

DOCUMENT 1

From: Ask <Ask@sepa.org.uk>
Sent: 17 October 2022 16:26
To: **redacted 11 (2)** Ask; **redacted 11 (2)**
Cc: **redacted 11 (2)** **redacted 11 (2)**
Subject: RE: OME ID:3032 - Loch Leven, Pollution incident

OFFICIAL

H **redacted 11 (2)**

In addition to the useful context below I can provide some incident-specific information.

As soon as the incident on 8 September was reported, SEPA contacted Scottish Water to check both the Sewage Treatment Works and the burn. Scottish Water confirmed that they were already on site. They also confirmed that the sewage works was operating and running normally.

During heavy rain, the storm tank at Kinross sewage works begins to fill. The storm tanks are there to catch the 'first flush' from the network which is the most concentrated effluent to prevent this from entering the water environment. Once the rain event is over the storm tank is emptied back into the sewage works for full treatment. If

the rain event is prolonged the storm tank will overflow via COPA Sacks (screens) to the watercourse. This is licenced by SEPA and part of the normal operation of sewage works.

SEPA attended the following week and found no evidence of sewage debris or pollution in the burn. Scottish Water regularly check the culvert entrance to ensure it is not blocked with any debris and carry out a clean of the bars to remove leaves and any other blockages. This ensures the burn can flow freely into the culvert before entering the loch.

Scottish Water have invested in new, larger screens at the inlet to the sewage works, made improvements for accessing the COPA Sacks at the storm tank overflow to maintain them and have new flow meters within the works to record flows at the works.

Regards
redacted 11 (2)
redacted 11 (2) **redacted 11 (2)**
Public Affairs
Scottish Environment Protection Agency
redacted 11 (2)@sepa.org.uk
redacted 11 (2)

OFFICIAL

From: **redacted 11 (2)**@gov.scot>
Sent: 17 October 2022 09:29
To: Ask <Ask@sepa.org.uk>
Cc: **redacted 11 (2)**@gov.scot **redacted 11 (2)**, **redacted 11 (2)**@sepa.org.uk>

Subject: RE: OME ID:3032 - Loch Leven, Pollution incident

2

Hi **redacted 11 (2)**

The response below from SEPA does not provide me with any of the detailed information I

requested regarding the environment events reported to SEPA, as follows:

Please provide information of the incident including SEPA actions, the impact on Loch

Leven, past and future planned Scottish Water investment, etc.

I already know all the general information provided by SEPA because I was closely involved in its development within SG from a policy and legislative perspective.

Please provide the specific information I requested ASAP.

Thanks

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(I am currently working from home and can be contacted via email only)

Water Environment Team

Environmental Quality & Resilience Division

Environment & Forestry Directorate

redacted 11 (2)

From: Ask <Ask@sepa.org.uk>

Sent: 14 October 2022 15:34

To: **redacted 11 (2)**@gov.scot>

Cc: **redacted 11 (2)**@gov.scot>

Subject: OME ID:3032 - Loch Leven, Pollution incident

OFFICIAL

Dear **redacted 11 (2)**

Thank you for your enquiry please see our response below.

SEPA aim to be a firm, fair and effective regulator, to help improve and protect Scotland's environment. Operators are expected to uphold the conditions of their authorisations and we have powers of enforcement if they fail to meet these conditions.

Over the past 20 years, SEPA has worked with Scottish Water to deliver significant improvements to the water environment through upgrades to the sewage collection and treatment systems. Between 2010 and 2021, SEPA required Scottish Water to improve 279 sewer overflows and 104 wastewater treatment works, which were causing

significant pollution. As a result, water quality is now at its highest level to date, with 87% of Scotland's waters having good or better water quality, as set out in the River Basin Management Plan that SEPA published in December 2021 (The River Basin Management Plan 2021-27).

