

[Scottish Salmon Watch](#), 16 May 2019

[Close Down "Very Poor" Scottish Salmon](#)

- "Sewage fungus" at The Scottish Salmon Company's Kinlochmoidart Hatchery
  - "Gross" pollution of River Moidart 'Special Area of Conservation'
- Impact on endangered freshwater pearl mussels triggers call to cease operation



Campaigners are calling on government agencies to revoke the licence of The Scottish Salmon Company's Kinlochmoidart Hatchery for gross pollution (including "clumps of fungal growth") of the [River Moidart 'Special Area of Conservation'](#) and impacts on [endangered freshwater pearl mussels](#).



"Scottish salmon farming is synonymous with environmental pollution and ecosystem degradation," said Don [Staniford, Director of Scottish Salmon Watch](#). "The Scottish Salmon Company has been found guilty by SEPA of gross pollution of the River Moidart which is an EU-protected 'Special Area of Conservation'. The time has come for Scottish Natural Heritage, Scottish Ministers, Highland Council and SEPA to close down the Kinlochmoidart Hatchery which has plummeted from 'Excellent' to 'Poor' and now 'Very Poor'. Freshwater pearl mussels are an endangered species and warrant special protection from waste effluents discharged by disease-ridden salmon farming operations."



In the [latest compliance assessment by the Scottish Environment Protection Agency](#) (SEPA), the Kinlochmoidart Hatchery (operated by The Scottish Salmon Company) was assessed as "Very Poor" making it the worst salmon farming operation in Scotland [1].

The image shows the SEPA logo (Scottish Environment Protection Agency) and a photograph of several people in a boat on a river. Below this is a webpage layout for a compliance assessment report.

**Return to SEPA homepage**

**Compliance Assessment Scheme - Assessment Reports**

<p><b>Compliance Record Details</b></p> <p>Authorisation No: CAR/L/1001840</p> <p>Regime: CAR</p> <p>Sector : Fish farming</p> <p>Team: West Highlands &amp; Argyll</p> <p>Address: Kinlochmoidart Hatchery</p>	<p><b>Licence Compliance for 2017:</b></p> <p style="text-align: center; font-size: 2em;"><b>Very Poor</b></p>
---	--

Comments: Kinlochmoidart Hatchery is classified as Very Poor as sample results show exceedences in BOD and ammonia levels. Mitigation measures have been put in place to improve performance and bring site back into compliance.

**Historic Compliance**

- 2017: Very Poor
- 2016: Poor
- 2015: Poor
- 2014: Excellent
- 2013: Excellent
- 2012: Excellent
- 2011: Excellent
- 2010: Excellent

Freshwater pearl mussels are [protected via the Wildlife and Countryside Act 1981](#). Under the European Habitats and Species Directive 92/43/EEC the freshwater pearl mussel (*Margaritifera margaritifera* L.) is a protected species listed in Annexes II and V; it is also listed in the [IUCN 1996 Red Data List as 'endangered'](#).

 Names - common, scientific, regions etc...   [Advanced](#) [About](#) [Assessment process](#) [Resources & Publications](#)



# Freshwater Pearl Mussel

*Margaritifera margaritifera*

## CITATION

Moorkens, E., Cordeiro, J., Seddon, M.B., von Proschwitz, T. & Woolnough, D. 2018. *Margaritifera margaritifera* (errata version published in 2018). *The IUCN Red List of Threatened Species* 2018: e.T12799A128686456. <http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T12799A508865.en>. Downloaded on 15 May 2019.

[Download](#) ▼

 Translate page into:

 Select Language ▼

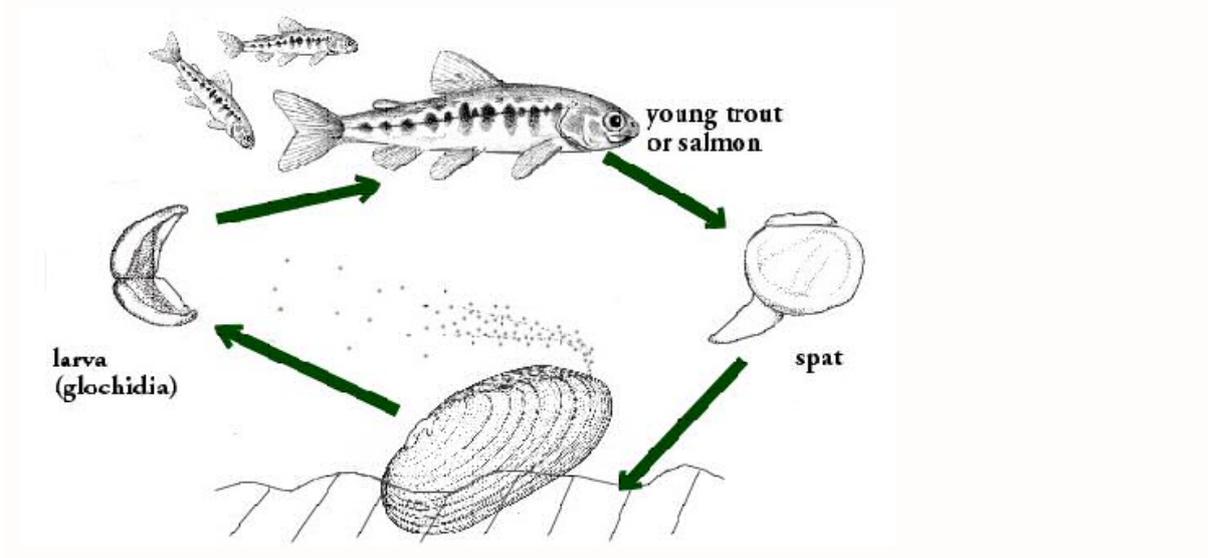
Scotland is a major global stronghold for freshwater pearl mussel populations but has seen a "[dramatic decline](#)" [2].



[According to Scottish Natural Heritage](#) (the government agency charged with protecting freshwater pearl mussels as well as 'Special Areas of Conservation' in Scotland), freshwater pearl mussels "have a complex life cycle: in their first year, they live on the gills of young [Atlantic salmon](#) or [brown trout](#), without causing harm to the fish".

### Life cycle

Successful breeding requires healthy and abundant salmon and trout populations to be present. Pearl mussels produce free-swimming larvae which must find the gills of a young salmonid fish within a short time during the summer breeding season. They encyst in the gills of the young fish and are carried around until the following spring when they hatch and fall to the bottom of the river to start life as a mussel. Apart from this bizarre start to life mussels sit unmoving in sand and gravel beds on the bottom of streams for up to 50 years filtering microscopic plants from the water as food.



Documents ([including photos](#)) obtained via Freedom of Information from [SEPA](#) and [SNH](#) reveal serious concerns about waste effluent discharges at the Kinlochmoidart Hatchery and impacts on endangered freshwater pearl mussels [3].



A site visit by SNH in July 2014 recorded "algal mats and sewage fungus" entirely covering the riverbed directly downstream of the effluent pipe from the Kinlochmoidart Hatchery. "It is my opinion that the conditions on the riverbed are such that they would not be able to sustain freshwater pearl mussel in this reach, particularly juvenile mussels which require oxygenated water to be able to freely penetrate into the riverbed," [reported SNH's inspection team](#) (which included Iain Sime and Corinna Mertens). "The physical habitat appears ideal

for pearl mussel so I can only assume there are so few pearl mussels in this reach (and further downstream) because of the pollution from the discharge."



"It would obviously benefit the population if the discharge could be changed in some way to improve water quality either by improved treatment, different discharge arrangements etc.," [concluded SNH](#). "If there were sufficient improvements, this would likely lead to improved habitat for pearl mussels and allow a more abundant and better recruiting population to establish and grow in the reaches we surveyed and potentially further downstream too."

