and during the one-year testing phase of the pilot project, BCMAFF Fish Health veterinarian or his/her designate will conduct on site visits that will include a Fish Culture Facility record check to ensure the Fish Culture Facilities. The information will be checked for consistency with the quarterly reports for that zone. If discrepancies are found, follow-up with the individual company will occur if required to determine reason for the variation in reporting.

6. Regulatory Basis for Reporting

BCMAFF will establish a mandatory fish disease reporting scheme based on discussions with the BCSFA, participants and public fish culture facilities and on information gathered through the Database during the evaluation period. This will be completed subsequent to the end of the one-year evaluation of the Database pilot project. The following is a breakdown of the types of infectious disease information that may be captured by the Database and will provide clarification on regulatory roles and responsibilities.

Exotic Diseases: Responsibility for management and control of Exotic Diseases and diseases of significance from a trade perspective for Canada fall under the regulatory responsibility of the Department of Fisheries and Oceans (DFO), with joint jurisdiction

for fish health in aquaculture operations shared with the Provinces. There are no clear guidelines currently established for reporting Exotic Diseases; however DFO is undertaking a regulatory review and legislative amendments are anticipated. Using agricultural regulation as a model, Exotic Diseases would be reported directly to DFO. DFO recognizes that to do this they must first establish standards to assure reliability of diagnostic information. This will be part of the National Aquatic Animal Health Program. Any finding of an exotic disease recognized as Notifiable to the Office International des Epizooties (OIE), the recognized international authority for animal health must be reported directly to DFO. The List of Notifiable diseases includes Infectious Hematopoietic Necrosis Virus (IHNV), *Oncorhynchus Masou* Virus (OMV), Viral Hemorrhagic Septicemia (VHS)- European Strain, Epizootic Hematopoietic Necrosis Virus (EHV) or Spring Viraemia of Carp (SVC).

New Emerging Pathogens: Information on New Emerging Pathogens¹ would be routinely captured by the Database in the quarter during which they occurred. However, where there is an economic or biologically significant pathogen or disease detected this requires direct and timely reporting to BCMAFF. Criteria need to be developed in conjunction with BCMAFF, BCSFA, participants and public fish culture facilities to establish when and how diseases of economic or biological significance must be reported to BCMAFF in a more timely manner than through the Database. Newly discovered agents that are determined to be Exotic Diseases should be reported immediately and directly by the Fish Culture Facilities Company to DFO.

Endemic Diseases: There are many commonly recognized diseases in aquaculture. Fish Culture Facilities will voluntarily report these to the Database based on the confirmed diagnosis of a veterinarian or fish health professional. When Endemic Diseases cause significant mortality or are of economic importance to the industry, a mechanism for direct reporting to BCMAFF must be defined. Significant mortality will have to be more precisely defined based on discussions with BCMAFF, BCSFA, participants, public fish culture facilities and the veterinary practitioners in the industry.

7. Cost of Building and Housing the Database

BCMAFF has agreed to contribute \$70,000 to the BCSFA to assist with the structuring and building of the Database. This funding will be used to allow for the continuation of the pilot project beyond June 2001. This will be provided to the BCSFA in a contribution agreement. The BCSFA has a confidential Technical Requirements document outlining the components of the Database. The BCSFA will issue a Request for Proposal for selection of competitive bids from software developers based on the scope of work outlined in the Technical Requirements document.

¹ New Emerging Pathogens/Disease - agents not previously recognised that are determined to have a significant economic or biological impact and may represent a risk for wild and/or cultured fish stocks.

8. Reporting Information from the Pilot Project

UCMAFF and the BCSFA agree to a period for critical evaluation and assessment of the Database as outlined in Section 4. It is estimated that structuring the Database will take approximately six months; hence the term of the pilot project evaluation and review will be one year from the completion date. Information gathered through the auditing and surveillance program will also be confidential with no public reporting of the findings for the same time period.



