AP2/9/2015

GALWAY BAY AGAINST SALMON CAGES

APPEAL



NOTICE OF APPEAL UNDER SECTION 40(1) OF FISHERIES (AMENDMENT) ACT 1997 (NO. 23)

Name and address of appellant:	
Billy Smyth Chairman, Galway Bay Against Salmon Cages 10 Colmans Rd.	CULTURE LICENCES
Shantalla, Galway	1 4 OCT 2015
Telephone: Fax: Mobile Tel: 09695110 E-mail address: billy-myth@gamila	RECEIVED
Subject matter of the appeal:	
Fisheries Amendment Act, 1997 (No23) & foreshore Act, 1933 to grant Aquaculture and Foreshore licences. The Minister for Amarine has decided to grant an Aquaculture licence and a Forest Fanad Teo t/a Marine Harvest Ireland, Kindrum, Fanad, Letterk Ref:T5/555 for the cultivation of Atlantic Salmon Salmo Salar of at Shot Head, Bantry Bay, Co. Cork	Agriculture, Food and the hore licence to, Bradán enney, Co. Donegal,
***************************************	<u>*************************************</u>

Site Reference Number: - T5/555 (as allocated by the Department of Agriculture, Food and the M	farine)
Appellant's particular interest in the outcome of the appeal:	
We want licence T5/555 withdrawn	
***************************************	<u> </u>

Outline the grounds of appeal (and, if necessary.	
on additional page(s) give full grounds of the	
appeal and the reasons, considerations and	
arguments on which they are based):	
We Galway Bay Against Salmon Cages request that salmon far withdrawn, due to its impact on protected wild salmon/sea trou	

in the area of Shot Head and Bantry Bay in general. The decision to grant the licence was
given without consideration of all the research available.
Copy of full appeal submission enclosed with this form
<u></u>
<u></u>
444995
Fee enclosed: € 152-37
(payable to the Aquaculture Licences Appeals Board in accordance with the Aquaculture
Licensing Appeals (Fees) Regulations, 1998 (S.I. No. 449 of 1998))(See Note 2)
Signed by appellant Billy Sangel (CBASC) Date: 12/10/2015
Signed by appellantivactor 2015
Note 1: This notice should be a plant and be a larger than ding and duly signed by me appearant and be
accompanied by such documents, particulars or information relating to the appeal as the appellant considers
necessary or appropriate and specifies in the Notice.
Note 2: The fees payable are as follows:
Appeal by licence applicant
Appeal by any other individual or organisation €152.37
Request for an Oral Hearing (fee payable in addition to appeal fee) €76,18
In the event that the Roard decides not to hold an Oral Hearing the fee will not be refunded

A. Marie

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GALWAY BAY AGAINST SALMON CAGES

We, Galway Bay Against Salmon Cages (GBASC) request that salmon farm licence T5/555 is withdrawn, due to its impact on protected wild salmon / sea trout, and other marine species in the area of Shot Head and Bantry Bay in general. The decision to grant the licence was given without full consideration of all the research available.

Minister Coveney has granted the Shot Head licence on the strength of one research paper from the Marine Institute and has ignored all other research papers that contradict it in relation to the impact of sea lice on wild salmon and sea trout smolts. We believe that the Marine Institute research paper that states that sea lice causes only 1% mortalities in wild salmon is totally flawed. The fact that in the years that their research was being carried out, there was heavy rainfall at the time of smolt migration in the Bays that were being monitored, was not taken into account. This led to low salinity in the Bays and as sea lice don't function well in low salinity waters this resulted in a low count of sea lice on targeted migrating salmon smolts in those years. The statistical manipulation of the figures is just that-manipulation. All other research papers on sea lice must be looked at and taken into consideration, and licence T5/555 rejected.

Minister Coveney has not considered or even acknowledged the research into the effects the use of toxic pesticides that plicensed for use on Irish salmon farms, have on Shrimp, Prawn, Lobster and Crab and other marine wildlife. Recent research on veterinary pesticides from Norway and British Columbia has shown that these chemicals can kill Lobsters and other marine species up to 10 Km distance from salmon farms. All research documents on the harmful effects of toxic veterinary pesticides on marine crustaceans and must be examined and taken into consideration and licence T5/555 rejected.

GBASC object to the granting of licence T5/555 to Marine Harvest Ireland (MHI) on the grounds that MHI will not divulge any information in relation to any outbreak of Pancreas Disease (PD) or other non listed diseases that may occur at the Shot Head or their other sites in Bantry Bay.

In a letter I received from the Marine Institute on the 29th April 2015 in response to a request of information under AEI Regulations Aarhus Convention (Ref. A0051) I was informed that "MH has not consented to the release of the information on the grounds that the information was supplied voluntarily and that its release would adversely affect their interests on the basis of commercial confidentiality." In the same letter the Marine Institute state and I quote, "Marine Harvest has advised us (MI) that site specific health and mortality information is commercially sensitive in situations where they share a water body with other competitors." This statement from MHI shows that they will have no concern for other stakeholders using Bantry Bay, and it goes against the principles of the Co-ordinated Local Aquaculture Management Systems (CLAMS) which state that all stakeholders are obliged to share information on diseas outbreaks and other problems occurring in the Bays in which they operate. Displacing local fishers from this area also displaces jobs that are real and woven into the fabric of the society. Marine Harvest is effectively a monopoly in Ireland as it stands and the policy of facilitating that (minutes of meeting with An Taoiseach January 2014) is contrary to the public interest.

GBASC object to the granting of licence T5/555 to MHI on the grounds that MHI have previously broken the planning and foreshore licensing laws in relation to their taking of fresh water (to treat Amoebic Gill Disease) from Loughaunore Lake in South Connemara last year. Galway County Council issued a warning letter (Ref: WL/EN14/070) to MHI on the 11 July 2014 to dismantle their illegal pump and piping system or face prosecution. In light of this fact, we believe that MHI will have no regard for any rules/regulations or laws pertaining to Aquaculture in Bantry Bay.

There is little or no regulation of the salmon farming industry in Ireland. Salmon farmers seem to be able to do what they want, where they want and when they want, without any fear of sanction. No penalties have been imposed on the salmon farm industry in relation to overstocking, sea lice control, escapes, maintenance of cages, illegal dumping of farmed salmon carcases and the breaking of planning /foreshore licensing laws.

The poor regulation and lax standards that allow an "Organic" certification is simply a marketing exercise to allow for inflated prices in markets duped by such practices. There is a real danger to the wider reputation of Irish food products that generate wealth and jobs for the economy will be tarnished as these issues are raised in the courts

and media as the unprecedented expansion proposed by BIM for the entire west coast progresses. A cursory glance at the IOFGA certifying body will show the major flaws in this system. A challenge in the target markets by competing forces will destroy our reputation.

The fact that a massive escape happened in stormy weather just across the bay from this site and that the minister refuses to divulge information related to that again begs the question of whose interest the minister is promoting here - certainly not the public's!

GBASC recommend that no new salmon farm licenses be approved until new laws are put in place to regulate the out of control salmon farm Industry in line with other Industrial operations.

If, despite all logical evidence as to the futility of salmon farming, the minister insists on promoting it, we would prefer if all open cage salmon farms were taken out of the sea and placed in on land closed containment systems, which would be less damaging. There would be no contact with wild marine species, which would mean 1. no disease transfer,2. no sea lice, 3, no escapes, so therefore, little or no antibiotics, no toxic pesticides, no dilution of the gene pool in wild salmon stocks and no overloading of nutrients into the marine environment. The free release of waste material into the marine environment would cease. This would put the industry on a level playing field with other farming practices as regards efficient regulation and true costings. The 30% mortality rate in salmon farming currently tolerated is not acceptable in the farming of any species we are aware of.

On behalf of GBASC

Billy Smyth
Chairman GBASC,
10 Column Pd
Shanteller
Ghanne
Phone Godd 11 (00)

THE PLANNING AUTHORITY COMHAIRLE CHONTAE NA GAILLIMHE GALWAY COUNTY COUNCIL

Warning Letter Pursuant to Section 152 of the Planning & Development Act 2000 Reference No: WL/ EN14/070

Owner/Occupier/Person Carrying out Development

Marine Harvest Ireland Kindrum Fanad Co Donegal

Description of Unauthorised Development

Unauthorised installation of a pipeline from Loughaunore Lake out into Kilkieran Bay.

Located in the town land of Ardmore

Dear Sir/Madam.

It has come to the attention of the Planning Authority that unauthorised development referred to above may have been/ is being/ may be carried out by you.

You may make submissions or observations *in writing* to the Planning Authority regarding the purported offence not later than four weeks from the date of the service of this Warning Letter.

When the Planning Authority considers that unauthorised development has been, is being or may be carried out, an Enforcement Notice may be issued pursuant to Section 154 of the Planning & Development Act 2000.

Officials of the Planning Authority may at all reasonable times enter on the land for the purposes of inspection.

Any person who has carried out or is carrying out unauthorised development shall be guilty of an offence pursuant to Section 151 of the Planning & Development Act 2000.

A person who is guilty of an offence under Sections 151 and 154 of the Planning & Development Act, 2000 shall be liable to the penalties set out in the Schedule, attached hereto.

Any costs reasonably incurred by the Planning Authority in relation to enforcement proceedings may be recovered from a person on whom an Enforcement Notice is served or where court action is taken.

Note: Costs for court cases can be in the range of €1,500 to €2,500. In addition, a fine of up to €5,000.00 may be imposed against you (s156 Planning & Development Act, 2000 as amended by s46 Planning & Development (Amendment) Act, 2010).

It is the objective of the Planning Authority to ensure that the decision on whether to issue an Enforcement Notice relating to the alleged unauthorised development shall be taken within twelve weeks of the issue of this Warning Letter.

Signature: MDodwe
Title: Senior Staff Officer/Administrative Officer

Date: 11 July 2014

Enforcement & Building Control,
Planning & Development Department,
P.O.Box No. 27,
Galway County Council,
County Hall,
Prospect Hill,
Galway.