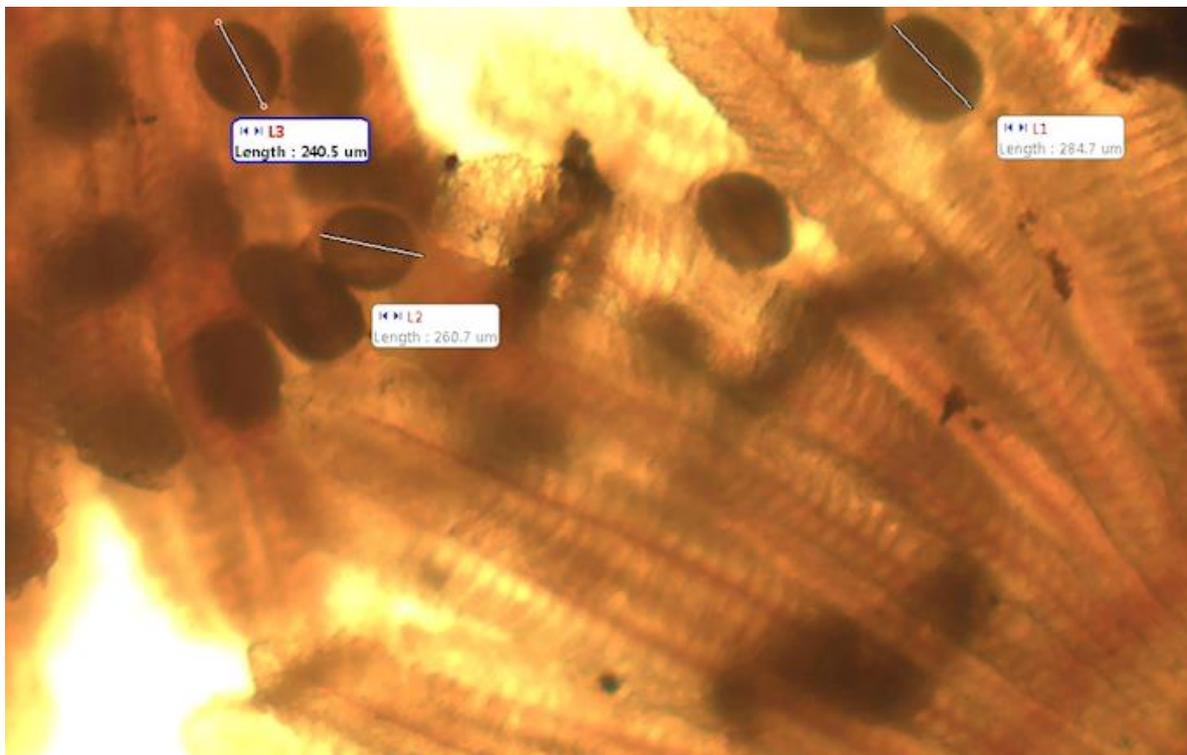


SNH's Iain Sime wrote to SNH's Corrina Mertens in November 2015 suggesting that discharge pipe was extended to the sea (MH = Marine Harvest):

The other thing is extending the pipe. Could that it may be extended to encourage mixing. Do you think, in the longer term, there might be mileage in really extending the pipe to the sea and directly discharge there? It would reduce any effluent problem in the river at a stroke. I realise that it might be a much larger amount of funding required within MH but we could, potentially, look at working with MH to try and obtain external funding via a project. Might be worth suggesting to SEPA to see if its something they would support before going back to MH?

SEPA's Stephen Macintyre [wrote to SNH's Corinna Mertens in November 2015](#) reporting "mussel spat attaching to the gills of farmed stock" via the hatchery abstraction point:

Site is also proposing to install filtration (within hatchery footprint) of the incoming water to address issues such as leaf litter in incoming water and interestingly mussel spat from upstream abstraction point (dam). At certain times of year the site notice mussel spat attaching to the gills of farmed stock – they want to prevent this and generally reduce any associated stress to fish gills before they are moved to sea where previous gill stress issues can result in more significant fish health issues. The plan is to have a continuous back wash of the planned drum filter which will wash any accumulated leaf litter and presumably mussel spat back into the river (a 20 micron filter has been suggested) just above the access bridge into the site. No issues for SEPA regulation but again copied to you for info – site seem to have a pretty good awareness of when mussel spat release occurs (a reported 2 day period within a 6 week window in the summer) and presumably preventing mussel spat from going into the site and returning to the river will be beneficial.



An [appraisal by SNH of the River Moidart SAC in 2009](#) warned:

The river water is passed through the fish tanks and therefore there is a likelihood that FWPM glochidia which are in suspension within the water will attach to the farmed fish. This therefore will act as a filter, removing a proportion of the glochidia from the river system and reducing the potential for natural recruitment.

[Note that glochidia is the microscopic larval stage of the Freshwater Pearl Mussel - FWPM]

SNH's Iain Sime [wrote to SNH's Corrina Mertens in June 2016](#) once again suggesting discharging direct to the sea due to the impact on the SSSI:

I'd also welcome TSSC's efforts to improve the quality of the discharge. As they are at the planning stage, can we suggest something? That they consider discharging direct to sea, rather than returning to the river? In the long term it may be very difficult to always provide a level of treatment that means the lower part of the SSSI remains viable, due to the sensitivities of the pearl mussels. As such, if they are considering longer term arrangements, it would be wise for them to consider something like discharging into the sea loch before making other significant investments.



"The general condition of the effluent treatment infrastructure remains poor and is reflected in the present quality of effluent being discharged and the downstream impact to the River Moidart," [wrote SEPA's Stephen Macintyre in July 2017](#). "Further improvements may be required especially around the siting of the outfall discharge point, noting the ecological importance and sensitivity of the downstream habitat forming part of the SAC designation."

"Assessed as Gross ELC breach - although the drum filter was in operation there was clear carry over of fine solid matter, including clumps of fungal growths (breaking off from the settlement tank) into the river," reported SEPA in July 2017.

[ELC = [Environmental Limit Condition](#)]

The Kinlochmoidart Hatchery has a history of problems - also including mass mortalities and infectious diseases [4]. OneKind [reported in August 2018](#):

Closed containment systems are also completely managed environments, which increases the risk of human error or equipment failure, both of which can be catastrophic. One example of this is that at Kinlochmoidart Hatchery, operated by Sunbeam Aquaculture, where a power cut led to the death of 140,886 (39%) of fish on site in February 2016 (Fish Health Inspectorate, 2016).

A [FOI disclosure in August 2018](#) revealed mortalities due to ERM ([Enteric Redmouth - caused by Yersinia ruckeri](#) - in the [same family of diseases as the Black Death plague](#)):

<b>Mortality Event Report</b>	
Mortality Event ID	MRT00691
Site Name:	Kinlochmoidart Hatchery
Site No:	FS0146
Start date of mortality:	04/06/2018
Period of mortality:	Weekly
Percentage mortality:	2.58
Explained/unexplained:	Explained
Reason (if explained):	ERM, stress from spikes in water temperatures
Business Name:	The Scottish Salmon Company
Business Number:	FB0169
Species:	SAL
Water Type:	FW
Weight (site average):	5g to smolting
Weight (affected population average):	8g
Age:	2018 s0
Estimated number of fish lost:	Not provided
Additional information:	Treated with antibiotics
MS action:	

A [FOI disclosure in July 2018](#) revealed that the ova (eggs) sourcing the Kinlochmoidart Hatchery were imported from Iceland and Norway ([sourced from companies with reported disease and pathogen problems](#)):

Date	Site of destination	Operator	Consignee on certificate (if different from operator)	Species	Stage	Number	Source Country	Source Company
11/01/2017	Kinlochmoidart Hatchery	Sunbeam Aquaculture	The Scottish Salmon Company	Salmon	Ova	785,250	Norway	AquaGen AS
16/02/2017	Kinlochmoidart Hatchery	Sunbeam Aquaculture	The Scottish Salmon Company	Salmon	Ova	562,500	Norway	AquaGen AS
22/11/2017	Kinlochmoidart Hatchery	The Scottish Salmon Company		Salmon	Ova	1,522,500	Iceland	Stofniskur
01/03/2018	Kinlochmoidart Hatchery	The Scottish Salmon Company		Salmon	Ova	615,000	Iceland	Stofniskur

Data [published by the Scottish Government's Fish Health Inspectorate in March 2019](#) reveals a staggering three hundred 'Mortality Event Reports' by The Scottish Salmon Company alone involving over 2.46 million dead farmed salmon between 2017 and the end of January 2019. [Reported causes](#) of mortality included Amoebic Gill Disease, Salmonid Alphavirus, Piscine Reovirus, Heart & Skeletal Muscle Inflammation, Pancreas Disease, Haemorrhagic Smolt Syndrome, Cardiomyopathy Syndrome, Anaemia, Fungus, Proliferative Gill Disease, Enteric Redmouth Disease and "complex and severe" gill issues.



Site Name	Start date	Mortality rate recorded(%)	If explained, select reason(s):	Total mortality during event (if available):	Additional information (e.g. action taken):
Vuiabeag	04/09/2017	10.37	AGD, PD, Treatment	97534	
Sgian Dubh	01/08/2016	6.1	treatment	68123	Post salmosan, complex gill issues, lice - accelerated harvest
Loch Odhairn(Gravir)	24/07/2017	9.64	AGD, Complex gill issues, Treatment	64872	Severe gill issues with high levels of AGD present. H2O2 treatment at end of week 29. FW treatment planned for 12/08/17. Vet has been attending weekly and will attend FW treatment.
Loch Odhairn(Gravir)	24/07/2017	9.64	AGD, Complex gill issues, Treatment	64872	Severe gill issues with high levels of AGD present. H2O2 treatment at end of week 29. FW treatment planned for 12/08/17. Vet has been attending weekly and will attend FW treatment.
Meall Mhor Loch Fyne	17/10/2016	4.1	PD, Treatment	49116	Post h2o2 treatment, complex gill issues and PD runts 2 treatments in period one bath and one hydrolicer
Taranaish	06/08/2016	3.12	Treatment	46000	Post lice treatment, fallow two weeks later
Druimyeon Bay	13/11/2017	8.69	post treatment hydrolicer losses, handling, CMS.	45089	further hydrolicer treatment planned, fish on functional feed, harvesting.
North Uiskevagh	03/09/2016	2.5	AGD, Treatment	41000	Complex gill issues, post H2O2 treatment, AGD
Russel Burn	17/07/2017	4.42	Fungus	40873	Mortality event attributed to fungus post vaccination. Affected stock were treated with formalin and numbers have dropped.