Bud Graham
Assistant Deputy Minister
Ministry of Agriculture, Food, & Fisheries
BC Fisheries

Odd Grydeland
President
British Columbia Salmon Farmers Association

- About us
- Programs
- Key Issues
- Take Action
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Programs

Salmon Farming

Growing evidence indicates that open net-cage salmon farms allow diseases and parasites to transfer from farmed to wild salmon. High fish density leads to cramped conditions inside salmon farms, encouraging disease and sea lice infestations.

Typically, salmon farms are located along wild salmon migration routes, where juvenile salmon are most vulnerable.

Open net salmon farms also allow waste feed and untreated fish feces - that can contain antibiotics or parasiticides - and chemicals used for cleaning or treating nets to enter the marine environment.

We are an active member group of the Coastal Alliance for Aquaculture Reform, a coalition of eight groups including environmental organizations, scientists and First Nations, working for changes to fish farming on the B.C. coast.

On the North Coast we are working with commercial fishermen, sportsfishing charterboat operators and First Nations to prevent salmon farms from threatening our world famous Skeena River salmon stocks. We are active members of Friends of Wild Salmon.



Our tourism association members see the juvenile pinks migrating. Before they hit the farms they are free of lice. Once they pass the farms, they become infected.” BRIAN GUNN

BROUGHTON ARCHIPELAGO

Action urged to save Broughton pink runs

Groups call for fallowing of 11 farms in 2006 to create safe migration route

FOLLOWING ANOTHER near-collapse in pink salmon returns for most streams in the Broughton Archipelago this year, environmentalists, First Nations, tourism operators and fishermen are calling on the province to require fallowing of several salmon farms in order to create a lice-free corridor for out-migrating juvenile salmon in 2006.

The groups held a news conference in Vancouver Sept. 27 to highlight the demand following the release of escapement data on Broughton pink rivers showing that pink salmon returns had again plunged following a sea lice epidemic among the juveniles from the brood year.

“Another pink salmon collapse is in the making in the Broughton Archipelago,” said Jennifer Lash, executive director of Living Oceans Society, which organized the news conference. “We need immediate action from the provincial government to provide a safe migration route beginning in January, 2006.”

The migration route proposed — known as the Fife-Tribune Channel route — would affect some 11 farm tenures, she said, including eight owned by Marine Harvest



ALEXANDRA MORTON
“What we’re seeing is an unusual, anomalous crash of pink salmon in Broughton rivers.”

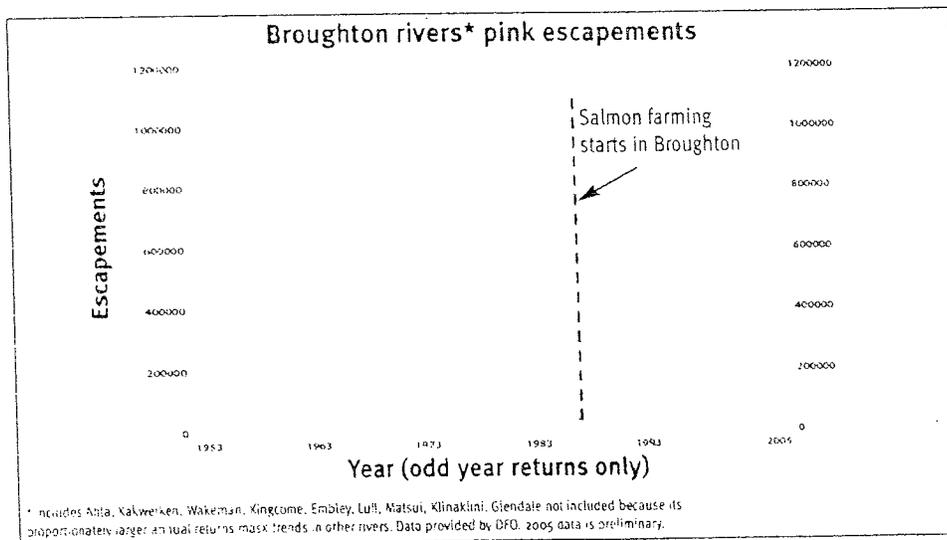
and three by Mainstream (formerly Heritage Salmon). “Six of those farms have fish in them and must be emptied by January, 2006.”