EN14/070

Please contact the Enforcement Section at 091-509042 should you have any queries

29th April 2015

Billy Smyth Chairman Galway Bay Against Salmon Cages, 10 Colemans Rd, Shantalla, Galway Foras na Mara
Rinn Mhaoil
Uarán Mór
Co.na Gaillimhe
Éire
Marine Institute
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Telephone +353 91 387200
Fax +353 91 387201
Email institute mall@marine.ie

billysmyth0@gmail.com



Re: Access to Environmental Information – Ref: A0051

Dear Mr Smyth

I refer to your request under the Access to Information on the Environment Regulation 2007 (the "AEI Regulations") for an internal review of the response issued to you on the 24th March 2015 in respect of your request for the following:

"Marine Harvest in their stock market report for the 4th quarter 2014 state that," There was 2 sites (salmon farms) diagnosed with Pancreas Disease (PD) in the fourth quarter of 2014. Reduced survival due to PD was reported in Ireland in the period." As the Marine Institute is the authority that fish diseases must be reported to. I request the following information.

(No1) What sites were affected with PD in Ireland in 2014. (No2) How many fish mortality's were there at these 2 sites. (No3) Were the fish that survived, treated or culled. You may reply by email to my questions."

I have undertaken a comprehensive review of all information held by the Marine Institute in respect of this request and have found the following:

I can confirm that the Marine Institute holds certain records in respect of the occurrence of Pancreas Disease (PD) at a single Marine Harvest site during the first half of 2014. We do not hold any records with respect to the occurrence of PD on Marine harvest sites during second half of 2014.

The information we hold on file on the occurrence of PD during the first half of 2014 relates to a non-listed disease. We have informed Marine Harvest Ireland of your request and sought their consent to release the information. Marine Harvest has not consented to the release of the information on the grounds that the information was supplied voluntarily and that its release would adversely their interests on the basis of commercial confidentiality.

I have firstly considered whether the information was provided to the Marine Institute on a voluntary basis, and whether the release of this information would adversely affect a third party.

Article 8(a)(ii) states that:

A public authority shall not make available information in accordance with Article 7 where disclosure of the information — would adversely affect - the interests of any person who,

Foras na Mara 80 Sráid Fhearchair Baile Átha Cliath 2 Éire

Marine Institute 80 Harcourt Street Oublin 2 Ireland Telephone +353 1 4766500 Fax +353 1 4784988

> Foras na Mara Baile Uí Fhlacháin Co. Mhaigh Eo Éire

Marine Institute Furnace Newport Co. Mayo Telephone +353 98 42300 Fax +353 98 42340



voluntarily and without being under, or capable of being put under, a legal obligation to do so, supplied the information requested, unless that person has consented to the release of that information



Article 7(11) states that:

Where a request is made for information which has been provided to the public authority on a voluntary basis by a third party and, in the opinion of the public authority, release of the information may adversely affect the third party, the public authority shall take all reasonable efforts to contact the third party concerned to seek consent or otherwise to release the information, pursuant to article 8(a)(ii) and article 10.

Article 10 states that:

Notwithstanding articles 8 and 9(1)(c), a request for environmental information shall not be refused where the request relates to information on emissions into the environment.

linkedin.com/company/

Consideration of Article 8(a)(ii)

All Aquaculture Production Businesses in the country are subject to mandatory fish health inspections which are completed in accordance with Article 10 of Council Directive 2006/88/EC. According to this article:

- Member States shall ensure that a risk-based animal health surveillance scheme is applied in all farms and mollusc farming areas, as appropriate for the type of production.
- 2. The risk- based animal health surveillance scheme referred to in paragraph 1 shall aim at the detection of:
 - a) any increased mortality in all farms and mollusc farming areas as appropriate for the type of production;
 - the diseases listed in Part II of Annex IV, in farms and mollusc farming areas where species susceptible to these diseases are present.

Article 26 further says:

Member States shall ensure that:

- (a) When there are any reasons to suspect the presence of a disease listed in Part II of Annex IV, or the presence of such a disease is confirmed in aquatic animals, the suspicion and/ or confirmation is immediately notified to the competent authority; and
- (b) When increased mortality occurs in aquaculture animals, the mortality is immediately notified to the competent authority or a private veterinarian for further investigations.

As a consequence, the objective of all fish health inspections carried out on Irish aquaculture sites is to determine the status of the operation with respect to to diseases listed in the Directive and to ensure that if increased mortality occurred on a site, that it was properly investigated by a private veterinary practitioner and that those investigations ruled out the presence of a disease listed in the Directive. There is no onus on the operator to report any case of a non-listed disease to the competent authority. Their responsibility is to report the suspicion or presence of a listed disease and to investigate increased mortality with the objective of ruling out the presence of a listed disease.

The Directive does however recognise that 'for diseases not subject to Community measures, but which are of local importance, the aquaculture industry should, with the assistance of the competent authorities of the Member States, take more responsibility for preventing the introduction of or controlling such diseases through self-regulation and the development of codes of practice'.

This has been done in Ireland, and a Code of Practice and accompanying Farmed Salmonid Health Handbook have been agreed voluntarily between industry and government to deal with all aspects of best practice in relation to salmonid farming. This includes the management of non-listed

diseases. Ireland is free of all of the finfish diseases listed in Part II of Annex IV of the Directive.

Article 52 of the Directive deals with the matter of sampling, in that context. It says 'a Member State that is declared free from one or more non-exotic diseases listed in Part II of Annex IV in accordance with Article 49 may discontinue targeted surveillance and maintain its disease free status provided that the conditions conducive to clinical expression of the disease in question exist, and the relevant conditions of the Directive are implemented'.

As Ireland has a disease free status, it is not mandatory to carry out any statutory testing other than where a listed disease is suspected/confirmed or where increased mortality remains unexplained. The additional testing which is currently carried out on farms in Ireland is a voluntary measure which falls outside the scope of Article 52.

In the context of the information outlined above, it is my view that records provided to the Marine Institute in relation to the incidence of non-listed diseases on Irish fish farms, is given voluntarily and that 8(a)(ii) of the AIE Regulations applies.

Consideration of Article 10

It is my view that information relating to disease presentation do not equate to emissions into the environment.

Consideration of Article 9(1)(c)

I have also considered whether the disclosure of the information would adversely commercial confidentiality, and if so whether this is provided for in national or Community law.

Article 9(1)(c) of the AIE Regulations provides that a public authority may refuse to make available environmental information where disclosure of the information would adversely affect commercial or industrial confidentiality, where such confidentiality is provided for in national or Community law to protect a legitimate economic interest.

There is not, in Irish law, an enactment which creates a general right of commercial or industrial confidentiality. Where there is no specific confidentiality statutory provision, it is the equitable duty of confidence which has been recognised by case law that will apply. This has been accepted by the Commissioner for Environmental Information as the correct position in a review entitled HoA Action Group and Kildare County Council. In that review, the Commissioner stated as follows:

"Given that no specific national or Community law has been identified, it seems to me that for article 9(1)(c) to apply, disclosure of the records concerned must amount to a breach of an equitable duty of confidence. The correct tests to apply in deciding whether there is a breach of an equitable duty of confidence are set out in the case of Coco v A.N. Clark (Engineers) Limited (which is accepted as reflecting the Irish law on the subject – see, for example, House of Spring Gardens Limited v Point Blank Limited) in which Megarry, J. stated as follows:

Three elements are normally required if, apart from contract, a case of breach of confidence is to succeed. First, the information itself ... must have the necessary quality of confidence about it. Secondly, that information must have been imparted in circumstances imposing an obligation of confidence. Thirdly, there must be an unauthorised use of that information to the detriment of the party communicating it."

I consider that the information provided by Marine Harvest to the Marine Institute was confidential in nature in that it an express understanding that the communication was for a restricted purpose; this imposed an obligation of confidence on the Marine Institute; and communication of this information to a third party would be detrimental to Marine Harvest. Marine Harvest has advised us that site specific health and mortality information is commercially sensitive in situations where they share a water body with other competitors. I regard this as a legitimate economic interest and it is therefore my opinion that Article (9)(1)(c) applies in this case.

Public Interest

Finally I have considered the public interest and whether the public interest served by disclosure outweighs the grounds for refusal as outlined above.

The considerations in favour of releasing the records are that:

 There may be a public interest in having information with respect to the presence of disease in a waterbody.

The considerations against releasing the records are that:

- All of the aquatic diseases present in Ireland, whilst capable of causing mortalities in aquatic animals under certain conditions, do not cause any public health concern.
- Any mortalities which occurred on the named sites were handled in accordance with the Animal By- Products Regulations and there were therefore no environmental concerns in relation to disposal of carcasses.
- If the records are released, industry will be very reluctant to provide voluntary information which may be publicly disclosed by the Marine Institute and which may result in negative commercial consequences for their business. Consequently it is likely that industry will not provide this information to the Marine Institute going forward. If this is to occur the Marine Institute will not have a full picture of the health status of the Irish industry and will therefore be less able to monitor changes in disease status.

On balance and having considered both the issues for and against releasing the records in the public interest, I find that the consequences of industry not providing the Marine Institute with voluntary information on non-listed diseases which would result in a diminished ability to monitor disease status outweigh the benefits in releasing the records in the public interest.

Right of Appeal

Under Section 12 of the AEI Acts, you are entitled to appeal the above decision. In the event that you make such an appeal, you can do so by writing to the Information Commissioner, 18 Lower Leeson Street, Dublin 2. You may also apply for a review on-line at https://www.oic.gov.ie/en/apply-for-review/apply-for-review-online

You should make your appeal within one month from the date of this letter, however the Commissioner may extend this deadline where he is satisfied that it would be reasonable to do so. The appeal will involve a complete reconsideration of the matter by the Commissioner.

Where you feel that other records may be held by the Marine Institute that fall outside of the Access to Environmental Legislation, you can make application for the release of these records under other legislation such as Freedom of Information.

Should you have any queries regarding this or if I can be of any further assistance, please do not hesitate to contact me.