This is not the first time The Scottish Salmon Company has been found guilty of pollution. Documents obtained from SEPA via FOI revealed "[very serious pollution](#)" at their processing plant at Marybank, Stornoway, in 2017.



Read more on The Scottish Salmon Company via:

[Scottish Scamon](#)

[Disease-Ridden Scottish Salmon](#)

[Whistleblower Photos of The Scottish Salmon Company](#)

Watch a video report on [diseases and mortalities](#) at The Scottish Salmon Company via:



Last month, the Irish Government [revoked a salmon farm licence due to overstocking](#) at Mowi's Deenish Island site in Ballinskelligs Bay. Last year, the Washington state government in the United States [terminated a salmon farm lease operated by Cooke Aquaculture following negligence over an escape](#) (with a subsequent [phase-out of all Atlantic salmon farming in Washington state by 2025](#)).

**Contact:**

Don Staniford: 07771 541826 ([salmonfarmingkills@gmail.com](mailto:salmonfarmingkills@gmail.com))

**Notes to Editors:**

[1] Read more on Scotland's failing fish farms via:

[Stricter rules could close salmon farms](#)

[One in five Scottish fish farms 'not meeting standards'](#)

[Failing Fish Farms: Scotland's Worst Salmon Farms Named & Shamed](#)

[BBC Radio Scotland's 'Newsdrive' on Failing Fish Farms](#)

[Marine Harvest's ASC-certified site ranked 'poor' in 2016 environmental protection report](#)

[Failing Fish Farms- 18% rated "poor" by SEPA in 2015](#)

Documents [obtained via Freedom of Information from SEPA](#) include:



Buidheann Dion  
Àrainneachd na h-Alba

Our Ref: CAS2017  
Your Ref:

If telephoning ask for:  
Stuart Baird

The Scottish Salmon Company Ltd  
8 Melville Crescent  
Edinburgh  
EH3 7JA

FAO: Marc Browne  
Head of Site Development

9 May 2018

Dear Sirs

**COMPLIANCE ASSESSMENT SCHEME**

I refer to SEPA's final assessment of your environmental performance for 2017. Your ratings are shown on the attached document. Your final assessment was determined using SEPA's Compliance Assessment Scheme which is available on SEPA's website at:

[http://www.sepa.org.uk/about\\_us/what\\_we\\_do/compliance\\_assessment.aspx](http://www.sepa.org.uk/about_us/what_we_do/compliance_assessment.aspx).

**The Scottish Salmon Company Limited**

CAR Ref Number	Site Name	Final 2017 CAS Assessment
CAR/L/1001840	Kinlochmoidart Hatchery	Very Poor

COPY



Scottish Environment  
Protection Agency

Buidheann Dion  
Àrainneachd na h-Alba

Our Ref: ST/MM  
Your Ref:

Mr William Downs  
The Scottish Salmon Company Limited  
Mid Strome  
Lochcarron  
Ross-shire  
IV54 8YH

24 July 2018

Dear Mr Downs

**WATER ENVIRONMENT (CONTROLLED ACTIVITIES) (SCOTLAND) REGULATIONS 2011  
("THE REGULATIONS")**

**SAMPLE FAILURE - CONTRAVENTION OF AUTHORISATION**

**AUTHORISATION NUMBER: CAR/L/1001840**

**SITE LOCATION: KINLOCHMOIDART HATCHERY, LOCHAILORT**

I would refer to the sample of final effluent taken by SEPA from the above location on 4 July 2018 and confirm that analysis indicates a failure of the lower tier numeric limit for Ammoniacal Nitrogen (as N) with a recorded sample value of 2.43 milligrams per litre.

I enclose for your attention the completed Compliance Report for that sample. I would confirm that failure to comply with or contravene conditions of a water use licence is an offence under the terms of the above Regulations.

The lower tier numeric limit is failed if the cumulative number of results exceeding the lower tier limit (including the current sample) in the preceding 12 months for planned samples is greater than that permitted by the look-up table, for a particular parameter. I must advise you that this level of non-compliance may result in enforcement action being taken by SEPA, which may include corroborative routine planned sampling in line with SEPA's Enforcement Policy.

I would request that you carry out investigations to determine the cause of the contravention, the steps which are required to remedy the contravention and the dates by which these steps have been taken or will be taken. Please report the outcome of your investigations and any action undertaken in writing to SEPA by 07 August 2018.

The results of this sample have been recorded within SEPA's Compliance Assessment Scheme and I enclose an Interim Assessment Report reflecting present compliance status.

If you have any questions regarding this letter or the notice please contact Linda MacLeod at SEPA Fort William Office or telephone 01397 704426.

Yours sincerely

Sarah Iune  
Environment Protection Officer

CC: *ryan.macdonald@scottishsalmon.com*



## Compliance Report

### Sample from : Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

Date and Time of Sample : 04-Jul-18 at 1110 Location Code : 201666 Version Number: 1  
 Sample Number: 3478315 Taken By : John A Wilson  
 Sample Type : Other Trade Effluent Team Area : West Highlands and Argyll  
 Licence Number: CAR/L/1001840

Test Reference	Notes	Determinand	Result	CAR Status	UWWTD Status	% Red'n
ES-INN-P-015	AB	Ammoniacal Nitrogen (as N)	2.43 mg/L	E		
ES-INR-P-005	AB	Biochemical Oxygen Demand - ATU suppressed	6.1 mg/L	C		
ES-INR-P-006	AB	pH	6.3 pH units	C		
ES-INR-P-007	AB	Suspended Solids (105°C)	9.33 mg/L	C		

Authorised By Fiona Wyllie - Chemistry Manager 16/07/2018

C = Complies  
 E = Exceedance  
 F = Fail

### Two Tier Compliance Report

Location: 201666 Kinlochmoidart Hatchery, TE to River Moidart, Lochailort Licence No: CAR/L/1001840  
 Compliance assessment following the reporting of sample 3478315 collected on 04/07/2018

Compliance Limits	CAR				UWWTD				
	Lower Tier	Upper Tier	Annual Mean Conc	Lower Tier	Upper Tier	Percent Reduction	Annual Mean Conc	Annual Mean % Red'n	
Ammoniacal Nitrogen (as N) (mg/L)	1.4	5.6							
Biochemical Oxygen Demand - ATU suppressed (mg/L)	10	40							
Bronopol (µg/L)		90							
Chloramine T (µg/L)		300							
Formaldehyde (µg/L)		65							
pH (pH units)		6-9							
Suspended Solids (105°C) (mg/L)		100							

Compliance History	CAR					UWWTD						Exclusions from Compliance
	LT Samples	LT Fails	UT Samples	UT Fails	Annual Mean Conc Samples	LT Samples	LT Fails	UT Samples	UT Fails	Annual Mean Conc Samples	Annual Mean % Red'n Samples	
Ammoniacal Nitrogen (as N)	6	2	6	0								1
Biochemical Oxygen Demand - ATU suppressed	6	1	6	0								1
pH			6	0								1
Suspended Solids (105°C)			6	0								1

#### Summary

On 04/07/2018 the discharge from Kinlochmoidart Hatchery, TE to River Moidart, Lochailort was:  
 Not complying with its CAR discharge limits

**Two Tier Compliance Report**

**Location:** 201666 Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

**Licence No:** CAR/L1001840

Compliance assessment following the reporting of sample 3478315 collected on 04/07/2018

Compliance Limits	CAR			UWWTD			
	Lower Tier	Upper Tier	Annual Mean Conc	Lower Tier	Upper Tier	Percent Reduction	Annual Mean Conc

Overall Kinlochmoidart Hatchery, TE to River Moidart, Lochailort was FAILING its discharge limits.

**From:** West Highland and Argyll Team  
**Sent:** 10 July 2018 16:20  
**To:** 'duncan.macleod@scottishsalmon.com'  
**Cc:** 'ryan.macdonald@scottishsalmon.com'; Macleod, Linda  
**Subject:** FW: SEPA Monitoring Sample - Limit fail: 201666 - Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

Hi Duncan

Please see below an early warning database notification of a sample limit failure. This result is an early warning for indicative purposes only to allow you to initiate investigations into effluent quality and/or efficiency of treatment systems, as appropriate. Formal notification of the sample result will follow in due course as will a request, if appropriate, for confirmation of remedial actions taken in response to this notification. Please contact [westhighlandargyll@sepa.org.uk](mailto:westhighlandargyll@sepa.org.uk) if you have any queries.