Preliminary escapement figures from eight pink salmon rivers in the Broughton show that returns this year have dropped even below the record low returns in 2003. Only on the Glendale River — one of only two rivers in the area with artificial spawning channels — were returns close to the average for previous years.

Although odd-year returns are typically lower than those in even years, a similar precipitous decline in 2002 prompted the federal and provincial governments to adopt an action plan to control sea lice, which included the spring, 2003 fallowing of several farms along the migration route. The plan was credited with reducing sea lice infection rates substantially and boosting spawner returns in 2004.

So far, however, the province has not considered any new plan for 2006. The fisheries and aquaculture branch of the Ministry of Agriculture and Lands has posted a note on its website stating that “current downturns in some pink salmon runs are likely attributable to an interplay of factors, including fluctuations in stream conditions, ocean temperature and currents, predation, and land-based human activities.”

DFO also rejects any connection between sea lice infection and wild pink salmon returns on its sea lice website.



Netpen fish farming

A DECADE AND A HALF AGO, when salmon farming had barely begun in British Columbia, the T. Buck Suzuki Environmental Foundation sent a delegation to Norway, the country that had pioneered salmon aquaculture. The warnings that delegation members sounded then have resonated ever since.

In Norway, they found that the impact of diseases and parasites, which may have been relatively small on salmon species in the wild, suddenly became magnified in the densely populated netpens used by the salmon farming companies. They found that wastes from the fish created a near-wasteland underneath those netpens, often drastically altering the benthic (seabed) environment.

Certainly improvements in salmon aquaculture have been made since then, but fundamental problems and risks remain: the transfer of disease to wild fish, environmental degradation under farm sites, high levels of antibiotic use, and colonization of local streams by escaped farm salmon. Salmon farming is also unsustainable — it takes three to five kg of other fish to make the feed to produce only one kg of farmed salmon.

Some of the worst fears of disease transfer were realized in 2002, when pink salmon returns to rivers in the Broughton Archipelago collapsed, following two years of severe sea lice outbreaks. The lice populations had exploded in the area's salmon farms, and had infected the juvenile pink salmon as they passed the farms on their migration out to sea. In a special report on the issue issued in November, 2002, the Pacific Fisheries Resource Conservation Council linked the pink salmon stock collapse to the sea lice outbreak in salmon farms and recommended that the salmon farms be fallowed — emptied of salmon — during the spring when juvenile wild salmon are migrating out to sea.

Review recommendations not implemented

The Foundation also participated in the 1997 Salmon Aquaculture Review (SAR), which conducted an exhaustive study of the industry. SAR made numerous recommendations to improve the industry's environmental performance, including prevention of fish escapes, strict disease control, measures to prevent pollution under the netpens and a precautionary approach to farm siting. To date, not even half of the SAR's 49 recommendations have been implemented. Only six have been fully implemented.

Despite that, the provincial government made the decision in 2002 to lift the moratorium on new farm sites, allowing the industry to expand to new areas, including the North Coast. Companies are also launching new ventures to farm additional species, including halibut and sablefish. The environmental risk is increasing.

Aquaculture must be sustainable

Regulation and reform of the industry is essential if we are to ensure a future for our wild fish stocks. At the very least, the recommendations of the SAR must be fully implemented. But finfish aquaculture must also be moved to a more sustainable base, which requires that companies:

- Develop technology that eliminates the risk of disease transfer to wild fish and escapes of salmon into the wild;
- Guarantee fish farm waste is not released into the wild;
- Develop fish feed that doesn't deplete global fish stocks;
- Ensure that wildlife is not harmed as a result of fish farming;
- Eliminate the use of antibiotics in fish farming;
- Respect the views of coastal residents and not locate farms where First Nations or other communities object.



Cancer-contaminated BC farmed salmon must be destroyed

June 4th, 2005

For immediate release

Tofino, BC - The Canadian Government must prevent hundreds of thousands more BC farmed salmon contaminated with malachite green (a chemical considered a carcinogen by Health Canada) from reaching unsuspecting consumers. According to the Canadian Food Inspection Agency, 36,287 kilograms of tainted BC farmed salmon has already reached markets in the US, Canada, China, Japan and other Asian countries since a food safety recall was issued on 3rd March. Stolt Sea Farms is seeking a market for a further 310,000 Chinook farmed salmon which are still swimming in sea cages at their suspect farm at Brougham Point on East Thurlow Island in the Georgia Strait.