Yours sincerely,

Caroline Bocquel

Director Corporate Services

Charges (

On the 30th January 2014 the Taoiseach Enda Kenny, Minister Simon Coveney, Minister of State Mc Ginley and Deputy Joe Mc Hugh met with Alf-Helge Aarskog, CEO, Marine Harvest (MH) Group, Jan Feenstra, CEO, Marine Harvest Ireland and 2 others from MH. We Galway Bay against Salmon Cages (GBASC) believe that this meeting and subsequent meetings with MH should never have taken place while Minister Simon Coveney was adjudicating on the Galway Bay salmon farm licence. We believe that these meetings may have breached the rules in regard to the tendering regulations for salmon farm licences as according to BIM, 21 financiers have shown expressions of interest in the Galway Bay project, a number of which may also want to acquire the licence, and if none of these firms have had similar meetings with An Taoiseach and Minister Coveney then we may be looking at another Esat Digifone type debacle.

There are a number of questions GBASC would like answered and these are.

- No 1. MH say they "needed a "Champion" to drive forward the interests of the industry." Is this "Champion" non Irish speaking Junior Minister Joe Mc Hugh? Minister Mc Hugh has lobbied for MH for a number of years and according to himself was the one that facilitated this meeting with the Taoiseach and Minister Coveney. Minister Mc Hugh is now in charge of Inland Fisheries Ireland (IFI) and Udaras Na Gaeltachta which has invested 1.3 million Euro in the 'South Connemara' (Kilkieran) salmon farm alluded to in paragraph 6 on page 2 of document A. Was Joe Mc Hugh placed in charge of these ministries to keep I.F.I. in check as they oppose Coveneys mega farm proposals and "to drive forward the interests of the industry and to coordinate interactions with the EU Commission (DG Environment) and Inland Fisheries Ireland." (page 1, paragraph 3, document A).
- No. 2. In paragraphs 5 and 7 page 2 of document A, Minister Coveney pointed to significant structural changes that had taken place in the Marine Institute (MI) "to ensure they produce a faster turn around on scientific advice." Does this mean the science is now being tailored to suit salmon farming. How can we now trust the MI to deliver independent advice on anything got to do with salmon farming?
- No. 3. In paragraph 3, page 1, document A, MH "acknowledged the assistance and cooperation it received from the Department in relation to the sourcing of fresh water "(to treat Amoebic Gill Disease) (AGD). Did Minister Coveney or anyone else in his Department give permission to MH to take water from lakes and rivers along the west coast without planning permission, Environmental Assessments or Foreshore licences? IE. Loughaunore Lake in Kilkieran and Clare Island? If this was the case then this would be a serious matter for Minister Coveney.
- No. 4. In paragraph 1, page 1 of document B. MH stated "they produce 170,000 tonnes of fish per annum and employ 500 employees in Scotland." Minister Coveney and BIM have been saying that a 15,000 tonne salmon farm in Galway Bay will also create 500 jobs. Who is telling the truth? If 500 jobs are created by producing 170,000 tonnes then 15,000 tonnes will create only 45 jobs.

No. 5. In paragraph 6, page 2 document A. "it points to the gap that existed between the total annual production of the industry (10,000 – 13,000 tonnes) and of tonnage that was actually licensed (approximately 32,000 tonnes)." If the salmon farm industry cannot even reach 1/3 of this quota why do they need another 15,000 tonne farm in Galway Bay? The answer to that question can be found in paragraph 3, page 1, document A. where Mr Feenstra "pointed to the disease control issue and said the company needed to spread its risk by having access to more sites." What do they mean by spreading their risk? It means that if you have 14 million salmon in cages in Galway Bay and 50% or more die from disease then you still have a massive amount left for market. No mention here of the risk to wild salmon, sea trout or other marine species in our bays.

No. (6) In paragraph 3, page 2, document B. Minister Coveney refers to the one-on-one coordination group that his Department has put in place to deal with the challenges facing the COMPANY. Why was this group set up to deal with the COMANY and not the INDUSTRY? Who are the members of this coordination group and what are their positions within Minister Coveneys Department?

I received the minutes of the meeting on the 11 July and was shocked to discover 4 days later that Deputy Joe Mc Hugh had been made Junior Minister in charge of IFI. This to GBASC was like putting the fox in charge of the chickens.

Enda Kenny's plan to elect a "crony candidate" to the Seanad debacle, would pale into insignificance if it were to be found that a minister was appointed at the request of a multinational company.

END

Billy Smyth

Chairman Galway Bay Against Salmon Cages

Phone 0863511628

Brian Curran P.R.O

Phone 0872509722

Our Ref:

AIE/14/023

Your Ref:

Meeting Between An Taoiseach, Ministers and the

CEO, Marine Harvest Group, Mr Alf-Helge Aarskog.

Food and the Marine
An Roinn
Talmhaíochta,
Bla agus Mara

Agriculture.

Date: 11 July 2014

Mr Billy Smyth Chairman Galway Bay Against Salmon Cages 10 Colemans Road Shantalla Galway

Dear Mr Smyth

I refer to your request for information under the Access to Environmental Information Regulations (S.I. 133 of 2007 - European Communities (Access to Information on the Environment) Regulations 2007, implementing EU Directive 2003/4/EC). You requested the following:

"A meeting took place at Government Buildings on approximately the 31th of January last between An Taoiseach Enda Kenny, Minister Simon Coveney and Alf-Helge Aarskog CEO of Marine Harvest............. i am applying under the Aarhus Convention for the minutes or notes (if any) that were taken at the above mentioned meeting".

A final decision on your request was made today by the undersigned. Having considered your request, my decision is to grant you access to the information sought. Attached find a copy of the Department's summary report of the meeting in question.

If for any reason you wish to appeal this decision you may do so by writing to the Freedom of Information Unit at the Department of Agriculture, Food and the Marine, Grattan House, Grattan Business Centre, Dublin Road, Portlaoise, Co. Laois. You must make your appeal within one month of this notification.

Yours sincerely,

JohnA Kelly

Department of Agriculture, Food & the Marine

Aquaculture & Foreshore Management Division

National Seafood Centre

Cionakilty

Co Cork

An Roinn Talmhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

Meeting between Marine Harvest Group and an Taoiseach Government Buildings, 30 January 2014

SUMMARY REPORT

Attendance:

An Taoiseach
Minister Coveney
Minister of State McGinley
Deputy Joe Mc Hugh
Paul O' Brien, Dept. Taoiseach
Maura Duffy, Dept. Taoiseach
Cecil Beamish, DAFM
John Quinlan, DAFM

Alf-Helge Aarskog, CEO, Marine Harvest Group Jan Feenstra, CEO, Marine Harvest Ireland Catherine Mc Manus, Technical Manager, MHI Pat Connors, Sales Director, MHI

1) Purpose of Meeting

The meeting was held at the request of the company to discuss licensing and industry development issues associated with the company's operations in Ireland.

- 2) The Taoiseach explained that specific cases such as the Shot Head application could not be discussed in detail in view of the statutory basis of the assessment process. Appropriate regard would also have to be had for EU Directives and the role they played in the licensing system. However within these parameters everything was being done to remove obstacles for business. The Government was fully supportive of the company's operations in Ireland and the employment that was created in coastal regions.
- 3) Mr. Aarskog gave a broad overview of the company's global operations. In particular he cited Scotland, where the company had 500 employees and an £80 million investment. The company was aware that its operations needed to be environmentally sustainable. The challenge for its operations in Ireland was the need for a 'predictable' licensing system which would facilitate investment. Mr. Feenstra pointed to the disease control issue and said the company needed to spread its risk by having access to more sites and by changing the terms and conditions of its licences to better reflect technological advances. The company acknowledged the assistance and cooperation it received from the Department on the disease issue, especially in relation to sourcing fresh water supplies. The company fully supported the aims of Food Harvest 2020. However, to achieve these production targets the company felt the industry needed a 'champion' to take a developmental role (as distinct from the regulatory role) to drive forward the interests of the industry and to coordinate interactions with the EU Commission (DG Environment) and Inland Fisheries Ireland. The company felt it important that there should be 'one voice' communicating with the Commission from Ireland in relation to the industry.

- 4) Minister Coveney pointed to the Government's decision to allocate Fisheries to a senior Minister which was a clear indication of the priority attached to the industry. He referred to the 2007 ECJ Judgement against Ireland which necessitated the introduction of a very complex system of licensing. This had been negotiated with the Commission and was the only practical way to proceed. It was clear that the system was achieving results as indicated by the fact that 115 licence determinations were made in 2012 and 137 in 2013. More than 200 licence determinations were on track for this year. The system was not without frustration for everyone but there had been very significant advances made over the last two years. The Minister was hopeful that a determination could be made in respect of the Shot Head application by Easter. The licensing system in Ireland was operating under intense scrutiny and challenges from numerous NGOs which was not the case in Scotland. It was possible similar challenges would arise in Scotland in the future.
- 5) Minister Coveney noted the position of DG Mare in respect of increased aquaculture production but the fact was DG Environment had a different focus and this added to the complexities encountered. The Department was seeking to identify 'deep sea' sites for aquaculture which would be outside designated NATURA areas. The first of these was in Galway Bay and investigations were also ongoing by BIM and the MI in respect potential sites off Mayo and Donegal. The company said they would like to see the Marine Institute enter into a 'service agreement' with the Department which ensured the timely delivery of scientific advice. The delay by the Institute in delivering advice on the Shot Head application made the overall system very unpredictable in terms of timelines. In Scotland it took approximately 22 months to get a licensing determination. The company also felt it was losing market share because it could not guarantee supplies of fish to retailers. Minister Coveney and officials pointed to significant structural changes that had recently taken place within the Marine Institute which, it was expected, would enable the Institute to respond faster to the Department.
- 6) The Department pointed to the gap that existed between the total annual production of the industry (10,000 13,000 tonnes) and the amount of tonnage that was actually licensed (approximately 32,000 tonnes). The Department was working with BIM to identify licensed sites which were under performing in terms of production and would examine all options for ensuring that the foreshore in question was fully utilised as envisaged in the licence. The successful example of South Connemara could act as a template on how to proceed nationally.

7) The following measures/steps were agreed:

- The Department will expedite its work on identifying under performing sites
- The new structural changes in the Marine Institute will be monitored to ensure they produce a faster turn around on scientific advice.
- The deep sea aquaculture initiative would be progressed in respect of Galway, Mayo and Donegal
- The Department would continue to engage with DCENR in respect of the angling perspective on the industry
- Minister Coveney would be available to meet with the company again at the March NASF conference in Bergen

- The Taoiseach would be willing to meet with Mr. Aarskog again in six months to review the situation.