Kind regards  
Marianne

Marianne MacPherson  
Senior Admin Officer

SEPA - Fort William Office  
Tel: 01397 704426 (Ext. 2389) Fax: 01397 705404



## Compliance Report

### Sample from : Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

Date and Time of Sample : 08-Feb-18 at 1035      Location Code : 201605      Version Number: 1  
Sample Number: 3385783      Taken By : John A Wilson  
Sample Type : Other Trade Effluent      Team Area : West Highlands and Argyll  
Licence Number: CAR/L/1001840

Test Reference	Notes	Determinand	Result	CAR Status	UWWTD Status	% Red'n
ES-INN-P-015	AB	Ammoniacal Nitrogen (as N)	1.46 mg/L	E		
ES-INR-P-005	AB	Biochemical Oxygen Demand - ATU suppressed	26 mg/L	E		
ES-INR-P-006	AB	pH	6.6 pH units	C		
ES-INR-P-007	AB	Suspended Solids (105°C)	19.5 mg/L	C		

Authorised By Fiona Wylie - Chemistry Manager 19/02/2018

C = Complies  
E = Exceedence  
F = Fail

*Sample excluded*

**Two Tier Compliance Report**

**Location:** 201666 Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

**Licence No:** CAR/L/1001840

Compliance assessment following the reporting of sample 3385783 collected on 08/02/2018

Compliance Limits	CAR			UWWTD				
	Lower Tier	Upper Tier	Annual Mean Conc	Lower Tier	Upper Tier	Percent Reduction	Annual Mean Conc	Annual Mean % Red'n
Ammoniacal Nitrogen (as N) (mg/L)	1.4	5.6						
Biochemical Oxygen Demand - ATU suppressed (mg/L)	10	40						
Bronopol (µg/L)		90						
Chloramine T (µg/L)		380						
Formaldehyde (µg/L)		65						
pH (pH units)		5 - 9						
Suspended Solids (105°C) (mg/L)		100						

Compliance History	CAR					UWWTD					Exclusions from Compliance	
	LT Samples	Fail	UT Samples	Fail	Annual Mean Conc	LT Samples	Fail	UT Samples	Fail	Annual Mean Conc		Annual Mean % Red'n
Ammoniacal Nitrogen (as N)	6	2	6	0								
Biochemical Oxygen Demand - ATU suppressed	6	3	6	0								
pH			6	0								
Suspended Solids (105°C)			6	0								

**Summary**

On 08/02/2018 the discharge from Kinlochmoidart Hatchery, TE to River Moidart, Lochailort was:

**Not complying with its CAR discharge limits**

**Two Tier Compliance Report**

**Location:** 201666 Kinlochmoidart Hatchery, TE to River Moidart, Lochailort

**Licence No:** CAR/L/1001840

Compliance assessment following the reporting of sample 3385783 collected on 08/02/2018

Compliance Limits	CAR			UWWTD				
	Lower Tier	Upper Tier	Annual Mean Conc	Lower Tier	Upper Tier	Percent Reduction	Annual Mean Conc	Annual Mean % Red'n
Overall Kinlochmoidart Hatchery, TE to River Moidart, Lochailort was FAILING its discharge limits.								



### 1. Assessment Summary

Licence reference number: CAR/L/1001840  
ELC assessment: Minor Breach(es) / 1 Gross Breach  
Interim EMC assessment: Low Performance  
Overall interim assessment: Poor  
Safety risk assessment for site (Is the current RA adequate? Are there any particular additional risks? in place)

### 2. Assessment Details

Date and time of assessment: 21/07/2017 10:45  
Site name: Kinlochmoidart Hatchery  
Site address: Kinlochmoidart, Acharacle  
Assessment type: Standard inspection

### 3. Components of licence assessed

#### Environmental Limit Condition (ELC)

Licence condition number	ELC assessment - (compliant, minor, repeated minor, gross or significant)	Description of non-compliance with ELC (include follow-up actions to rectify non-compliance, timescales and reporting requirements) - Where several breached ELCs are linked, refer to first condition number and associated non-compliance described
1.1.1	No Breaches	-
1.1.2	No Breaches	-
2.6.1	Minor	-
3.4.1	Gross	-

### 4. Other items identified / discussed (include licence, development and good practice issues)

Inspection / site visit to review progress with upgrade/improvements to the sites effluent treatment system and to carry out downstream impact assessment.

Proposed improvements to effluent treatment system were previously agreed in principle - in summary use of bio blocks and final settlement tank in present form to be discontinued. New fibreglass settlement tank to be installed during 2017 with interim arrangements put in place for 2016 (effluent from drum filter to be piped to outflow channel, settlement tank to be emptied and cleaned with improvements implemented to blockwork/walls of sludge tank.

Inspection findings confirmed that improvements have not been delivered. Subsequent confirmation however that preparation work completed - settlement tank emptied, cleaned and disinfected. Commitment to complete remainder of identified work in the next 2-3 weeks. Further discussions / inspection to be carried out in respect of delivery of remaining improvement works.

Non compliance issues identified during inspection -

Condition 3.4.1 - The effluent shall be subject to a process designed and operated to be at least equivalent to a 60 micrometre mesh screen in the removal of solid matter. Assessed as **Gross ELC breach** - although the drum filter was in operation there was clear carry over of fine solid matter, including clumps of fungal growths (breaking off from the settlement tank) into the river.

Condition 2.6.1 - Other than as specifically permitted or limited by any condition of this licence, none of the authorised activities shall have a significant adverse impact on, or cause pollution of, the water environment. Assessed as **Minor ELC breach** - there was visible impact to substrate of river, including fungal growths out with the direct mixing zone around the outfall.

Operational condition of plant and infrastructure - effluent treatment infrastructure remains in a continuing poor condition. Assessed as **Major EMC breach** - failure to deliver previous commitments to improve operational condition of effluent treatment infrastructure and no communication or agreement to alternative timescale.

#### 5. Inspection specific details (complete all relevant sections)

Other SEPA staff present: none  
Operator representatives met on site: general discussion with on site staff  
Relevant weather: sunny - low to moderate river flows

#### 6. Assessment sign-off

Name of inspecting officer: Stephen Macintyre  
Team name: West Highlands & Argyll

Signature:

[Redacted signature box]

Date signed:

21/07/2017

#### 7. Office information only

Was the inspection announced? Yes

SEPA's [FOI90111 \(6 March 2019\) disclosed further documents:](#)

## SEPA Disclosure Log

Click to view the [SEPA General Data Reuse Statement](#)

From date: 01/01/2005 To date: 07/03/2019 [Apply Date Filters](#) [Clear All Filters](#)

Ref Number	Title	Date
F0190111	Compliance, complaints and correspondence - Kinlochmoidart Hatchery	06/03/2019
<ul style="list-style-type: none"><li><b>Description:</b> Please provide information on Kinlochmoidart Hatchery (listed as operated by Andrew Maclean of Sunbeam Aquaculture in SEPA's 2016 compliance assessment but understood to be now operated by The Scottish Salmon Company) since 1 January 2017. Please include emails, compliance assessments, public complaints, sampling results, letters and any other information regarding Kinlochmoidart Hatchery. Note via SEPA's compliance assessment: <a href="http://apps.sepa.org.uk/compliance/">http://apps.sepa.org.uk/compliance/</a> However no documents are available for 2017 when you click on 'View Reports'. Please provide those documents and other information since on Kinlochmoidart Hatchery since 1 January 2017.</li><li><b>Information:</b> Please refer to response letter and released information</li><li><b>Related documents:</b><ul style="list-style-type: none"><li><a href="#">F0190111 EIR Response r</a></li><li><a href="#">Release</a></li></ul></li></ul>		

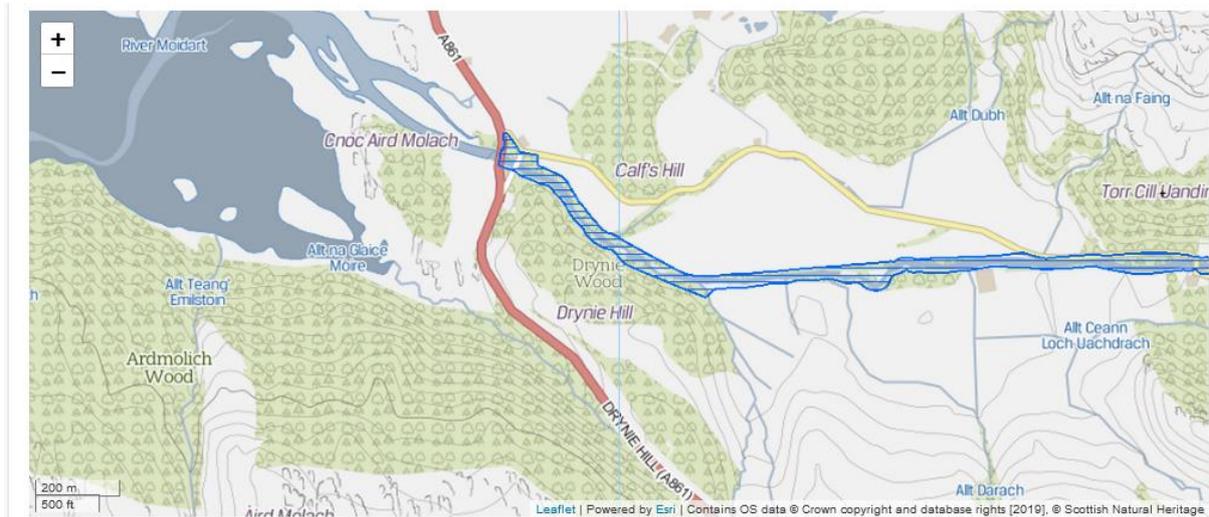
The FOI disclosure included 48 PDFs:

Name	Size	Packed Size	Modified
 20180509_CAS 2017 lett...	347 658	326 603	2019-03-04 12:38
 20180704_Sample 34783...	631 154	600 171	2019-03-04 12:23
 20180817_Update_Wast...	156 613	154 553	2019-03-01 09:48
 SEPA-APP-RPS01_FORT...	109 654	95 567	2019-02-28 16:04
 SEPA-APP-UNI01_FORT...	191 932	180 182	2019-02-28 16:03
 CAR-L-1001840 ST Kinlo...	128 841	127 957	2019-02-28 15:34
 20180810_Notification_S...	135 916	134 827	2019-02-28 15:23
 20180410_MM_Kinloch...	171 518	170 597	2019-02-28 15:18
 20170627_LJI_New_Resp...	182 964	170 637	2019-02-28 14:33
 20170627_LJI_Former_Re...	182 732	170 437	2019-02-28 14:31
 20170407_CAS ltr.pdf	158 547	143 632	2019-02-28 14:24
 SEPA-APP-RPS01_FORT...	90 765	86 175	2019-02-11 10:55
 Mitigation measures up...	133 192	122 921	2019-02-01 15:05
 Interim CAS report_Kinl...	211 252	190 519	2019-02-01 15:04
 20171003_Sample 33141...	334 568	316 877	2019-02-01 15:02
 20180214_SEPA Monitor...	135 411	134 335	2019-02-01 12:17
 20171011_SEPA_Monito...	135 651	134 659	2019-02-01 12:16
 20170731_SM_Kinloch...	218 738	217 582	2019-02-01 12:16
 20170721_SM_Kinlochm...	214 679	213 399	2019-02-01 12:15
 20170712_SEPA Monitor...	136 787	135 698	2019-02-01 12:15
 SEPA Monitoring Sampl...	109 969	109 230	2019-02-01 12:14
 20170613 SEPA Monitori...	108 154	107 388	2019-02-01 12:14
 2018 and 2017 inspectio...	546 570	499 647	2019-02-01 12:12
 20180208_sample exclu...	288 132	276 632	2019-01-21 14:38
 00763420.PDF	76 815	73 895	2018-12-10 14:08
 00763421.PDF	46 278	43 594	2018-12-10 14:08

 00752702.PDF	76 805	73 884	2018-10-10 16:02
 00752703.PDF	46 113	43 439	2018-10-10 16:02
 00738129.PDF	76 813	73 905	2018-07-16 09:03
 00738130.PDF	46 423	43 727	2018-07-16 09:03
 00732659.PDF	76 822	73 922	2018-06-06 16:17
 00732660.PDF	46 561	43 876	2018-06-06 16:17
 00727823.PDF	76 813	73 904	2018-05-04 14:54
 00727824.PDF	46 116	43 435	2018-05-04 14:54
 00711936.PDF	76 802	73 891	2018-02-20 16:27
 00711937.PDF	46 229	43 538	2018-02-20 16:27
 00703130.PDF	76 769	73 852	2017-12-08 15:35
 00703131.PDF	46 418	43 738	2017-12-08 15:35
 00691220.PDF	76 780	73 859	2017-10-11 13:26
 00691221.PDF	45 937	43 542	2017-10-11 13:26
 00673700.PDF	76 774	73 853	2017-07-12 15:32
 00673701.PDF	46 479	44 093	2017-07-12 15:32
 00669166.PDF	76 793	73 880	2017-06-16 10:05
 00669167.PDF	46 166	43 781	2017-06-16 10:05
 00658304.PDF	76 759	73 845	2017-05-01 15:37
 00658305.PDF	46 415	44 043	2017-05-01 15:37
 00640503.PDF	76 762	73 856	2017-02-10 14:34
 00640504.PDF	45 932	43 562	2017-02-10 14:34

[2] Documentation on the River Moidart SAC are available from SNH [online here](#) - including:

#### River Moidart SAC



**Conservation Objectives for  
River Moidart Special Area of Conservation**

To avoid deterioration of the habitats of the qualifying species (listed below) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- Distribution and viability of the species' host species
- Structure, function and supporting processes of habitats supporting the species' host species

**Qualifying Species:**

- Freshwater pearl mussel

Read more via a SNH commissioned report: "[The management and conservation of the freshwater pearl mussel in Scottish catchments designated as Special Areas of Conservation or Sites of Special Scientific Interest](#)" (2007).



## COMMISSIONED REPORT

---

Commissioned Report No.249  
**The management and conservation  
of the freshwater pearl mussel in  
Scottish catchments designated as  
Special Areas of Conservation or  
Sites of Special Scientific Interest**

(ROAME No. F05AC607)

*For further information on this report please contact:*

Iain Sime  
Scottish Natural Heritage  
Great Glen House  
Leachkin Road  
INVERNESS  
IV3 8NW  
E-mail: [iain.sime@snh.gov.uk](mailto:iain.sime@snh.gov.uk)

*This report should be quoted as:*

*Langan, S, Cooksley, S, Young, M, Stutter, M, Scougall, F, Dalziel, A, Feeney, I, Lilly, A and Dunn S. (2007). The management and conservation of the freshwater pearl mussel in Scottish catchments designated as Special Areas of Conservation or Sites of Special Scientific Interest. Scottish Natural Heritage Commissioned Report No.249 (ROAME No. F05AC607).*

In 2013, [BBC News reported:](#)

## NEWS

[Home](#) | [UK](#) | [World](#) | [Business](#) | [Politics](#) | [Tech](#) | [Science](#) | [Health](#) | [Family & I](#)[Scotland](#) | [Scotland Politics](#) | [Scotland Business](#) | [Edinburgh, Fife & East](#) | [Glasg](#)[Tayside and Central Scotland](#)

## Contractors fined after pearl mussel colony destroyed on River Lyon

19 March 2013



**Two contractors whose attempts to build green energy projects caused massive pollution in a pair of Scottish rivers have been fined a total of £11,000.**

Alan Smith and Charles Kippen admitted causing damage to a river which will take hundreds of years to recover.

Work on a hydro-scheme on the River Lyon in Perthshire destroyed an internationally important colony of protected freshwater pearl mussels.



[3] [FOI reply from SNH dated 8 April 2019:](#)



Mr Don Staniford

By email: [salmonfarmingkills@gmail.com](mailto:salmonfarmingkills@gmail.com)

Our Ref: SIR154646/A2913011

8 April 2019

Dear Mr Staniford

**Information Request – River Moidart SAC and Loch Moidart SSSI**

Thank you for your information request, which we received on 11 March. We have considered your request under the Environmental Information (Scotland) Regulations 2004 ('the EIRs').

**Your Request**

"Please provide information on the River Moidart SAC and Loch Moidart SSSI.

Specifically, please include information relating to any impacts or potential impacts of the Kinlochmoidart Hatchery on the River Moidart SAC and Loch Moidart SSSI.

For example, in June 2016 SNH's Iain Sime wrote to SNH's Corrina Mertens (both copied here along with freshwater pearl mussel expert Professor Phil Boon) that:

"In the long terms it may be very difficult to always provide a level of treatment that means the lower part of the SSSI remains viable, due to the sensitivities of the pearl mussels".

Please include any warning letters to the operators of the Kinlochmoidart Hatchery (Marine Harvest, Sunbeam Aquaculture and now the Scottish Salmon Company), threats of legal action, breaches of the SAC/SSSI and any suggestions of impacts.

Please include any correspondence (emails, letters etc), photos and any other information regarding the Kinlochmoidart Hatchery."

**Our Response**

We have carried out a detailed search of the information we hold and, we have identified a number of documents that are relevant to your request. Copies of the documents are attached along with this letter.

We have marked out (redacted) some personal data in the documents provided. Releasing the personal data into the public domain in response to an access to information request would breach the Data Protection Act 2018. We are therefore withholding the information under EIRs Regulation 11(2) (Personal data).