"Stolt's arguments that malachite-contaminated BC farmed salmon is still safe to eat simply don't wash," said Don Staniford of Friends of Clayoquot Sound. "The fact is that BC farmed salmon has been found to be tainted with a chemical considered a carcinogen by Health Canada. The fact is that the Canadian Government has a 'zero tolerance' approach to malachite green residues in the flesh of farmed salmon. The fact is that the 310,000 farmed salmon still remaining in Stolt's Brougham Point farm constitute a potential health hazard and a threat to public health".

The Coastal Alliance for Aquaculture Reform (CAAR) of which Friends of Clayoquot Sound is a member has now written to the Government, supermarkets and the industry asking:

- How much more tainted farmed Chinook salmon is still swimming on BC salmon farms?
- How many other companies are involved?
- Is BC farmed Atlantic salmon also contaminated with cancer-causing chemicals?
- How much contaminated BC farmed salmon reached consumers plates in the US, Canada, China, Japan and other Asian countries?

"As a matter of urgency and food safety all contaminated BC farmed salmon must be destroyed immediately," says Staniford. "If Health Canada and the Canadian Food Inspection Agency deem BC farmed salmon unsafe to eat then why should consumers in the US, Europe, China, Japan and elsewhere in Asia be offered this contaminated food which is, by Canadian definition, unfit for human consumption? The only safe approach is for consumers to adopt a zero tolerance to BC farmed salmon."

For more information contact:

Don Staniford, Friends of Clayoquot Sound, 250 725 4218

Jennifer Lash, Living Oceans, 250 741 4006



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salmon farming

What is salmon farming?

History of Salmon Farming in
British Columbia

Environmental Impacts of
Farming Salmon

Salmon Farming and Human
Health

Salmon Farming and First
Nations

Salmon Farming and the
Coastal Economy

Location of Salmon Farms in
BC

Why you should think twice about eating farm salmon

- A study released in the journal Environmental Science & Technology found much some chemical flame retardants in farmed salmon compared to most wild salmon concluded that, in spite of the heart healthy benefits of omega-3 fatty acids in all frequent consumption of farmed salmon is more likely than wild to boost levels of researchers have found to be increasing rapidly in people's bodies.
- The groundbreaking study, "A Global Assessment of Organic Contaminants in Farmed Salmon: Geographical Differences and Health Risks" was released January 2007 in the respected journal Science. The study, which is being considered the most thorough comparison of farmed and wild salmon to date, found in most cases that consuming more than 100g of farmed salmon per month could pose unacceptable cancer risks, according to United States Environmental Protection Agency (EPA) standards for determining safe fish consumption. Farmed salmon were found to have up to 10 times higher levels of PCBs and dioxin than wild salmon.
- Farmed salmon is much higher in saturated fats than wild salmon. This can contribute to heart disease problems.
- A single serving of salmon, wild or farmed, gives you the suggested daily requirement of 2g of omega-3 fatty acids. These essential fatty acids are also found in other wild fish like tuna and anchovies. Farmed salmon, however, contains more unhealthy fats. Preliminary research shows that farmed salmon has higher levels of PCBs and other contaminants than wild salmon. Farmed salmon are frequently fed antibiotics which contribute to the growth of drug-resistant bacteria.
- Farmed salmon are often given additives in their food to colour their flesh pink which makes them resemble their wild counterparts - otherwise, it would remain an unappetizing grayish color.
- In BC, over 70% of farmed salmon are Atlantic salmon. Atlantic salmon are considered non-native, or alien species in Pacific waters since they do not naturally occur in the Pacific Ocean.
- With only a very few exceptions, farmed salmon are raised in open net cages in the water. These nets can tear, allowing farmed salmon to escape into the wild. Over a million farmed salmon have been reported by the industry to have escaped into Pacific waters since 1980 because many escapes over the years have gone unreported, experts believe the actual number is much higher.
- According to the Department of Fisheries and Oceans, Atlantic salmon have been found in 81 BC rivers and streams. It is worth noting that only a small portion of BC rivers have been surveyed so far - meaning non-native Atlantic salmon could be inhabiting many more rivers.
- Atlantic salmon compete with wild salmon for habitat and have been known to eat wild salmon eggs. Atlantic salmon have been found spawning and their eggs surviving in wild rivers.
- There are risks even when native Pacific salmon escape into the wild. Escaped farmed salmon can spread diseases to wild salmon.