The company thanked the Taoiseach and the Ministers for the meeting which they regarded as very constructive.

Ends



Roinn an Taoisigh Department of the Taoiseach

14 July 2014

Mr Billy Smyth Chairman Galway Bay Against Salmon Cages 10 Colemans Road Shantalla Galway

Dear Mr Smyth,

I refer to the request which you made under the European Communities (Access to Information on the Environment) Regulations 2007 to 2011 (S.I. No. 133 of 2007 and S.I. No. 662 of 2011) for access to records held by this Department relating to

"a meeting between An Taoiseach, Enda Kenny, Minister Simon Coveney and Alf-Helge Aarskog, CEO Marine Harvest ... I am applying under the Aarhus Convention for the minutes or notes (if any) that were taken at the above mentioned meeting".

A final decision on your request was made today by the undersigned. Having considered your request, I have decided that you should be granted access to the Department's summary note of the meeting in question.

Under Article 11 of the AIE Regulations you have a right to seek an internal review of this decision. An internal review involves a complete reconsideration of the matter by a member of the staff of this Department, of the same or higher rank than the original decision-maker, who may affirm, vary or annul the original decision made. The decision of this review will be communicated to you within one month of receipt of your application for an internal review.

In the event that you wish to make such an appeal, you can do so by writing to the Information Officer, Department of the Taoiseach, Government Buildings, Dublin 2 referring to this decision You must make this request within one month of the date of this notification, (the making of a late appeal may be permitted in appropriate circumstances).

Yours sincerely,

Maura Duffy Economic Policy

Note of a meeting between Marine Harvest Ireland and the Taoiseach Thursday, 30 January 2014@ 12noon, Sycamore Room

Attendance
Taoiseach
Minister Coveney
Paul O'Brien, Taoiseach's Office
Maura Duffy, Department of the Taoiseach
Cecil Beamish, Department of Agriculture, Food & the Marine
John Quinlan, Department of Agriculture, Food & the Marine

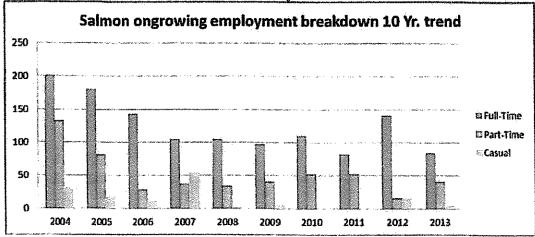
Marine Harvest Ireland: Alf-Helge Aarkog, CEO Marine Harvest Group Jan Feenstra, MD, Marine Harvest Ireland Catherine McManus, Technical Manager Pat Connors, Processing/Sales Director

The delegation was accompanied by: MoS McGinley Deputy Joe McHugh

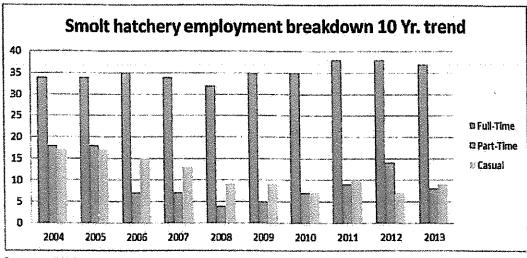
The Taoiseach met the CEO from the Marine Harvest Group and a delegation from Marine Harvest Ireland, the largest producer of farmed salmon in the State, at their request. The Taoiseach welcomed the delegation to Government Buildings; outlined his support for the industry, and invited the company to outline their concerns. At the outset the CEO gave a profile of Marine Harvest Group (which operates in 22 countries), and in particular the Scottish operation which he stated produces 170, 000 tonnes of fish per annum and employs 500 full time employees. He stated that he is would like to see the Irish operation grow and prosper in the same way but that there are structural challenges relating to licences that need to be addressed for this to happen.

The Group stated that delays in having applications for licences determined resulted in uncertainty for the company. They accepted that there is a need to adhere to the regulatory regime but lengthy delays (Shot Head application currently awaiting determination) undermined their business. They confirmed that they would work to reach industry targets but could only do this if licence applications were determined in a timely manner. They suggested that a champion for aquaculture be appointed to coordinate the work of the relevant Departments and agencies involved. Asked about the licences that were not being used by the company, the delegation stated that the old licences will not

"Yhis glaph from the National Sthategie Won for Sustainable Aquacultielle shaw the small amount of people employed on 36 (Opphox) Salmon frams along to blest coast. Is it worth desthoying the environment and the tourist anglis industry for this small amount of jobs.



Source: BIM



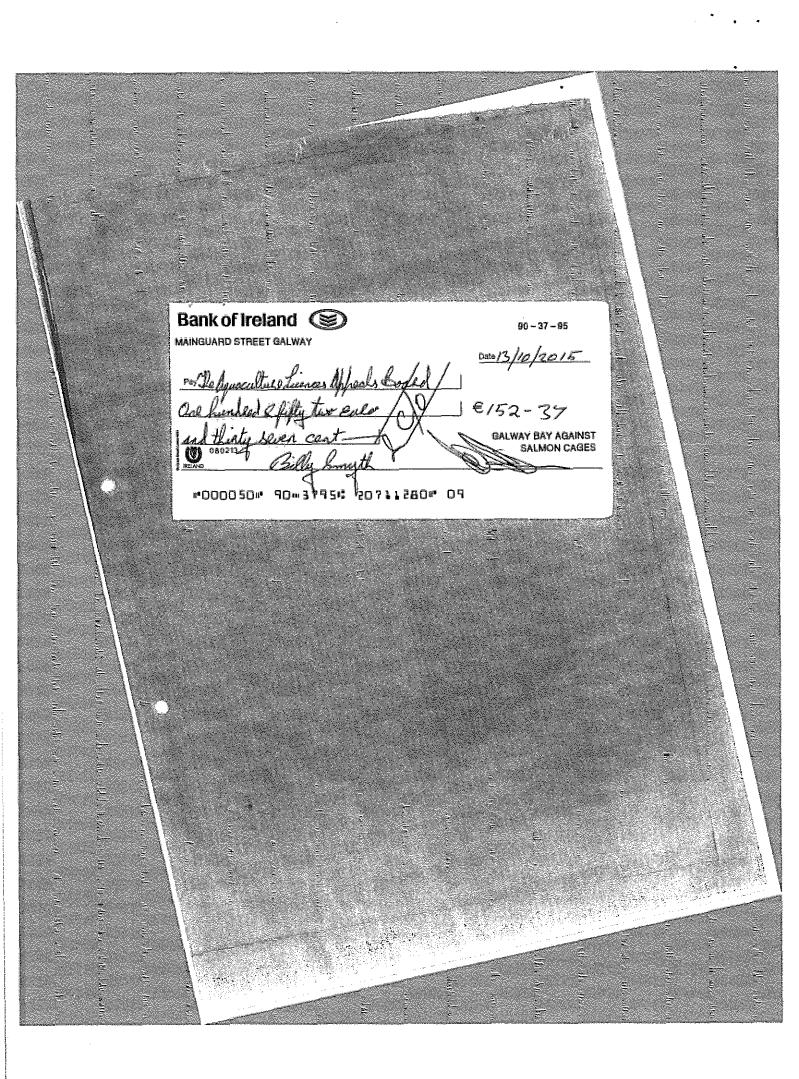
Source: BIM

Production Trends

Notwithstanding declines in salmon production output, the Irish salmon farming industry maintains extremely positive market trends by delivering a product that is viewed as distinct and desirable in the marketplace by virtue of its origin. Ireland's high-energy, exposed sites and low stocking densities result in high quality salmon that achieve a price premium in the market place.

Over the past decade, the Irish salmon industry has focused on organic status production, which has proven to be a beneficial strategy for Ireland's low-volume, niche output in terms of achieving a favourable price differential.

The production of organic aquaculture has been the success story of the organic movement in Ireland, with organic salmon production leading the way, and known as





SALIVIONI CONFIDENTIAL:

The ugly truth about Canada's open-net salmon farms

against eating

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sh farms

og aboriginal rebellion

WHAT IS A FISH FARM?

In Canada, fish farms exist on both the east and west coasts. Open-net pen fish farms are large floating cages anchored in the seawater and are often located in bays and relatively sheltered areas. Each farm can contain over a million fish and impact areas far beyond the lease site.

issues with open-net pen fish farms include:

- Ease of disease/virus transmission between captive and wild fish
- Conflicts with marine mammals
- Sea lice Infestations
- Pollution from large and concentrated volumes of manure into the marine environment (wild salmon habitat)
- Escapes of non-native fish
- Displacement of local fishermen
- Impacts the much larger tourism industry

In British Columbia, these issues are of serious concern with respect to wild salmon stocks as farms are located on major salmon migration routes. This industry is expanding rapidly.

The alternative is to build land-based, closed-containment fish farms—a cleaner and more socially acceptable way to undertake aquaculture in Canada—and to restore wild salmon with the cutting-edge tool known as genomic profiling.



o Copyright Alexandra Morton

FOREWORD

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WILD SALMON: OUR NATURAL HERITAGE ATRISK

Wild salmon are at the centre of the circle of life in British Columbia, the backbone of the province's heritage and a symbol of its culture. They drive billions of dollars in related economic activity.

Wild salmon have fed people for thousands of years. They feed the trees that make the oxygen we breathe and that help regulate global climate. Wild salmon have marked the seasons, sustained communities, fed the wildlife around them, and provided employment and quiet days of family fishing for generations of British Columbians. Wild salmon are a gift that we will not be given twice. They are a national treasure and a source of food security.

The scientific evidence from around the world strongly suggests that wild salmon are threatened by the government policy that allows a foreign species to be raised in industrial farms, on wild salmon migration



routes, creating high risk of viral outbreaks and much more. 2.3 People in Norway, Scotland, Ireland and Canada are trying to stop the industry from pushing wild salmon off their coasts and off their plates. Salmon farms are feedlots that have to be sealed from marine environments, similar to preventing wild birds from accessing chicken farms for fear of spreading avian viruses.