We redacted some information that would identify the locations of freshwater pearl mussels, because releasing that information could increase the risk of deliberate disturbance and harm to the pearl mussels. As release of information under the EIRs is equivalent to release into the public domain, we do not believe it is in the public interest to release information that might enable disturbance and harm to the pearl mussels. We have therefore applied EIRs Regulation 10(5)(g) (Protection of the environment) to this information.

We also redacted some information because it is outwith the scope of your request.

#### **How We Handled Your Request**

We believe you have asked for environmental information as defined in the Environmental Information (Scotland) Regulations 2004 ('the EIRs'), so we are dealing with your request under those regulations. To be able to use the EIRs, we must apply an exemption under section 39(2) of the Freedom of Information (Scotland) Act 2002 ('FOISA'). The Scottish Information Commissioner's guidance recommends that public authorities apply this exemption to environmental information and handle requests under the EIRs.

If you would like to find out more about the access to information legislation, there is a guidance booklet available on the Scottish Information Commissioner's website:

<http://www.itspubliknowledge.info/nmsruntime/saveasdialog.aspx?IID=5487&SID=5024>.

#### **Review and Appeal**

I hope this information meets your requirements but if you are dissatisfied with how we have responded to your information request, please write to us within 40 working days explaining your concerns. You can contact us at Battleby, Redgorton, Perth, PH1 3EW or email us at [FOI@nature.scot](mailto:FOI@nature.scot). We will carry out a review of our response and contact you with our findings within 20 working days.

If you are not satisfied following this, you can make an appeal to the Scottish Information Commissioner. The Scottish Information Commissioner can be contacted at:

Scottish Information Commissioner  
Kinburn Castle  
Doubledykes Road  
St Andrews  
Fife  
KY16 9DS

Online appeal service: [www.itspubliknowledge.info/Appeal](http://www.itspubliknowledge.info/Appeal)

Website: <http://www.itspubliknowledge.info/>

Telephone: 01334 464610

Yours sincerely

*Rhoda Davidson*

Rhoda Davidson  
Information Officer

The FOI documents disclosed included:

## File note

Visit to River Moidart, 1<sup>st</sup> July 2014.

Attending: Iain Sime, Corrina Mertens, [REDACTED]

We visited the River Moidart, downstream of Kinlochmoidart hatchery, to investigate the presence of sewage fungus and its possible damage to the River Moidart SSSI, SAC and resident freshwater pearl mussel population.

We entered the river approximately 100-150m downstream from the hatchery bridge. This was just downstream of a broken wooden/stone weir that extends about a third of the way across the channel. We noticed sporadic sewage fungus to grow in this part of the river. This became more prevalent as we moved upstream, as did the presence and extent of algal mats on the riverbed. At times, especially within 100m of the discharge point, these mats and the sewage fungus entirely covered the riverbed. These mats, and the sewage fungus, were not observed upstream of the discharge point. Filamentous algae was present up and downstream of the discharge point into the Moidart.

[REDACTED]  
[REDACTED] All appeared to be feeding normally, with their siphons extending into the water column and responding to touch by clamming up. As we surveyed in an upstream direction, mainly along the southern half of the river channel, we recorded no freshwater pearl mussel until [REDACTED]

[REDACTED] This area contained significant algal mats and sewage fungus (see image below). It is my opinion that the conditions on the riverbed are such that they would not be able to sustain freshwater pearl mussel in this reach, particularly juvenile mussels which require oxygenated water to be able to freely penetrate into the riverbed.



I did not find any evidence that the discharge has caused damage or death of pearl mussels in recent times as we did not find any dead or apparently unwell pearl mussels. It would obviously benefit the population if the discharge could be changed in some way to improve water quality either by improved treatment, different discharge arrangements etc. If there were sufficient improvements, this would likely lead to improved habitat for pearl mussels and allow a more abundant and better recruiting population to establish and grow in the reaches we surveyed and potentially further downstream too.

[REDACTED]

[REDACTED]

**From:** Macintyre, Stephen  
**Sent:** 04 November 2015 14:49  
**To:** 'Corrina.mertens@snh.gov.uk.'  
**Subject:** Kinlochmoidart hatchery

Hi Corrina – just a heads up on a few issues regarding Kinlochmoidart hatchery.

The requested improvements to the sites effluent treatment system has now been put in place and I carried out an inspection of this earlier today. I am hopeful this will make the treatment process better and more robust and ensure consistent compliance with the numeric effluent standards contained in the sites CAR authorisation permitting the discharge of effluent to the River Moidart. We will continue to sample the effluent at a frequency of x4 samplings per annum.

The site manager also indicated that they wish to investigate extending the outfall from the hatchery directly into the main river flow. If you recall it presently discharges to the confluence of a small burn and the edge of the river beside the hatchery. The river channel appears to have altered however over the years – the side of river with the

outfall is now mainly exposed gravel during low flows and as a result you see aesthetic impacts in this area and along the edge of the river for a short distance into the deeper pool downstream. By extending the outfall pipe across this exposed gravel area into the main flow it would improve dispersion characteristics of the effluent and prevent this localised area of impacts. I have no objections to this and would welcome it to address this area of impact in the river around the outfall – will require some limited works in the river (approx. 5m length of pipe) but thought I should advise so you can comment. Site manager contact [REDACTED] in case you need to follow up.

Site is also proposing to install filtration (within hatchery footprint) of the incoming water to address issues such as leaf litter in incoming water and interestingly mussel spat from upstream abstraction point (dam). At certain times of year the site notice mussel spat attaching to the gills of farmed stock – they want to prevent this and generally reduce any associated stress to fish gills before they are moved to sea where previous gill stress issues can result in more significant fish health issues. The plan is to have a continuous back wash of the planned drum filter which will wash any accumulated leaf litter and presumably mussel spat back into the river (a 20 micron filter has been suggested) just above the access bridge into the site. No issues for SEPA regulation but again copied to you for info – site seem to have a pretty good awareness of when mussel spat release occurs (a reported 2 day period within a 6 week window in the summer) and presumably preventing mussel spat from going into the site and returning to the river will be beneficial.

Give me a shout if you want to discuss.

Regards  
Stephen

---

Stephen MacIntyre, Senior Environment Protection Officer  
West Highland and Argyll Team, Scottish Environment Protection Agency, Carrs Corner, Lochybridge, Fort William  
PH33 6TQ

**From:** Iain Sime  
**Sent:** 05 November 2015 11:21  
**To:** Corrina Mertens  
**Subject:** RE: Kinlochmoidart hatchery

Hi Corrina,

That is really interesting. One, that they are getting glochidia coming in from their the dam – is that in the river or up at the loch. If it's the river, it'd be really interesting if they could tell us when that happened over the past few years. It would help with any further reinforcement work we might do with other populations.

The other thing is extending the pipe. Could that it may be extended to encourage mixing. Do you think, in the longer term, there might be mileage in really extending the pipe to the sea and directly discharge there? It would reduce any effluent problem in the river at a stroke. I realise that it might be a much larger amount of funding required within MH but we could, potentially, look at working with MH to try and obtain external funding via a project. Might be worth suggesting to SEPA to see if its something they would support before going back to MH?

Thanks,  
Iain

**From:** Macintyre, Stephen <stephen.macintyre@sepa.org.uk>  
**Sent:** 17 May 2016 15:40  
**To:** Corrina Mertens  
**Subject:** Kinlochmoidart Hatchery

Hi Corrina – just a quick heads up on development concerning Kinlochmoidart Hatchery

Operation has been taken over by The Scottish Salmon Company Ltd (TSSC) – site contact is [REDACTED]  
[REDACTED]@scottishsalmon.com.

TSSC have also committed to implement welcome improvements to the sites wastewater treatment system – interim improvement will be put in place for remainder of 2015 with a longer term arrangements planned for 2016. There has been a recurring pattern of effluent quality compliance failures during the last 12 months which has been subject of ongoing attention by SEPA and which this work will hopefully address.

As part of the wider site development work TSSC are also putting in an inlet drum filter to screen physical debris (leaf litter) etc from the inlet water to the works. The plan was to put the reject water i.e. clean water with natural occurring debris through the site treatment system however I have advised that I don't think this is appropriate – there is no need to add clean water to the dirty water going through the treatment system which may in fact compromise overall process efficiency. I have advised it would be preferable to simply discharge this clean water back to the river. There is potentially an added benefit as it would mean that at certain times of year (with appropriate filter size) it may be possible to catch mussel spat before it goes through the site and return it direct to the river. I think I raised this general issue last year. Work is now under way on this and I have advised TSSC to contact yourself to discuss implications with return of water from the inlet filter (it's possible that no in river work would be needed - an outfall terminating on the edge of the bank is all that would be required) and the potential consequential benefits re collection / return of mussel spat.

I hope that they will be in touch soon but if not may be worth making contact direct.