can interbreed with wild chinook. Since farmed salmon are cultivated from a limited genetic base, this interbreeding leads to "genetic dilution", or a narrowing of the genetic make-up which could lessen their ability to survive in the wild.

- Open net-cage systems can allow for the transfer of disease and parasites from farmed salmon to wild salmon.

Click here to link to Watershed Watch report ()

- Salmon farmers are granted licenses to kill predators such as sea lions and seals eating their fish. In the spring of 2001 a mass grave containing at least 15 sea lions was discovered in Clayoquot Sound. Since then, more pits of dead seals have been found in the same area. BC salmon farmers reported having killed at least 100 sea lions in the last decade. The real figure could be much higher as some kills by farm employees go unreported.
- The mass worldwide production of salmon in fish farms has caused a drop in wild salmon. This has hurt thousands of commercial fishermen and their communities in which they have a strong support, drawing into question the true economic value of this industry.
- It takes three to five kilograms of other fish, such as herring and anchovy to make one kilogram of farmed salmon resulting in a loss of edible fish worldwide.
- In Canada it is illegal to make animal feed out of proteins otherwise suitable for human consumption. As a result most of the feed for BC salmon is obtained from South America, which reduces the amount of food energy available to people there.
- To fatten up their livestock, some salmon farmers use bright lights even at night to keep salmon into thinking it is always feeding time. This attracts other fish to the farm and disrupts their feeding and migration patterns.
- In B.C. fish farms use net guards that deter predators. Some farmers coat the net guards with a toxic solution to prevent naturally occurring marine organisms from growing on them. This solution contaminates our waters.
- There are presently over 85 open net cage fish farms currently operating in the coastal waters of British Columbia producing waste that is equivalent in volume to the raw sewage of a city of 500,000 inhabitants. It could get a lot worse if the industry is allowed to add new farms.

[^ return to top](#)

Coastal Alliance for Aquaculture Reform (CAAR)
207 West Hastings, Suite 1405 Vancouver, BC V6B 1H7
604-699-0065 Email: info@farmedanddangerous.org



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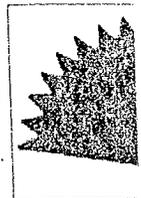
- What is salmon farming?
- History of Salmon Farming in British Columbia
- Environmental Impacts of Farmed Salmon
- Salmon Farming and Human Health
- Salmon Farming and First Nations
- Salmon Farming and the Coastal Economy
- Location of Salmon Farms in BC

Salmon Farming and Human Health

Nutrition

A single serving of most seafood, including wild or farmed salmon, provides the daily recommended healthy Omega 3 - an essential fatty acid with many health benefits. However, wild fish has a 1:1 Omega 3 to Omega 6 ratio than farmed salmon which is best for your diet and overall health.

Farmed Atlantic salmon also contain higher levels of unhealthy saturated fats than wild coho, sockeye, steelhead pink and chum salmon. In addition, research indicates farmed salmon have up to 10 times more PCBs and dioxins than wild salmon. According to a comprehensive study published in the respected journal *Science*, in most cases, consuming more than one serving of farmed salmon per month could pose unacceptable cancer risks.



SalmoFan

A study released August 10 2004 in the journal *Environmental Science & Technology* found much higher levels of some chemical flame retardants in farmed salmon compared to most wild salmon. The study concluded that, in spite of the benefits of omega-3 fatty acids in all salmon, frequent consumption of farmed salmon is likely to boost levels of chemicals that researchers have found to be increasing rapidly in the environment.