Shortly after the arrival of open-net pen salmon farms in B.C. (mid-1980s), sockeye salmon populations began to decline and continued to do so for 18 years. Meta-analysis reports this is a global trend in wild salmon populations exposed to salmon farms. Despite scientists, First Nations, business leaders, conservationists and the government's own Cohen Commission of Inquiry raising alarm bells about the threat posed by these salmon farms to wild salmon, little has been done to reverse this decline.

Canada is a nation capable of playing a large role in feeding the world, fostering new technology and protecting our natural heritage for the future. There is a way forward for aquaculture and wild salmon, but it is going to require the government to step up and use the science and tools available.

"It is absolutely crucial to recognize and acknowledge the importance of wild salmon stocks to First Nations and all British Columbians. Before the proliferation of salmon farms along the B.C. coast, we could depend and rely on the return of wild salmon. This has dramatically changed since the arrival of the fish farm inclustry. We must collectively do whatever is necessary to protect our wild salmon stocks from extinction."

- Grand Chief Stewart Phillip, Union of British Columbia Indian Chiefs

"Salmon farming has potential negative implications for its surroundings, including wild salmon. Addressing the sea lice challenge is one of the most important tasks for the salmon farming inclustry worldwide."

- Marine Harvest Sustainability Report 2008





Simply put, far more people rely on wild salmon for their livelihoods than on farmed salmon. Current government policies are threatening the contributions that wild salmon make to the Canadian economy.

B.C.'s traditional commercial wild salmon fisheries and growing wilderness tourism sector—from sport fishing to whale watching—are flagships of Canada's international image. These industries are dependent upon the abundance of wild salmon and dwarf the economic contribution of the salmon farming industry in Canada.

Current government management of the salmon farming Industry is putting more jobs at risk than can possibly be gained from fish farming.

- World leaders, business executives and wilderness enthusiasts come to B.C. to enjoy wild salmon fishing experiences. This is a \$1.4 billion growth industry in B.C.—nearly double that of salmon farming.⁶
- Employment in the B.C. fish farm sector has remained stagnant since 1992 despite a large increase in production and risk to wild fisheries.⁷
- The Industry remains vulnerable to the mutation and spread of viruses such as infectious salmon anemia virus (ISAV), which was ignored in Chile until it decimated their farmed salmon industry, at a cost of \$2 billion and 1,000 jobs.*
- There is a growing international concern about the health risk of eating farmed salmon because the product is absorbing marine and other toxins in its high-fatcontent flesh.
- Pending federal legislative changes are setting a disastrous course towards privatized fisheries, weakened pollution laws and culling wild salmon to protect farmed salmon from disease.

Does it make sense to risk the jobs and economic benefits of well-managed B.C. wild fisheries and tourism for a high-risk, controversial, foreign-owned industry, with serious limits to growth? B.C. could, in fact, have both wild fish and closed-containment aquaculture. It is not an either-or proposition.





B.C. SALMON ECONOMY — FARMED VS. WILD'

JOBS

FARMED 1,700 TOTAL FOR 2011

refilitier michte

SPORT/COMMERCIAL FISHING 9,800 TOTAL FOR 2011

T = ONE HUNDRED JOES

W/AGES

FARMED \$55.7 MILLION TOTAL FOR 2011

000006

SPORT/COMMERCIAL FISHING \$227.3 MILLION TOTAL FOR 2011

000000000000 000000000000

(C) TEN MILION DOLLARS

FARMED \$58.5 MILLION TOTAL FOR 2011

99999

SPORT/COMMERCIAL FISHING \$334.8 MILLION TOTAL FOR 2011

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BOATAND HELICOPTER TOURS



FOCUMENTALITY



Distriction



WILDERNESS TOURISM CREATES \$1.4 BILLION EVERY YEAR





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Commission of Inquiry Into the Decisie of Sockeye Galman in the Freser Aiver



Commission d'enquête. sur la décilo des populations de saunon rouge du fleuve Fraser

The Uncertain Future of Fraser River Sockeye

Volume 2 • Causes of the Decline

COHEN COMMISSION: A ROADMAP TO PROSPERITY IGNORED

In 2009, the federal government appointed Justice Bruce Cohen to lead a Commission of Inquiry to investigate the alarming 18-year decline of Canada's greatest wild salmon populations, the Fraser River sockeye salmon.¹⁰

At a cost of over \$37 million to taxpayers, and after 133 days of hearings and over half a million submitted government documents, ¹¹ Justice Cohen's final report (October 2012) made a strong statement on the threat salmon farms pose to wild salmon:

"I therefore conclude that the potential harm posed to Fraser River sockeye from salmon farms is serious or irreversible." 12

Eleven out of 75 Cohen Commission recommendations on how to restore wild salmon are aimed at reducing the risk of salmon farms.¹³ Two years later, the media reported that the Privy Council Office would not accept the delivery of Fisheries and Oceans Canada (DFO)'s in-depth responsive report on how to enact these recommendations.¹⁴ This suggests Justice Cohen's recommendations continue to gather dust, while wild salmon remain under threat from open-net salmon farms.

in fact, contrary to the Cohen Commission's recommendations, as early as January 2014, Canada began the process of opening B.C.'s coast to expand the 98% foreign-owned salmon farming industry.

KEY COHEN COMMISSION FINAL REPORT RECOMMENDATIONS INCLUDE:

#3. The Government of Canada should remove promotion of the farmed salmon industry and product from the DFO's mandate.¹⁵



#15. The DFO should explicitly consider the Fraser River sockeye migration route when siting salmon farms.¹⁵



#17. The DFO should revise siting criteria for salmon farm sites to protect wild salmon migration routes. Farms that do not comply should be closed or relocated.¹⁷



#19. On September 30, 2020, the Minister of Fisheries and Oceans should prohibit net-pen salmon farming in the Discovery Islands unless less than minimal harm to sockeye can be proved.¹³



"The U.S. government is investing in wild salmon enhancement to the extent that as much as two-thirds of the wild chinook salmon that we harvest in Canadian waters is sourced from U.S. rivers.

While Canadian fishermen are benefitting from the U.S. government is support of the wild salmon stocks, we are embarrassed that our government is allowing open-net pen salmon farming to get a free ride at the expense of the environment and the wild salmon commercial, recreational and First Nations fisheries. This was pointed out in a federal judicial inquiry yet we still await implementation of the 75 recommendations made by Justice Bruce Cohen."

- Dane Chauvel, President, Organic Ocean Seafood Inc., British Columbia

SALMON VIRUSES: A TOP SECRET GOVERNMENT FILE?

The Cohen Commission released raw government data reporting positive test results for an internationally reportable salmon virus, infectious salmon anemia virus (ISAV). This data remains unpublished with no explanation as to why these results have been ignored. Relevant testimony appears in the documentary *Salmon Confidential*.

Examples of farmed salmon disease risk in B.C.:

- 1990s: The DFO named the salmon leukemia virus, which was killing farmed Chinook salmon in pens sited along the Fraser sockeye migration route. When the DFO discovered sockeye could get infected, it did nothing to protect them. Coincidentally, the catastrophic Fraser sockeye decline began at exactly this time.¹⁹
- 2006: The DFO tasked its own scientist, Dr. Kristi Miller, to find out why Fraser sockeye were dying in the millions just before spawning. Miller reported a viral signature matching salmon leukemia. Sockeye unexposed to salmon farms had no sign of this virus and were thriving. This project was quickly shutdown. Miller used a process called genomic profiling, which if properly utilized, could enable Canada to become a leader in this technology and have the ability to restore wild fish populations.
- 2008: Soon after Miller's findings were reported, the salmon farming industry quietly removed all its Chinook farms from the sockeye migration route.²¹ 2008 was the first year sockeye went to sea without exposure to these farms. For the first time since 1992, they returned in historic numbers.
- 2011: The Vancouver Sun reported, "Top bureaucrats in Ottawa have muzzled a leading fisheries scientist whose discovery was first to explain why salmon stocks have been crashing off Canada's west coast." Why did the DFO muzzle a scientist who had made such a significant discovery? Was it because her findings suggest that salmon farms are implicated in the loss of wild salmon in Canada?

INFECTIOUS SALMON ANEMIA VIRUS

ISAV is a highly lethal virus to farmed salmon worldwide.²³ Like other members of the influenza family, ISAV is known to mutate to higher virulence in the feedlot-type environment found in salmon farms.²⁴ ISAV was discovered in Norwegian salmon farms in 1984, and is now internationally reportable.²⁵

ISAV: SPREADING GLOBALLY

- ISAV is spreading worldwide in salmon farms, and cannot be eradicated once it appears.^{26, 27, 28, 29}
- Scientists report ISAV spread from Norway to Chile via farmed Atlantic salmon eggs.³⁰ The salmon farming industry initially refused to accept this science, charging the scientists who made the discovery with "Scientific Misconduct" twice. But the charges did not stick.³¹ The research was valid.
- Chile's fish farms suffered \$2 billion in damages and they cannot eradicate ISAV.³²
- Currently Chile uses the highly sensitive Polymerase Chain Reaction (PCR) test. This test
 can detect pre-outbreak levels of ISAV, allowing the opportunity to prevent an ISAV
 outbreak. Canada depends on "virus isolation", a test known to work only when viral
 levels are already very high.



A SCANDALOUS COVER-UP: ISAV HISTORY IN BRITISH COLUMBIA

- In 2004, 100% of Cultus Lake sockeye (the most endangered Fraser River sockeye, despite a federal recovery strategy) tested positive for ISAV.³³
- The DFO prohibited publication of this data,³⁴ never retested Cultus sockeye, and failed to provide this information to the Cohen Commission.
- The College of Veterinarians of B.C. is currently investigating B.C.'s lead veterinarian for misleading B.C.'s Minister of Agriculture and Lands in 2007 that ISAV is not a risk because B.C. had never imported live Atlantic salmon eggs (in fact 27 million live Atlantic salmon eggs had been imported by 2007).³⁵
- In exhibits produced by the Cohen Commission, a B.C. government lab, Animal Health Centre, reported ISAV-type lesions in B.C. farmed salmon.
- The entire Cohen Commission reopened in December 2011 when new ISAV-positive results were reported in Fraser River sockeye.
- In 2011, ISAV-positive test results in B.C. farmed salmon (from a federal lab) became public.³⁶
- The Canadian Food Inspection Agency (CFIA) testified at the Cohen Commission that the export of B.C. farmed salmon would cease if ISAV is confirmed.³⁷
- In absence of scientific testing, the CFIA recommended The World Organization for Animal Health (OIE) delist a Canadian academic lab reporting ISAV results in B.C. farmed salmon in 2012, stating these results could not be corroborated.³⁶
- in 2013, the CFIA admitted it recommended delisting the academic lab without retesting any of the contentious positive samples.^{39, 40}
- In 2011, the CFIA declared ISAV-contaminated farmed salmon on the east coast safe to eat.⁴¹
- In 2013, the U.S. reaffirmed its border is closed to ISAV-contaminated farmed salmon.⁴²
- In 2014, the CFIA announced B.C. is ISAV-free, without reporting the specifics of the test that was used. The labs refused to attest to their results, because the test they were instructed to use was not validated for the samples they received.⁴³

The intermittent "all-clear" calls from government lack credibility. If ISAV in B.C. follows the same pattern as Chile, lying dormant for 8 years and then going viral, Canada's reputation as a trade partner will be damaged because suppression of the evidence is in the public record.