Regards  
Stephen

---

Stephen MacIntyre, Senior Environment Protection Officer  
West Highland and Argyll Team, Scottish Environment Protection Agency, Carrs Corner, Lochybridge, Fort William  
PH33 6TQ  
t: 01397 704426 e: [stephen.macintyre@sepa.org.uk](mailto:stephen.macintyre@sepa.org.uk) web: [www.sepa.org.uk](http://www.sepa.org.uk)

**From:** Macintyre, Stephen  
**Sent:** 30 May 2016 15:04  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** 20160530\_SM response\_Kinlochmoidart Hatchery\_effluent improvement actions

Dear [REDACTED]

**The Water Environment (Controlled Activities) (Scotland) Regulations 2011**  
**Kinlochmoidart Hatchery – Authorisation Reference CAR/L/1001840**

Thank you for the written confirmation of our discussions and actions arising out of our meeting on site on the 17<sup>th</sup> May.

In response I would confirm my agreement to the remedial actions as outlined below and for you to commence work to initiate the changes. We welcome your agreement that the present effluent treatment system is in need of repair and commitment to implementation of improvements.

I would however add the following general comments –

- Please ensure that the new pipe from the drum filter (by passing) the settlement pond discharges directly into the outlet channel at a point where we can obtain a representative sample i.e. with sufficient drop/clearance for sampling;
- As indicated we would appreciate being kept advised as to important dates/timescales in this process – principally the cleaning / disinfection of the existing concrete settlement tank. During these operations please ensure appropriate precautions are put in place to prevent wash waters / used disinfectant solutions from discharging into the river – the preference would be that such solutions are also removed of site by licensed contractor. Alternatively disposal by over pumping onto land with an appropriate buffer zone to the river may be a suitable alternative. In this regard I would be grateful for confirmation of your intentions;
- As discussed we would expect to see the (discussed) replacement (fibreglass) settlement tank in place and operational during early 2017.

In the interim if there is any further assistance or advice that SEPA can offer at this stage please do not hesitate to contact me.

Regards  
Stephen

**From:** Iain Sime  
**Sent:** 03 June 2016 08:18  
**To:** Corrina Mertens  
**Subject:** RE: Kinlochmoidart Hatchery - new development -

Hi Corrina,

Thanks for the reminder about this.

I'd simply welcome and support Stephen's suggestion that the screened inlet water is returned direct to the river, rather than adding to the amount of water going through their treatment facility.

I'd also welcome TSSC's efforts to improve the quality of the discharge. As they are at the planning stage, can we suggest something? That they consider discharging direct to sea, rather than returning to the river? In the long term it may be very difficult to always provide a level of treatment that means the lower part of the SSSI remains viable, due to the sensitivities of the pearl mussels. As such, if they are considering longer term arrangements, it would be wise for them to consider something like discharging into the sea loch before making other significant investments.

Maybe suggest to Stephen and consider sending direct to [REDACTED] to ensure the message gets through?

Iain

**From:** Macintyre, Stephen [<mailto:stephen.macintyre@sepa.org.uk>]  
**Sent:** 20 July 2017 14:43  
**To:** [REDACTED]  
**Cc:** 'Corrina Mertens'  
**Subject:** Kinlochmoidart Hatchery\_effluent improvement actions

**The Water Environment (Controlled Activities) (Scotland) Regulations 2011**  
**Kinlochmoidart Hatchery – Authorisation Reference CAR/L/1001840**

Dear [REDACTED] as you may be aware I visited Kinlochmoidart Hatchery this morning to carry out an inspection of discharge quality and downstream impacts in the River Moidart. I was disappointed to find that none of the previous agreements relating to improvement work to the sites effluent treatment system has been carried out. There has additionally been no contact to advise why the work has not been implemented. Non-compliance with conditions of the CAR authorisation were identified.

Arising from the findings of my inspection today the I will write to you formally in response to my visit today. In the interim you would like to discuss please do not hesitate to contact me.

Regards  
Stephen

**From:** [REDACTED]@scottishsalmon.com >  
**Sent:** 20 July 2017 14:55  
**To:** 'Macintyre, Stephen'  
**Cc:** Corrina Mertens  
**Subject:** RE: Kinlochmoidart Hatchery\_effluent improvement actions

Hi Stephen,

I was disappointed myself when I visited last week that the works had not been carried out, this will be rectified quickly, I would like to say however quite a lot of preparation work has been done, the large settlement area was pumped out completely and totally disinfected and pressure washed and a large amount of waste from the bottom removed, also all of the bio blocks were removed and disposed of.

I'm aware that the pipework has not been put in yet and part of the reason for that is we have discovered we need to lift the filter slightly as we are replacing all the seals which are on order at present as are new screens for the whole filter.

The Scottish Salmon Company now owns the site at that will help things move along much quicker now, [REDACTED]

I can assure you that the majority of works will be completed in the next 2-3 weeks and I'd like to arrange to meet with you then to discuss further planned improvements, regarding the river sampling I'm slightly concerned that the large amount of Silage in the field next to the river could be effecting the result of the farm effluent, what's your opinion on this?

Is it within a correct distance from the water flow under Sepa rules?

Apologies again for the time its taking but moves have been made now to rectify this issue.

I look forward to hearing from you.

Regards  
[REDACTED]

Download PDF in full [online here](#)

[FOI reply from SNH dated 8 March 2019](#) - included:

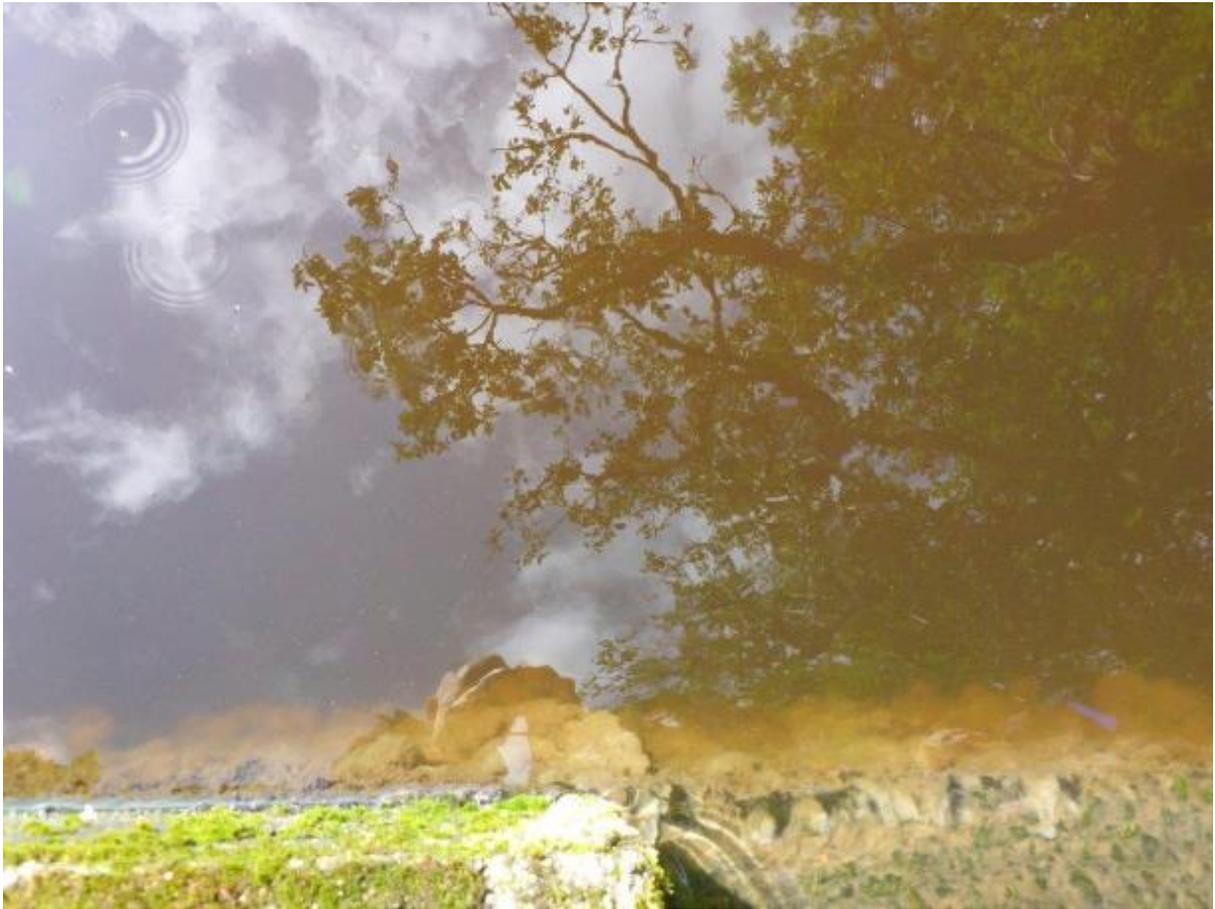
**From:** Macintyre, Stephen <stephen.macintyre@sepa.org.uk>  
**Sent:** 20 July 2017 14:06  
**To:** Corrina Mertens  
**Subject:** 20170720\_Kinlochmoidart hatchery\_photographs  
**Attachments:** p1010047.jpg; p1010041.jpg; p1010042.jpg; p1010043.jpg; p1010044.jpg; p1010045.jpg; p1010046.jpg

Copy for your info.