The food given to farmed salmon does not contain the natural sources of color and as a result the flesh is an unappetizing gray color. To make their product more marketable, fish farm companies add what color they want their salmon from the SalmoFan. Chemical additives are then added to the feed.

Farmed Atlantic salmon contain 200 per cent more unhealthy, saturated fat than wild pacific chum salmon. This has led some health professionals to question the nutritional value of farmed salmon.

In a letter urging retailers to stop selling farmed salmon to customers, Warren Bell MD, president of the Canadian Association of Physicians for the Environment (CAPE) writes, "Not only is the fat content of farmed salmon higher than that of wild salmon but the composition of farmed salmon fat is less healthy than that of wild salmon fat." He also writes that, "Another issue of concern is the fact that the monitoring of residues of antibiotics and other drugs in farmed salmon is inadequate."

Antibiotics & Biocides

Disease and parasites are frequent occurrences on salmon farms. Farmers attempt to control these problems by using powerful drugs including antibiotics and biocides. Farmed salmon are given more antibiotics per pound than any other livestock in North America.

Excess drugs make their way along the food chain. Research suggests that between 74 and 90% of wild fish caught near farms contain antibiotics in their flesh. Escaped fish caught in a British Columbia Archipelago stream were found carrying bacteria known to cause a range of human ailments. The bacteria were resistant to 10 different antibiotics. Excessive use of antibiotics has already led to the development of antibiotic resistant "super-bugs".

Sworn the 7th day of April, 2008

**IN THE MATTER OF AN INQUIRY UNDER PART 5 UNDER THE FREEDOM OF
INFORMATION AND PROTECTION OF PRIVACY ACT**

BETWEEN:

T. BUCK SUZUKI ENVIRONMENTAL FOUNDATION (“Applicant”)

AND:

THE MINISTRY OF AGRICULTURE AND LANDS (“Public Body”)

AND:

THIRD PARTIES

**WRITTEN INQUIRY UNDER THE *FREEDOM OF INFORMATION AND
PROTECTION OF PRIVACY ACT*
SCHEDULED FOR APRIL 29, 2008**

(OIPC FILE NO: F07-33524)

AFFIDAVIT OF CHRIS LEDGER

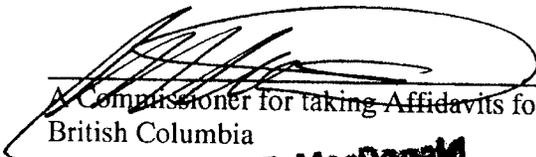
I, **Chris Ledger**, c/o 61 4th St., in the Town of Tofino, Province of British Columbia,
MAKE OATH AND SAY AS FOLLOWS:

1. I am a Salt Water Production Manager at Mainstream Canada (“Mainstream”) and as such have personal knowledge of the facts hereinafter deposed to, except where stated to be on information and belief, in which case I verily believe them to be true.
2. I am authorized to make this Affidavit on behalf of Mainstream.

3. Although I generally work at Mainstream's Tofino operation, my evidence is equally applicable to the Campbell River operation.
4. The sea lice and pathogen monitoring data which we have provided or facilitated the Ministry obtaining is both scientific and technical information.
5. The sea lice and pathogen monitoring data which Mainstream provided to the Ministry was provided by discussions between Mainstream staff and Ministry staff, Mainstream granting Ministry staff access to Mainstream's data records; and through Ministry analysis of fish carcasses and sea lice samples taken from live fish collected at Mainstream's sites by both Mainstream and Ministry staff with the consent of Mainstream.
6. I have been with the Mainstream organization for approximately 15 years, with the exception of one year (2000). Years ago I was informed by senior managers with Mainstream and verily believe that at all times over that period, the individuals responsible for managing the organization have had an expectation of confidentiality in regards to the information Mainstream provides to the Ministry. It has always been, and continues to be, the organization's policy that information regarding our operation is not to be provided to any person outside of the organization unless it is agreed that the information is to be held in strict confidence. I operate on that basis as do all employees who report to me. Due to the passage of time since I was so informed I am unable to say from which managers I received that information. All of the managers who were with Mainstream when I received that information are no longer with Mainstream.
7. Attached as Exhibit "A" to this Affidavit is an email, dated November 21, 2007, which I received from Dr. Ian Keith, a veterinarian at the Ministry. The email demonstrates the expectation of confidentiality Mainstream requires when provided information to the Ministry.
8. It is my understanding that the Applicant and the groups associated with it are dedicated to, among other things, opposing the viability and the very existence of the salmon farming industry. As such, if the Applicant is provided access to the records at issue in

this inquiry, I believe it would seek to use this information to damage Mainstream's business. As a consequence, Mainstream would cease to supply the Ministry with this type of information in the future.