THE VANCOUVER SUN

Ottawa silences acientist over West Coast salmon study

Wednesday, July 27, 2011 By Margaret Munro, Postmedia News





Disease transfer occurs between wild and farmed fish, and I are satisfied that salmon farms along the sockeye migration route have the potential to introduce exotic diseases and to exacerbate endemic diseases that could have a negative impact on Fraser Sockeye.

- Justice Bruce Cohen

10

SALMON FARMS: NOT FIT FOR THE OCEAN

SEA LICE - A DEADLY PARASITE

Benign and seasonal in their natural setting, sea lice reproduce exponentially in farmed salmon netpens. Vulnerable young wild salmon are running a gauntlet of billions of sea lice at each of the many salmon farms along migration routes. Sea lice penetrate into the flesh, puncture the skin and suck blood from young salmon.

0)

Sea Rice are causing major losses to the salmon farming industry itself, because the Rice become resistant to every new drug. Norway currently identified sea lice as its "single biggest issue" (see headline below).

Sea lice drug treatments threaten other fisheries, including lobster—Canada's largest fishery. A salmon farming company in eastern Canada was fined \$500,000 for using an illegal drug and killing hundreds of lobsters. 44

The DFO has recently approved hydrogen peroxide bath treatments in B.C., with no research on the potential impact of releasing this caustic chemical during wild salmon migrations along the farms.⁴⁵

The salmon farming industry is requesting removal of section 36 from the *Fisheries Act* so it can use more drugs.⁴⁶

While Canada approves delousing drugs in the absence of evidence that it will not harm wild fisheries, it is clear from Norwegian experience, that the industry will be requesting more and new drugs.

undercurrentnews

sealood business news from beneath the surface

Aarskog: 'Whoever solves sea lice, come and see me, because we need help'



Merch 6, 2011, 7.27 cm

Asked what the single biggest issue for the earnon farming industry to overcome in 2014/2015 was, Marine Hervest CEO Alf Heige Aarskog did not hasitate to point to see fice.

FEEDING SALMON AND PEOPLE - AN EITHER-OR PROPOSITION?

Salmon farming will never feed the world because it kills more fish biomass (to make fishmeal for feed) than it produces. Aquaculture is the biggest consumer of fishmeal worldwide. The industry has to grow continuously to satisfy shareholders, and so pressure on wild forage fish continues to grow.

Given the critical destabilization of life in our oceans, if aquaculture is going to feed people there has to be an increased shift to development of alternative feed resources. For example, seaweed production is on the leading edge of a very bright future. Growing the bottom rung of the food chain creates unfettered growth opportunity.

MANURE - THE DIRTY LITTLE SECRET OF SALMON FARMS

Salmon farmers may be the only farmers in Canada who never shovel their manure. Each farm produces tons of waste per day. Canada's most precious migratory wild salmon stocks are passing through a blizzard of farmed salmon feces and disease. This is shouldy management.

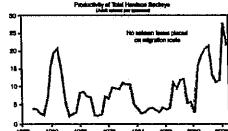
- The concentration of nitrogen and phosphorous in farmed salmon feces feeds rampaging toxic algae blooms.
- 200,000 farmed salmon produce the fecal equivalent of a town of up to 60,000 people. B.C.'s salmon farms contain 650,000 to 1,000,000 fish per farm.⁴⁴
- Farmed salmon waste concentrates in small coastal areas, while the natural waste of wild salmon is distributed over thousands of kilometers of open ocean.
- Salmon farming on land collects and reuses farmed salmon feces—a far more responsible use of the ocean protein that goes into making fishmeal.

WILD SALMON PRODUCTIVITY

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These graphs show the productivity (the number of salmon that return per spawner in the parent generation) for the Fraser sockeye. The red line is all Fraser sockeye, the blue line represents a stock that takes a southerly route to sea, avoiding exposure to fish farms.



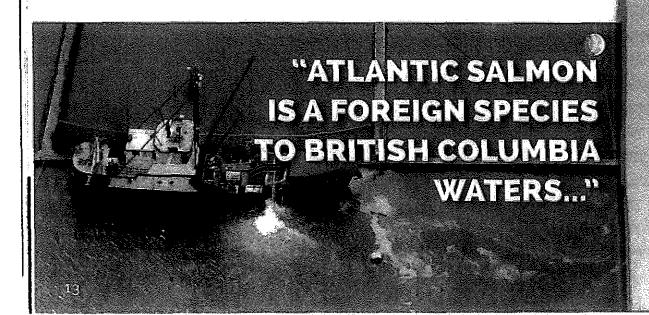


CONSUMERS AND SOCIAL LICENCE - WE HAVE A CHOICE AND A VOICE

As consumers become more aware of the finite nature of this planet, they are increasingly concerned about where their food comes from, whether is it sustainable and whether it is safe.

There is growing awareness of the impacts of open-net pen aquaculture in Canada and in the U.S.:

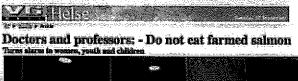
- Sustainable seafood organizations, Sea Choice and Ocean Wise have "red-listed" Canadian farmed salmon for a number of reasons including its reliance on pesticides and antibiotics and its impact on wild salmon.
- Consumers expect salmon to be reddish-orange. Wild salmon get this colouring naturally from their diet. Farmed salmon however, lack this natural colour and so their feed pellets contain additives such as astaxanthin. 49 The farmer chooses the exact shade of colour. Without this pigmentation additive, a farmed salmon fillet would be grey. 50
- International media is paying attention, including a CBS 60 Minutes exposé in 2014 by Dr. Sanjay Gupta on salmon farming in B.C., (featuring biologist Alexandra Morton) and a Bloomberg News segment entitled "Why You'll Never Want to Eat Farmed-Raised Salmon." 51, 52
- The Commission for Environmental Cooperation (CEC), a body under NAFTA, called for a review to ensure that Canada's management of salmon farming has not put wild salmon at risk. This failed when Canada and Mexico vetoed this review.⁵³
- There are over 106,000 signatures on a petition to the Premier of B.C. to stop the expansion of the salmon farming industry in B.C.⁵⁴
- In 2015, two political parties in Norway called for removal of the industry onto land to protect wild salmon and Norway's leadership in the industry.⁵⁵

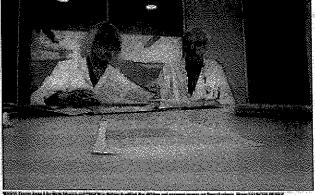




In June 2013, a leading Norwegian newspaper, **VG**, ran a story titled. *Excluse and professors*. Do not ear farmed solmon. The story incuted on farmed solmon containing alarmongly high levels of persistent organic containing (FDP₃).

With farmed salmon such consumption skyrocketing among young women, doctors have become concerned. The toxins that accomulate in women and girls are released doring pregnancy and nursing POPs are linked with impaired brain development in infants, including lower IO and autism.





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The news that farmed salmon might porbe sale was followed by news that the Norwegian government had remained stendly aware of the trainievers of farm salmon for 7 years. An advency was quotely released flowever the countries importing Norwegian farmed calmon and noting this Nurwey and out-information might by did not inform their consumers.

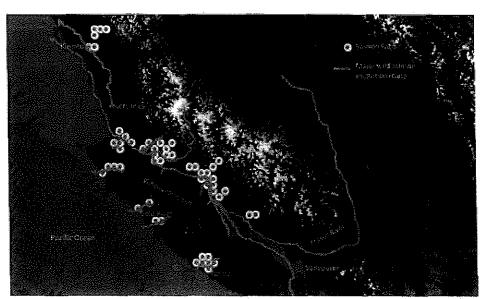
Norety eight percent of the calmon farming andustry that grows fish in B C open net pens have head offices in Norway.



WHO OWNS THE OCEAN? THE CANADIAN PEOPLE OR FOREIGN-OWNED SALMON FARMS?

Salmon farming has been the subject of jurisdictional confusion since the industry arrived in Canada in the mid-1980s. This has had significant implications for regulation and enforcement. In an attempt to legalize salmon farming in September 1988, Canada and B.C. signed a Memorandum of Understanding that gave B.C. the responsibility to license and regulate salmon farms. ⁵⁰ As a result, this fishery appeared to become a farming activity and B.C.'s provincial regulation was developed and applied, with no consideration for wild fish.

However, in a 2009 court case, Alexandra Morton et al vs the A.G. of British Columbia and Marine Harvest Canada, the B.C. Supreme Court ruled that provincial regulation of fish in the ocean was unlawful and transferred the responsibility of the industry back to the federal government. Justice Hinkson ruled that the ocean remains the ocean within the pens. The province of B.C. did retain a key responsibility, issuing the Licenses of Occupation, and therefore overseeing the siting of farms, which decides the direct impact on wild salmon migration routes. Inexplicably this ruling was not applied to Eastern Canada.



Map of open-net pen salmon farms and wild salmon migration routes in B.C.

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Of course this takes us back to the original problem: farming salmon in the ocean does not fit within the Constitution of Canada, as Canada prohibits private marine fisheries. It is therefore unclear who owns the fish in the pens. As the Senate Standing Committee on Fisheries and Oceans is reviewing aquaculture management, the salmon farming industry is requesting a stand-alone Aquaculture Act to provide for ownership of salmon in the marine waters of Canada.