---

Stephen MacIntyre, Senior Environment Protection Officer  
Scottish Environment Protection Agency, Regulatory Services North, West Highland and Argyll Team, Carrs Corner,  
Lochybridge, Fort William PH33 6TQ  
t: 01397 704426 e: [stephen.macintyre@sepa.org.uk](mailto:stephen.macintyre@sepa.org.uk) web: [www.sepa.org.uk](http://www.sepa.org.uk)







**From:** Macintyre, Stephen <stephen.macintyre@sepa.org.uk>  
**Sent:** 21 July 2017 13:02  
**To:** [REDACTED]  
**Cc:** Corrina Mertens  
**Subject:** Kinlochmoidart Hatchery\_effluent improvement actions  
**Attachments:** Interim CAS report\_Kinlochmoidart hatchery.pdf

**The Water Environment (Controlled Activities) (Scotland) Regulations 2011**  
**Kinlochmoidart Hatchery – Authorisation Reference CAR/L/1001840**

Hello [REDACTED] – thanks for the quick response. It is reassuring that you intend to complete the remaining improvement works over the next 2-3 weeks – the general condition of the effluent treatment infrastructure remains poor and is reflected in the present quality of effluent being discharged and the downstream impact to the River Moidart. These improvements are a welcome first step but I would highlight that depending on success further improvements may be required especially around the siting of the outfall discharge point, noting the ecological importance and sensitivity of the downstream habitat forming part of the River Moidart SAC designation. I would appreciate it if you could keep SEPA advised of progress with this work – we will likely carry out a further inspection once completed.

Following on from yesterday's inspection I have attached an Interim Compliance Assessment report detailing the present areas of concern – ELC and EMC breaches were recorded resulting in an overall interim compliance assessment for 2017 of Poor. There is however scope to improve Compliance Assessment moving through the remainder of 2017 with successful delivery of the improvements works and a resulting improvement in discharged effluent quality.

With regards to future discussions [REDACTED] however I would be happy to discuss any issues with you [REDACTED] and I will be available this pm or between 28<sup>th</sup> July to 4<sup>th</sup> August. Subsequent to this one of my colleagues will assume a lead role for the site and we will advise on this in due course.

On the issue of the manure heap – we are aware and have spent time earlier this year reviewing proximity to the river and had discussions with [REDACTED]. We appreciate the quantity increases and decreases according to time of the year – from yesterday's visit there was no evidence of any discharge from the manure heap in to the river. We will keep under review however and if you or your site staff have any specific concerns on future potential impacts to the river from this source then please raise them with us and we will follow up.

Regards  
Stephen

Another FOI disclosure from SEPA included this email from SEPA's Stephen Macintyre to SNH's Mairi Nicolson:

**From:** Macintyre, Stephen  
**Sent:** 06 June 2016 11:16  
**To:** Nicolson, Mairi  
**Subject:** River Moidart

Thanks Mairi – that’s interesting as there has been a decline in effluent compliance performance over last 12 months so I was wondering if this would be reflected in the results. On the plus side the site has been taken over by The Scottish Salmon Company who have agreed to implement improvements to the effluent treatment system – this is due to start shortly. Hopefully these improvements will arrest any further decline of high scoring species – are the latest results something we should keep SNH advised of given SAC status etc.

Separate I would also like to communicate this to the new operators to reinforce the need for the improvements – will you be producing a report on the analysis?

Regards  
Stephen

Note that in 2017, Stephen Macintyre left SEPA to work for Marine Harvest (re-named [Mowi](#) on 1 January 2019). Read more via "[SEPA's Shame on Salmon Farming](#)".

[4] The [Scottish Government's Fisheries Health Inspectorate visited Kinlochmoidart Hatchery on 9 October 2018](#) revealing the use of the carcinogenic Formalin, increased mortalities, antibiotic use, costia, ERM (Enteric redmouth) and eggs sourced from Iceland.

[Cases 20180392-20180509](#)

Page 259 to page 270: <https://www2.gov.scot/Resource/0054/00546463.pdf>

Case No:	2018-0493	Date of visit:	09/10/2018			
Time spent on site:	3 Hrs	Main Inspector:	WJM			
Site No:	FS0146	Site Name:	Kinlochmoidart Hatchery			
Business No:	FB0169	Business Name:	The Scottish Salmon Company			
Case Types:	1 <input type="checkbox"/> ECI	2 <input type="checkbox"/> CNI	3 <input type="checkbox"/> VMD	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>
Water Temp (°C):	11.5	Thermometer No:	Site	FHI 045 completed	<input type="checkbox"/>	
Observations:	Region:	HI	Water type:	F	CoGP MA	
Dead/weak/abnormally behaving fish present?	<input type="checkbox"/> Y	If yes, see additional information/clinical score sheet.				
Clinical signs of disease observed?	<input type="checkbox"/> N	If yes, see additional information/clinical score sheet.				
Gross pathology observed?	<input type="checkbox"/> N	If yes, see additional information/clinical score sheet.				
Diagnostic samples taken?	<input type="checkbox"/> N					

**Additional Case Information:**

Slight increased mortalities during week 39 put down to post vaccination. Levels still remained below reporting criteria and dropped back to normal levels following week.

Formalin flushed through a number of tanks (5,6,11,12) for costia

FHI contact details not updated on escape plan for Kinlochmoidart. Issue raised with site manager and will be corrected.

Water comes in via river passed through screens, but site also has 3 boreholes providing top up water for recirculation tanks.

A few morts noted in a few tanks. Maximum 2/tank. No signs of disease, no diagnostics taken. Fish sampled for VMD appeared healthy.

**Increased Mortalities**

- wk 23 - S0 2.7% (35,000), S1 1.27% (7,000)
- wk 24 - S0 2.54% (32,000), S1 0.59%, (3,000)
- wk 25 - S0 1.47%, (18,000), S1 0.3%, (1,600)
- wk 26 - S0 1.69%, (20,000), S1 0.18%, (900)
- wk 27 - S0 1.48%, (17,500), S1 0.26%, (1,400)

ERM put down as main cause, fish treated with antibiotics and mortalities started to decrease wk 24. Tank flow through 10 (S0 stock) worst affected, accounting for nearly 50% (19,000) of the morts wk 23 but dropped to 6,000 on wk 24. S0 stock worst affected during. Fish also stressed during this period due to increased water temperatures because of the weather.

<b>Mortality Records</b>	
1. Mortality records available for inspection?	<input type="checkbox"/> Y
2. How are mortalities disposed of?	<input type="checkbox"/> Ensiled - on site
If other detail:	
3. Mortality records complete and correctly entered?	<input type="checkbox"/> Y
4. Recent mortality (last 4 wks):	<input type="checkbox"/> Wk 37 - 40: 5336 (0.56%), 4957 (0.53%), 6404 (0.68%), 5334 (0.57%)
5. Evidence of recent increased/atypical mortalities?	<input type="checkbox"/> N
If yes, facility nos/no mortality per facility/no stock per facility/reason:	
6. Any other peaks in mortality during period checked?	<input type="checkbox"/> Y
If yes, detail:	<input type="checkbox"/> Wk 7 - 8%. Due to pump failure and airlock in pipework. Wk23,24,26 & 27 due to ERM and stress from increased water temperature (see additional information)
7. Have increased (unexplained) mortalities been reported to vet or FHI?	<input type="checkbox"/> Y
If yes, detail action:	<input type="checkbox"/> Antibiotics administered.
8. Have 'mortality events' been reported to FHI? If no, add MRT case and enter on mortality events sheet.	<input type="checkbox"/> Y

<b>Treatments and Medicines Records</b>	
1. Recent treatments (last 4 wks)?	<input type="checkbox"/> Y
If yes, detail:	<input type="checkbox"/> Formalin
If other, detail:	
2. Medicines records available for inspection?	<input type="checkbox"/> Y
3. Are records complete and correctly entered?	<input type="checkbox"/> Y
4. Are fish in a withdrawal period?	<input type="checkbox"/> Y
5. If yes, what treatment(s)?	<input type="checkbox"/> Formalin used only in tanks 5, 6, 11 & 12

Add Fish/Pools - click				
	Pool/Fish No			
	Fish nos	1-6	7-12	13-18
	Pool Group			
Stock Details	Species	SAL	SAL	SAL
	Average weight	0.0600	0.0600	0.0600
	Sex	N/A	N/A	N/A
	Water Type	FW	FW	FW
	Stock Origin	Stofnfiskur	Stofnfiskur	Stofnfiskur
	Facility No	R1-1	R2-1	R2-2

Mortality levels had exceeded the reporting criteria since the last inspection and had been reported to the Fish Health Inspectorate as required.