SWORN BEFORE ME at the City of
Vancouver, in the Province of British
Columbia, this 7th day of April, 2008.


A Commissioner for taking Affidavits for
British Columbia

Roderick I.T. MacDonald
Barrister & Solicitor
641 Vincente Place, Box 190
Tofino BC V0R 2Z0
Ph: 250-725-2843 Fax: 250-725-2854



----- Forwarded by Chris Ledger/PNA/Cermaq on 04/04/2008 02:03 PM -----

"Keith, Ian AL:EX" <Ian.Keith@gov.bc.ca>

To <Chris.Ledger@mainstreamcanada.com>

cc

Subject RE: Requesting cooperation

11/22/2007 05:14 PM

Many thanks Chris.
Ian

Dr. Ian Keith
Veterinarian
Fish Health
BC Ministry of Agriculture & Lands
101-2435 Mansfield Drive, Courtenay, B.C. V9N 2M2
Tel: 250-703-2435
Fax: 250-703-2440
Cell: 250-334-7581
Ian.Keith@gov.bc.ca

This is Exhibit "A" referred to in
the affidavit of CHRIS LEDGER
sworn before me at TOFINO BC
this 7th day of April, 2008

-----Original Message-----
From: Chris.Ledger@mainstreamcanada.com
[mailto:Chris.Ledger@mainstreamcanada.com]
Sent: Thursday, November 22, 2007 12:54 PM
To: Keith, Ian AL:EX
Cc: Manchester, Howie A AL:EX; Sheppard, Mark AL:EX
Subject: Re: Requesting cooperation

This is no problem.
Make your arrangements and let me know what the schedule is.

Have Howie coordinate with my Bio Tec's.

Chris Ledger
Tofino Production Manager
Mainstream Canada
725-1255 ext. 24

This e-mail is intended only for the named recipient(s) and may contain information that is privileged, confidential and/or exempt from disclosure under applicable law. No waiver of privilege, confidence or otherwise is intended by virtue of communication via the internet. Any unauthorized use, dissemination or copying is strictly prohibited, unless prior written consent is obtained from the Managing Director. If you have received this e-mail in error, or are not named as a recipient, please immediately notify the sender and destroy all copies of this e-mail. Please be aware that internet communications are subject to the risk of data corruption and other transmission errors.

"Keith, Ian

AL:EX"

<Ian.Keith@gov.bc

To

.ca>

<chris.ledger@mainstreamcanada.com>

cc

11/21/2007 06:41

"Sheppard, Mark AL:EX"

PM

<Mark.Sheppard@gov.bc.ca> ,

"Manchester, Howie A AL:EX"

4/6/2008

<Howie.Manchester@gov.bc.ca>

Subject

Requesting cooperation

Hi Chris,
We are still hoping to collect samples to test Animal Health Centre's new real-time PCR technology. Since the time of your offer of cooperation October 9, our audit results indicate that the endemic pathogen of interest remains present at low levels. We shared this information with your fish health staff and they corroborated our findings; there have been no disease outbreaks, only low numbers of mortalities, and only a few fish with lesions associated with the disease.

We would like to request permission to collect silvers from a number of your sites, to be determined in consultation with yourself and your fish health staff. Are you still open to our request to collect silvers for the test? We think that if we were to collect silvers from many sites over several days we could approach our target of 50 fish. If a site with a higher mortality rate and lesions associated with the disease were found, we might wish to re-visit the site and collect samples.