In 2021, SEPA wrote to Scottish Water setting out our expectations and timetable for a route map to improve urban waters as part of the actions required in the River Basin Management Plan 2021-2027, further information is available on our webpage about improving Urban Waters. In December 2021, Scottish Water published a route map

for improving urban waters. This sets out actions required by Scottish Water, as a public body and responsible authority for River Basin Management Planning, as well as significant work needed with other wpartners to deliver long term improvements. The effect of rainfall in a combined sewer area, such as that in Kinross, can lead to the operation of overflows to the water environment. This can be particularly acute in areas with older drainage networks which will include the connection of surface water from many roofs and some hard standing areas such as roads and car parks. More recent development will have incorporated restrictions on the entry of surface water to the system so would

contribute much less to the additional flows during periods of heavy rain. The improvement to remove surface water from these historic sewers is difficult and requires multi-million-pound investment. SEPA will continue to work to improve the environment in the Loch Leven catchment and work towards having these historic sewer networks upgraded to reduce the impact on the environment from combined sewer overflows.

Scottish Water has committed investment in recent years to improve infrastructure within Kinross sewage works and SEPA will continue to monitor and work with Scottish Water as it invests and improves all sewage treatment plant sites where this is required.

Recent inspections of the sewer network and sewage works in Kinross and Milnathort showed compliance with licence conditions.

If we can be of any further help, please let us know.

Kind regards

redacted 11 (2)

Scottish Environment Protection Agency (SEPA)

OFFICIAL

From: Ask <Ask@sepa.org.uk>

Sent: 29 September 2022 15:55

To: **redacted 11 (2)**@gov.scot

4

Cc: **redacted 11 (2)**@gov.scot

Subject: OME ID:3032 - Loch Leven, Pollution incident

OFFICIAL

Dear **redacted 11 (2)**

Thank you for your enquiry, I have passed to colleagues and we will respond as soon as possible.

If we can be of any help in the meantime, please let us know.

Kind regards

redacted 11 (2)

Scottish Environment Protection Agency (SEPA)

DOCUMENT 2

OFFICIAL

From: **redacted 11 (2)**@gov.scot <**redacted 11 (2)**@gov.scot>

Sent: 29 September 2022 15:38

To: Ask <Ask@sepa.org.uk>

Cc: **redacted 11 (2)**@gov.scot

Subject: FW: Loch Leven, Pollution incident

Dear Ask

The Minister has received the following email correspondence from Councillor Willie Robertson, see below, regarding untreated sewage discharges to Loch Leven from Kinross WWTW .

Please provide information of the incident including SEPA actions, the impact on Loch Leven, past and future planned Scottish Water investment, etc.

I'd appreciate a response by Friday 14 October.

Thanks

redacted 11 (2)

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(I am currently working from home and can be contacted via email only)

Water Environment Team

Environmental Quality & Resilience Division

Environment & Forestry Directorate

Tel: **redacted 11 (2)**

From: Councillor William Robertson <WBRobertson@pkc.gov.uk>

Sent: 21 September 2022 11:00

To: McAllan M (Màiri), MSP <Mairi.McAllan.MSP@Parliament.scot>

Cc: Councillor Dave Cuthbert <DCuthbert@pkc.gov.uk>; Councillor Richard Watters <RWatters@pkc.gov.uk>;

Councillor Neil Freshwater <NFreshwater@pkc.gov.uk>

Subject: Loch Leven, Pollution incident

Dear Ms. McAllan,

I am contacting you with regard to a serious pollution incident which occurred at Loch Leven earlier this month. As you may well know Loch Leven is a SSSI and RAMSAR site so is given special protection under European and UK legislation. I contacted SEPA following a major incident which resulted in countless amounts of raw sewage entering Loch Leven from the Kinross WWTP. This is becoming a more and more common occurrence.

What really worried me was the reply I have received from SEPA. Any landowner/farmer who allowed this to happen would be prosecuted but when Scottish Water is the culprit it appears to be regarded as 'just one of these things'. The special protections allocated to Loch Leven seem to count for nothing.