The implications of granting foreign ownership of salmon in Canadian marine waters will not please the Canadian public.

If it is the same ocean inside and outside the pens, these companies will own "their" salmon when they escape. Who then has the right to mixed farmed and wild fisheries? Who will win the legal challenges that will arise if wild salmon migrating past salmon farms are found to be carriers of specific diseases? Pending aquaculture regulations seek legislation to kill wild salmon to protect farmed salmon from disease. Once Canada grants private fisheries, a chaln of events will begin that will drastically change life on Canada's coasts.



AQUACULTURE COULD BE A GOOD THING, IF...

It is widely supported that wild fish alone cannot satisfy global demand for seafood. While aquaculture has many positive attributes, salmon farming in net-pens is wasteful, dirty and consumes more fish than it produces. Currently, its impact on wild salmon and the surrounding environment is not acceptable.

The fish farming industry comes at a financial cost. Canadian taxpayers have reportedly spent nearly \$100 million over the past three years compensating salmon farmers to cull diseased and dead fish. 61,62 While a federal salmon farming licence costs over \$4 million Norwegian Krone (as of March 2015, this equates to approximately \$650,000 Canadian Dollars) in Norway, Canada currently hands these licenses out at no charge. 63,64

There is an alternative.

Canadians are making progress on raising salmon in closed-containment tanks on land. These large tanks have:

- Better bio-security
- No interaction with wild species
- Greater control over the optimal conditions to grow fish
- Increased social licence, meeting a growing consumer demand for sustainable seafood

B.C. already has farmed Atlantic salmon grown in closed-containment systems being brought to market. This approach currently being used by businesses and First Nations significantly minimizes the Impact on the marine environment.

This is one step towards a future where aquaculture could sustainably contribute food to the people of this planet. This future will, however, require leadership from the federal government and a consistent, forward-thinking fisheries policy that goes beyond aquaculture to embrace wild salmon fisheries and tourism.

In addition to encouraging innovative aquaculture, cutting-edge genomic profiling should be used to pinpoint where wild salmon are dying and what is killing them. This will permit highly strategic adaptations of human impact to balance human activity and wild fish (not just salmon) population increases. This work is already under development in Canada, but requires Ottawa's support.

THE FIRST STEP

It is up to the federal government to get serious about wild salmon.

It begins with addressing the very real internal conflict in which the DFO finds itself. Justice Cohen's third recommendation—to remove the DFO's mandate to promote the farmed salmon industry and its product—must be implemented immediately.

Whether it is the media reports of the DFO "muzzling" scientists working on salmon disease or a distinct lack of transparency and accuracy with regard to test results for ISAV and other viruses, the DFO's reputation, and thereby the reputation of the Canadian government, is as much at risk as wild salmon and aquaculture.



A WAY FORWARD

'The truth is how we treat our environment is how well it will treat us." Craig Murray, owner of Nimmo Bay Resort

Canadians desperately need our government to protect the value of wild salmon for present and future generations. Salmon farming is a serious and unnecessary threat to wild salmon populations. If reversed, there will be enormous benefits to Canada and the world.

There is a window of opportunity to develop a path to a vibrant aquaculture industry, using pioneering Canadian solutions. Canada committed resources to find a path to restoring wild salmon and this process identified salmon farms as one of the most dangerous and fixable issues wild salmon face.

In addition, Canada is at the forefront of the most promising and powerful research to restore wild salmon populations. Genomic profiling allows scientists to read the immune systems of salmon to detect exactly what is killing them. Using this tool, funds could be precisely allocated to allow wild salmon to thrive wherever possible.

Canada made a significant investment in the Cohen Commission and we now have a roadmap for action. We urge you as an elected representative to.

- STAND UP for B.C's wild salmon economy and the global need for sustainable seafood
- Avoid a new aquaculture act. All fish in the ocean should be regulated under the Fisheries Act to protect public interest.
- Insist that the Privy Council Office accept the DFO's response document to the Cohen Commission's recommendations.
- Halt the growth of a dirty industry and transform it into a better one.
- Remove salmon farms from wild salmon migration routes.

There is an important and positive role to be played by each and every Member of Parliament and the Senate to help ensure that the Cohen Commission's recommendations, flowing from a well-respected federal government inquiry, are implemented. Most importantly, a strong voice is needed to direct DFO officials that fulfilling their fundamental mandate of protecting and preserving wild salmon is the top priority.

REFERENCES

- Reimchen, T. E., et al. "isotopic evidence for enrichment of salmon-derived nutrients in vegetation, soil, and insects in riparian zones in coastal British Columbia," American Fisheries Society Symposium. American Fisheries Society. 2003.
- Saksida, Sonja, and Elan Downey. Overview of Sea Lice Issues and Risks for Farmed and Wild Salmon in British
 Columbia. Rep. Ed. Paula Galloway. CERMAQ ASA, Jan. 2008. Web. Feb. 2015. http://www.watershed-watch.org/wordpress/wp-content/uploads/2012/07/Exh-1782-CAN068593-.pdf.
- Evans, Derek. "Atlantic Salmon Review Paper Deals Looks at Problems Faced by Atlantic Salmon and Sea Trout."
 The Irish Times. N.p., Jan. 2015. Web. Feb. 2015. https://www.irishtimes.com/sport/other-sports/atlantic-salmon-and-sea-trout-1.2068394.
- Cohen, B. (2012). The Commission's mandate. In The uncertain future of Fraser River sockeye (Vol. 1, p. 2). Ot tawa: Minister of Public Works and Government Services Canada.
- Sustainability Report 2008. Rep. Marine Harvest, 2008, Web. Feb. 2015. http://wenku.baidu.com/view/aa51891ec5da50e2524d7f0d.html
- Stroomer, Chad, and Mirlam Wilson. British Columbia's Fisheries and Aquaculture Sector: 2012 Edition. Rep.
 B.C. Stats, 2013. Web. 2015. http://www.bcstats.gov.bc.ca/Files/0c4250f8-e4ee-45b9-b1fa-247ae1a98590/BritishColumbiasFisheriesandAquacultureSector2012Edition.pdf.
- Stroomer, Chad, and Miriam Wilson. British Columbia's Fisheries and Aquaculture Sector: 2012 Edition. Rep. B.C. Stats, 2013. Web. 2015. http://www.bcstats.gov.bc.ca/Files/0c4250f8-e4ee-45b9-b1fa-247ae1a98590/BritishColumbiasFisheriesandAquacultureSector2012Edition.pdf.
- Asche, Frank. "The Salmon Disease Crisis in Chile." Marine Resource Economics 24.4 (2009): 405-11, JSTOR.
 Web, Feb. 2015. http://www.jstor.org/stable/10.2307/42629664?ref=no-x-route:1c31d59a97ef07a3ab6590ebb-7h66665.
- Stroomer, Chad, and Miriam Wilson. British Columbia's Fisheries and Aquaculture Sector: 2012 Edition. Rep. B.C. Stats, 2013. Web. 2015. http://www.bcstats.gov.bc.ca/Files/0c4250f8-e4ee-45b9-b1fa-247ae1a98590/BritishColumbiasFisheriesandAquacultureSector2012Edition.pdf.
- Cohen, Bruce, The Uncertain Future of Fraser River Sockeye, Rep. Privy Council, 2012. Web. 2015, http://pubfications.gc.ca/collections/collection_2012/bcp-pco/CP32-93-2012-1-eng.pdf.
- Canada. Office of the Auditor General of Canada, Federal Government Response to the 2012 Cohen Commis sion Report Into the Decline of Fraser River Salmon and Concerns about the Potential Impact to Fish Habitat Protection under the Amended Fisheries Act. Sea to Sky Fisheries Roundtable, June 2014. Web. Feb. 2015.
- Drews, Kevin. "Changes to Fisheries Act Could Harm Fraser River Salmon." CTV. The Canadian Press, Oct.-Nov. 2012. Web. Feb. 2015. http://www.ctvnews.ca/canada/changes-to-fisheries-act-could-harm-fraser-river-salmon-1.1019565>.
- 13. ibid.
- O'Neil, Peter. "Fisheries Department Response to Salmon Decline Report Remains Secret." The Vancouver Sun.
 Canada.com, Apr. 2014. Web. Feb. 2015, http://www.vancouversun.com/fisheries+department+response+salmon+decline+report+remains+secret/9753367/story.html.
- Cohen, Bruce. The Uncertain Future of Fraser River Sockeye. Rep. Privy Council, 2012. Web. 2015. http://publications.gc.ca/collections/collection_2012/bcp-pco/CP32-93-2012-1-eng.pdf. Page 12
- 16. Loc cit.
- 17. Loc. cit
- 18. Ibid., p. 26
- Kent, Michael L., and Sheila C. Dawe. "Experimental transmission of a plasmacytoid leukemia of chinook salmon, Oncorhynchus tshawytscha." Cancer research 50.17 Supplement (1990): 5679s-5681s.
- Miller, Kristi, Epidemic of a Novel, Cancer-causing Viral Disease May Be Associated with Wild Salmon Declines in BC. Rep. DFO, Oct. 2009. Web. Feb. 2015. http://www.watershed-watch.org/wordpress/wp-content/uploads/2011/08/Exh-1523-CAN006145.pdf.
- Aquaculture Coalition. What is Happening to the Fraser Sockeye? Rep. Commission for Environmental Coopera tion, Aug. 2011. Web, Feb. 2015. http://www.cec.org/Storage/133/15827_12-1-Exhibit_D.pdf. p. 20