As before, this testing is independent of the Fish Health Audit and Surveillance Program and the results would not enter the Audit and Surveillance database (but would be available to you). We would suggest that we bring a boat and otherwise follow our routine sample collection protocol. Of course, strict biosecurity and confidentiality would be followed, and the source of the samples used in the testing would be anonymous.

We know that the opportunity for collection of samples would not return before next fall, so we are anxious to do what we can for Abbotsford.

I joined Howie for a scheduled fish health Audit yesterday with the intention of meeting you and asking in person, but we returned late and didn't think it polite to knock on your door under the circumstances. Thanks for your consideration, Chris.

Best regards,
Ian

Dr. Ian Keith
Veterinarian
Fish Health
BC Ministry of Agriculture & Lands
103-2435 Mansfield Drive, Courtenay, B.C. V9N 2M2
Tel: 250-703-2435
Fax: 250-703-2440
Cell: 250-334-7581
Ian.Keith@gov.bc.ca

4/6/2008

---This verifies that this e-mail has been scanned for virus and deemed
virus-free according to Symantec AntiVirus/Filtering for Domino V4.0 ---

4/6/2008

Sworn the 7th day of April, 2008

**IN THE MATTER OF AN INQUIRY UNDER PART 5 UNDER THE FREEDOM OF
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BETWEEN:

T. BUCK SUZUKI ENVIRONMENTAL FOUNDATION (“Applicant”)

AND:

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AND:

THIRD PARTIES

**WRITTEN INQUIRY UNDER THE *FREEDOM OF INFORMATION AND
PROTECTION OF PRIVACY ACT*
SCHEDULED FOR APRIL 29, 2008**

(OIPC FILE NO: F07-33524)

AFFIDAVIT OF LAURIE JENSEN

I, **Laurie Jensen**, c/o #203-919 Island Highway, in the Town of Campbell River,
Province of British Columbia, MAKE OATH AND SAY AS FOLLOWS:

1. I am the Environmental, Licences and Community Relations Manager at Mainstream Canada (“Mainstream”) and as such have personal knowledge of the facts hereinafter deposed to, except where stated to be on information and belief, in which case I verily believe them to be true.
2. I am authorized to make this Affidavit on behalf of Mainstream.
3. Mainstream stores its sea lice and pathogen monitoring data on a secure server that is only accessible by a select group of Mainstream employees.
4. In regards to the information Mainstream has provided to the British Columbia Salmon Farmers Association (the “BCSFA”) pursuant to the “Letter of Understanding Regarding Fish Disease Reporting and Provincial Fish Health Database” (the “LOU”) agreed to

between the BCSFA and the Ministry of Agriculture, Food and Fisheries (the "Ministry"), I have been informed by Mary Ellen Walling at the BCSFA that none of the aquaculture companies, including Mainstream, would have provided this information unless they were assured by the BCSFA that the information would be held in strict confidence. Furthermore, it is Mainstream's policy that no information will be provided to government unless there is an assurance that the information will be protected.

- 5. It is my understanding that the Applicant and the groups associated with it are dedicated to, among other things, opposing the viability and the existence of the salmon farming industry. As such, if the Applicant is provided access to the records at issue in this inquiry, I believe it would seek to use this information to damage Mainstream's business. It is clear that if the Applicant received the requested information it would seek to persuade the public that not only are farm fish operations harmful to the health of wild salmon but would attempt to persuade the public that consuming farm fish is inherently dangerous to human health as evidenced by the excerpts from the Applicant's website and the website of the Coastal Alliance for Aquaculture Reform of which the Applicant is a member, found in the submission of Mainstream in this application. Such publicity would definitely harm the business of Mainstream. As a consequence, Mainstream would cease to supply the Ministry with this type of information in the future.

SWORN BEFORE ME at the Town of)
 Campbell River, in the Province of British)
 Columbia, this 7th day of April, 2008.)



 A Commissioner for taking Affidavits for)
 British Columbia)



D'Arcy J. Frankland
Notary Public
 440-10th Avenue
 Campbell River, B.C.
 V9W 4E3

WITNESSED AS TO SIGNATURE ONLY.
NO ADVICE SOUGHT OR GIVEN

D'Arcy J. Frankland
 Notary Public