I am sure you will be as alarmed as I am at the apparent relaxed attitude being taken by SEPA in their duties to protect our environment. Loch Leven already suffers from increasing instances of toxic algal blooms due to the amount of phosphorous (P)

entering the loch and there are ongoing efforts to reduce this. It is totally unacceptable here in Kinross-shire that our most valuable asset, Loch Leven, is being used as an open sewer by Scottish Water and that SEPA are turning a blind eye to this.

I would welcome your comments on this situation and would be grateful for any actions you can take to prevent further damaging pollution incidents such as the one I have highlighted.

Kind regards,

Councillor Willie Robertson
Kinross-shire Ward,
Perth and Kinross Council

DOCUMENT 3

From: **redacted 11 (2)**@sepa.org.uk>

Sent: 20 September 2022 11:26

To: Councillor William Robertson <WBRobertson@pkc.gov.uk>

redacted 11 (2)@sepa.org.uk>

Subject: RE: Pollution incident

OFFICIAL

Dear Councillor Robertson,

I understand your concern and support your aims of protecting the Loch. However, due to the historic design of sewers taking both surface water and foul water discharges into the main sewer pipeline, means that during periods of heavy rainfall the diversion of surface water into the sewer leads to the amount of effluent in the sewer

exceeding the capacity of the sewer. Therefore, it needs to discharge quickly either via emergency overflow to the environment or will back up the pipework and cause sewer flooding inside residential and industrial properties.

Obviously, your constituents would not appreciate their homes being flooded with sewage. Therefore, until the entire historic sewer network is replaced, separating out the foul water from the surface water, the only other alternative is discharge to the environment during periods of heavy rainfall. This is not a system unique to the Loch Leven Catchment and is the historic standard sewer design across Scotland.

SEPA are working with Scottish Water to prioritise areas for upgrade where there is the greatest impact from these discharges due to the historic sewer design. More information on this work can be found on the SEPA website at the following address: Improving urban waters | Scottish Environment Protection Agency (SEPA)

Furthermore, as Scottish Water, SEPA and Local Authority Planners are aware of this problem, the combined sewers that take both surface and foul water are no longer permitted to be installed for new developments. All new developments are being built with separate surface water and foul water pipework. Therefore, they do not

experience the same impact from rainfall that the historic network does and do not contribute to the requirement to discharge during periods of heavy rainfall.

SEPA understand and sympathise with your frustration at this situation, but the removal of these historic sewers will require multi-million pound investment and as this is public money it requires to be planned and spending to be justified. SEPA will continue to work to have these historic sewer networks upgraded to reduce the impact on the environment.

Kind regards,

redacted 11 (2)

redacted 11 (2)

Fife, Angus & Dundee Team

Scottish Environment Protection Agency

redacted 11 (2)

www.sepa.org.uk

OFFICIAL

From: Councillor William Robertson <WBRobertson@pkc.gov.uk>

Sent: 18 September 2022 10:28
To: **redacted 11 (2)**@sepa.org.uk>
7

Cc: **redacted 11 (2)**@nature.scot>
Subject: Pollution incident

Dear **redacted 11 (2)**,

I was sent the very alarming email below from **redacted 11 (2)** the Reserve Manager at the Loch Leven NNR.

I have raised the problems with Scottish Water allowing untreated sewage to enter Loch Leven many times in the past. This surely shouldn't be allowed to happen? Due to the expansion of housing in Kinross and Milnathort there will be further rises in the amounts of sewage requiring to be treated. This at a time when our waste water treatment plants are clearly not able to deal with the current levels. For SEPA to allow any sewage that can't be treated to be diverted into Loch Leven to totally unacceptable.

I would be grateful if you could let me know what actions are proposed to bring this situation under control.

Many thanks,
Councillor Willie Robertson
Kinross-shire Ward
Perth and Kinross Council

From: **redacted 11 (2)**@nature.scot>

Sent: 08 September 2022 12:22

To: Councillor William Robertson <WBRobertson@pkc.gov.uk>

Subject: Pollution incident

Good morning Willie.

Hope you're well.

We managed to get footage of the water pouring out of the sewage works into the loch today. Sewage was pouring down the trail.