- Munro, Margaret. "Ottawa Sliences Scientist over West Coast Salmon Study." The Vančouver Sun. Postmedia, July 2011. Web. Feb. 2015. http://www.vancouversun.com/technology/story.html?id=5162745.
- Li, Jieying, Keith A. Boroevich, Ben F. Koop, and William S. Davidson. "Comparative Genomics Identifies
 Candidate Genes for Infectious Salmon Anemia (ISA) Resistance in Atlantic Salmon (Salmo Salar)." Marine
 Biotechnology 13.2 (2011): 232-41. Springerlink, Apr. 2010. Web. Feb. 2015. http://link.springer.com/content/pdf/10.1007%2Fs10126-010-9284-0.pdf.
- 24. Ibid.
- 25. Ibid.
- Mullins, J. E., David B. Groman, and D. Wadowska. "Infectious salmon anaemia in salt water Atlantic salmon (Salmo salar L.) in New Brunswick, Canada." Bulletin of the European Association of Fish Pathologists 18.4 (1998): 110.
- Miller, Otts; Cipriano, Rocco C., tech. coords. 2003, International response to infectious salmon anemia: preven tion, control, and eradication: proceedings of a symposium; 3–4 September 2002; New Orleans, LA. Tech.
 Bull. 1902. Washington, DC: U.S. Department of Agriculture, Animal and Plant Health Inspection Service; U.S. Department of the Interior, U.S. Geological Survey; U.S. Department of Commerce, National Marine Fisheries Service. 194 p.
- Godoy, Marcos G., et al. "First detection, Isolation and molecular characterization of infectious salmon anaemia
 virus associated with clinical disease in farmed Atlantic salmon (Salmo salar) in Chile." BMC veterinary
 research 4.1 (2008): 28.
- Kibenge, Frederick SB, et al. "Isolation and identification of infectious salmon anaemia virus (ISAV) from Coho salmon in Chile." Diseases of aquatic organisms 45.1 (2001): 9.
- Kibenge, F. S., et al. "Infectious salmon anaemia virus (ISAV) isolated from the ISA disease outbreaks in Chile
 diverged from ISAV isolates from Norway around 1996 and was disseminated around 2005, based on
 surface glycoprotein gene sequences." Virol J 6.88 (2009): 422X-6.
- RESEARCH INTO THE SPREAD OF SALMON VIRUS, Rep. THE NATIONAL COMMISSION FOR THE INVESTIGATION
 OF SCIENTIFIC MISCONDUCT, Apr. 2011. Web. Feb. 2015. http://alexandramorton.typepad.com/Nylund%20Ethics%20investigation.pdf.
- 32. Godoy et al. Virology Journal 2013, 10:344. < http://www.virologyj.com/content/pdf/1743-422x-10-344.pdf>.
- Henderson, Paul. "Shocking Cultus Sockeye Report." Chilliwack Times, N.p., Dec. 2011. Web. Feb. 2015. http://www.chilliwacktimes.com/news/244964531.html.
- 34. Email Thread Btw M Kibenge and S Jones Re Paper, Ending on Nov 14 2011, with Attached Paper, Asymptomatic ISA in Juvenile Oncorhyncus Species from the Northest Pacific Ocean, Rep. no. Exhibit 2045, Cohen Commission, n.d. Web. Feb. 2015. http://www.watershed-watch.org/wordpress/wp-content/uploads/2011/08/Exh-2045-CCi001528.pdf.
- Pynn, Larry. "Lawsuit Dropped after College of Veterinarians of B.C. Agrees to investigate Fish Researcher's Complaint." The Vancouver Sun. Postmedia, Feb. 2015. Web. Mar. 2015.
- 36. Cohen Commission exhibits: 2053, 2025, 2043, 2062, 2060, 2051, 2061, 2040, 2055
- Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River Testimony, Public Hearings., p.
 118 (2011) (testimony of Dr. Kim Klotins (CFIA)). Online. December 19, 2011 http://www.watershed-watch.org/wordpress/wp-content/uploads/2011/12/CohenCommission-HearingTranscript-2011-12-19.pdf.
- Woo, A. (2013, July 3). Lab that found virus in B.C. salmon stripped of credentials after audit. The Globe and Mall. Retrieved February 1, 2014, from http://www.theglobeandmall.com/news/british-columbia/lab-that-found-virus-in-bc-salmon-stripped-of-credentials-after-audit/article12977743/
- Alexander, Ian D. "HCC 13-007073-620." Letter to Alexandra Morton, 5 Dec. 2013. Canadian Food Inspection Agency. N.p.: CFIA, n.d. N. pag. Print.
- "Statement on Infectious Salmon Anaemia Testing." Canadian Food Inspection Agency. Government of Canada, July 2013. Web. Mar. 2015. http://www.inspection.gc.ca/animals/diseases/reportable/isa/statement-2013-07-05/eng/1373038790217/1373041710849.
- Oved, Marco C. "Infected Salmon Declared Fit for Human Consumption by Canadian Food Inspection Agency." The Toronto Star. Thestar.com, Feb. 2013. Web. Feb. 2015.
- 42. Ibid.
- "No Sign of Two Viruses in B.C. Salmon: Food Agency." Global News. The Canadian Press, Nov. 2014. Web. Feb. 2015. http://globalnews.ca/news/1664288/no-sign-of-two-viruses-in-b-c-salmon-food-agency/.
- "Aquaculture Company on the Hook for \$500K for Pesticide Use." CBC News New Brinswick. CBC News, Apr. 2013, Web. Feb. 2015. http://www.cbc.ca/news/canada/new-brunswick/aquaculture-company-on-the-hook-for-pesticide-use-1.1317105.
- Galbraith, Moira, and Dave Mackas. Canadian Aquaculture R&D Review 2011. Publication. Fisheries & Oceans Canada, 2011. Web. Feb. 2015. http://www.dfo-mpo.gc.ca/science/enviro/aquaculture/rd2011/rdsealice-pou-eng.html>

- Osler, Draft Regulations Released for Deposits of Deleterious Substances under the Fisheries Act, Osler, Hoskins & Harcourt LLP, Feb. 2014. Web. Feb. 2015. http://www.osler.com/NewsResources/Draft-Regulations-Released-for-Deposits-of-Deleterious-Substances-under-the-Fisheries-Act/.
- Ford, Jennifer S., and Ransom A. Myers. "A global assessment of salmon aquaculture impacts on wild salmonids." PLoS biology 6.2 (2008): e33.
- "Waste Contamination from Salmon Farms." Pure Salmon Campaign. N.p., 2010. Web. 02 Mar. 2015, http://www.puresalmon.org/waste_contamination.html.
- Baker, Rémi TM. "Canthaxanthin in aquafeed applications: is there any risk?." Trends in Food Science & Technol ogy 12.7 (2001): 240-243.
- Turujman, Saleh A., et al. "Rapid liquid chromatographic method to distinguish wild salmon from aquacultured salmon fed synthetic astaxanthin." Journal of AOAC international 80.3 (1996): 622-632.
- 51. Gupta, Sanjay. "Saving the Wild Salmon." 60 Minutes. CBS, May 2014. Web. Feb. 2015. http://www.cbsnews.com/news/saving-wild-salmon/.
- "Why You'll Never Want to Eat Farm-Raised Salmon." Bloomberg, N.p., May 2014, Web. Feb. 2015, http://www.bloomberg.com/news/videos/b/44310b69-1c27-4933-a016-7fe2adcaee7c.
- O'Neil, Peter. "NAFTA Oversight Group Calls for Investigation into B.C. Fish Farms." The Vancouver Sun. Postme dia, May 2014. Web. Feb. 2015. http://www.vancouversun.com/business/NAFTA+oversight+group+calls-tinvestigation+into+fish+farms/9868750/story.html.
- Morton, Alexandra. "Restore Wild Salmon, Ban Salmon Feedlots in BC." Refuse to Expand the Salmon Farming Industry in BC. Change.org, 2012, Web. Feb. 2015. https://www.change.org/p/restore-wild-salmon-ban-salmon-feedlots-in-bc.
- Bodahl, Aslak. "Tar Fisken På Land." Siste.no, ANB, Jan. 2015. Web. Feb. 2015. http://www.siste.no/Tar_fisken_p_land-5-47-3378.html.
- HUSBY, MARCUS, and BJORN HAUGAN. "Leger Og Professorer: ikke Spis Oppdrettslaks." VG. Associ
 ated Press, June 2013. Web. Feb. 2015, http://www.vg.no/forbruker/helse/leger-og-professorer-ikke-spis-oppdrettslaks/a/10117390/.
- Rossignol, D. A., S. J. Genuls, and R. E. Frye. "Environmental toxicants and autism spectrum disorders: a system atic review." Translational psychiatry 4.2 (2014): e360.
- Lundqvist, Christofer, et al. "The effects of PCBs and djoxins on child health." Acta paediatrica 95, s453 (2006):
- Bevington, Pete. "Salmon Health Risks Debated in Norway." Shetland News. N.p., June 2013. Web. Feb. 2015.
 http://www.shetnews.co.uk/news/6988-salmon-health-risks-debated-in-norway-.
- "Government of Canada and Province of British Columbia Sign Agreement on Aquaculture Management." Gov ernment of Canada. Fisheries & Oceans Canada, Dec. 2010. Web. Feb. 2015. http://www.dfo-mpo.gc.ca/media/npress-communique/2010/np-pr11-eng.htm.
- "\$93M Paid For Diseased Fish." Web log post. Blacklocks Reporter. N.p., Sept. 2014. Web. Feb. 2015. http://www.blacklocks.ca/93m-paid-for-diseased-fish/>.
- Ross, Selena. "Fish Farm Culls Cost Public \$138m," The Chronicle Herald. N.p., Mar. 2014. Web. Mar. 2015. http://thechronicleherald.ca/novascotia/1194343-fish-farm-culls-cost-public-138m>.
- Government of Norway. Norwegian Ministry of Fisheries and Coastal Affairs. The Norwegian Aquaculture Act.N.p., Jan. 2014. Web. Feb. 2015. https://www.regjeringen.no/globalassets/upload/kilde/fkd/reg/2005/0001/ddd/pdfv/255327-I-0525_akvakulturloveneng.pdf.
- Policy and Practice Report: Aquaculture Regulation in British Columbia. Rep. no. PPR20. Cohen Commission, July 2011. Web. Feb. 2015. http://www.watershed-watch.org/wordpress/wp-content/uploads/2011/08/PPR20-NonRT.pdf. p.77



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About the Title:

This booklet's title "Salmon Confidential: the ugly truth about Canada's open-net salmon farms" is taken from Salmon Confidential, a film with over 1 million internet viewings and many awards on the dark politics behind farm salmon disease in British Columbia as revealed in testimony at the Cohen Commission.

To view the film, visit http://www.salmonconfidential.ca.

If you have an interest to organize a screening, please email AlexandraMorton5@gmail.com.