I don't think this is acceptable.

I have informed SEPA but after have not received a response.

I'm going to get footage at every opportunity whenever there is bad weather.

We have now put signs up to raise awareness. Cyclists are cycling through raw sewage and dogs are walking through it also.

redacted 11 (2)– **redacted 11 (2)**

Reserve Manager - Loch Leven NNR

DOCUMENT 4

Councillor William Robertson
WBRobertson@pkc.gov.uk
Our Reference: 202200321281
19 October 2022

Dear Councillor Robertson ,

Thank you for your correspondence to the Minister for Environment and Land Reform raising your concern about a pollution incident in Loch Leven from the Kinross Wastewater Treatment Works (WwTW) on 8 September. I have been asked by Ms McAllan to thank you for your letter of 21 September and to reply on her behalf.

I understand your concern regarding the protection and improvement of Loch Leven's water quality. The Scottish Environment Protection Agency (SEPA) currently classifies Loch Leven as moderate for water quality due nutrients (nitrogen and phosphorus). In the River basin Management Plan, SEPA has identified that these nutrient levels are due to rural diffuse pollution. SEPA's priority catchment work with land managers and farmers aims to have measures in place before the end of the current River Basin Management cycle, ie 2027, to reduce rural diffuse pollution with the aim of improving water quality.

Once the measure are in place the natural recovery of Loch Leven to good condition for water quality will be achieved beyond 2027. The delay is because the timescale for the recovery of the loch from the effects of nutrient pollution is dependent on the natural rates at which: excess quantities of nutrients already accumulated in the environment flush out of the system; and healthy communities of aquatic plants and animals colonise and re-established once nutrient concentrations in the loch have fallen.

In Scotland like most of England and Europe our public sewer system is combined in that it collects both surface water (rainwater runoff) and waste water (foul water) in the same pipe. During heavy rain, as occurred on 8 September, the amount of waste water mixed with surface water received Kinross WwTW exceeded the capacity of the works.

At this point the storm tank at Kinross WwTW begins to collect the excess effluent received at the works. The storm tanks are there to catch the 'first flush' from the sewer network, which is the most concentrated effluent to prevent this from entering the water environment. Once the rain event is over the storm tank is emptied back into the sewage works for full treatment.

If heavy rainfall is prolonged the storm tank will eventually overflow via screens, to remove the solid debris, discharging primary treated to the water environment as occurred on 8 September. This is licenced by SEPA and part of the normal operation of any large sewage works. Recent inspections of the sewer network and sewage works in Kinross and Milnathort by SEPA has shown compliance with licence conditions.

Scottish Water has committed investment in recent years to improve infrastructure within Kinross sewage works and SEPA will continue to monitor and work with Scottish Water as it invests and improves all sewage treatment plant sites, and will take action where this is required.

SEPA aims to be a firm, fair and effective regulator, to help improve and protect Scotland's environment. Operators are expected to uphold the conditions of their authorisations and it has powers of enforcement if they fail to meet these conditions. Over the past 20 years, SEPA has worked with Scottish Water to deliver significant improvements to the water environment through upgrades to the sewage collection and treatment systems. Between 2010 and 2021, SEPA required Scottish Water to improve 279 sewer overflows and 104 wastewater treatment works, which were causing significant pollution. As a result, water quality is now at its highest level to date, with 87% of Scotland's waters having good or better water quality, as set out in the River Basin Management Plan that SEPA published in December 2021 (The River Basin Management Plan 2021-27).

In 2021, SEPA wrote to Scottish Water setting out its expectations and timetable for a route map to improve urban waters as part of the actions required in the River Basin Management Plan 2021-2027, further information is available on SEPA's webpage about improving Urban Waters. In December 2021, Scottish Water published a route map for improving urban waters. This sets out actions required by Scottish Water, as a public body and responsible authority for River Basin Management Planning, as well as significant work needed with other partners to deliver long-term improvements.

I hope you find this information helpful.

Yours sincerely

redacted 11 (2)

DOCUMENT 5

26 OCT Scotsman: 'Scottish Government allowing untreated sewage to pour into specially- protected Loch Leven, Lib Dems reveal'. Daily record 'Perth and Kinross councillor raises loch sewage spill concerns with Scottish minister. Also covered in local Perth Advertiser and The Courier.

25 OCT Scottish Lib Dems issue embargoed statement "Scottish Liberal Democrats have today revealed that the Scottish Government's environmental protection agency is allowing untreated sewage to be diverted into Loch Leven, ahead of his leading a debate on sewage at the Scottish Parliament on Wednesday". The Courier and Sun requested statement from SG.

19 OCT Official SG response issued to Councillor Robertson explaining it was not an untreated raw sewage discharge.

8 OCT The Courier: 'Raw sewage' in Loch Leven leaves wildlife bosses 'extremely concerned'. Local NatureScot representative branded it a "serious pollution incident". Councillor Robertson said the current sewage system means that Scottish Water have no alternative but to allow large quantities of untreated sewage to go straight into Loch Leven.

8 SEPT An incident was reported to SEPA about Kinross sewage works by the local NatureScot representative. Due to prolonged heavy rainfall overnight Kinross sewage works was discharging primary treated effluent from the storm tanks. Scottish Water were already onsite and reported that the sewage works was operating normally.

Storm tanks are designed to collect and store sewage effluent a sewage works cannot treat in prolonged heavy rainfall, which is returned to the works for treatment at a later date. If the capacity of the storm tanks is reached then primary treated effluent (ie settled and screened), not raw sewage, is discharged to the water environment. This is licenced by SEPA and part of the normal operation of sewage works.

At the time, the watercourse downstream of the sewage works was overflowing with discoloured water onto a footpath because a downstream culvert had become blocked with natural debris from the prolonged heavy rainfall. Scottish Water cleared the culvert screen and restored natural flow in the watercourse through the culvet before it enters Loch Leven.

SEPA inspected the location and found no evidence of sewage debris or pollution in the burn.

TOP LINES

- Following the incident on 8 September, SEPA inspected the location and found no evidence of sewage debris or pollution in the watercourse before it entered Loch Leven.
- There was no discharge of untreated raw sewage from Kinross sewage works into the adjacent watercourse as the storm tanks only discharge effluent that has been treated
- Recent inspections of the sewer network and sewage works in Kinross and Milnathort by SEPA showed compliance with licence conditions.
- Scottish Water has committed investment in recent years to improve infrastructure within Kinross sewage works.

- SEPA will continue to monitor and work with Scottish Water as it invests and improves all sewage treatment plant sites, and will take action where this is required.

LOCH LEVEN WATER QUALITY

- SEPA currently classifies Loch Leven as moderate for water quality due to nutrients (nitrogen and phosphorus).
- In the River basin Management Plan, SEPA has identified that these nutrient levels are due to rural diffuse pollution.
- SEPA's planned priority catchment work with land managers and farmers aims to have measures in place before the end of the current River Basin Management cycle in 2027 to reduce rural diffuse pollution with the aim of improving water quality.

DOCUMENT 6

From: **redacted 11 (2)**@sepa.org.uk>
Sent: 26 October 2022 12:01
To: **redacted 11 (2)**
Cc: **redacted 11 (2)**
Subject: Loch Leven Sewage Incident
OFFICIAL
Good Morning **redacted 11 (2)**

I can confirm that Scottish Water were out on site on the day of the incident undertaking a clean-up. They have also committed to undertaking weekly checks of the culvert to prevent this issue recurring.

Here is the report from Scottish Water:

“Heavy rainfall event. Bar Screen/Culvert partially choked with tree debris, causing discoloured water to flow over a footpath. No SRD present. SW Ops investigated and cleared the debris from the blocked culvert to restore flow. SW assets checked and operating in accordance with licence conditions.”

Thanks,

redacted 11 (2)

redacted 11 (2) redacted 11 (2)

Fife, Angus & Dundee Team

Scottish Environment Protection Agency

DOCUMENT 7

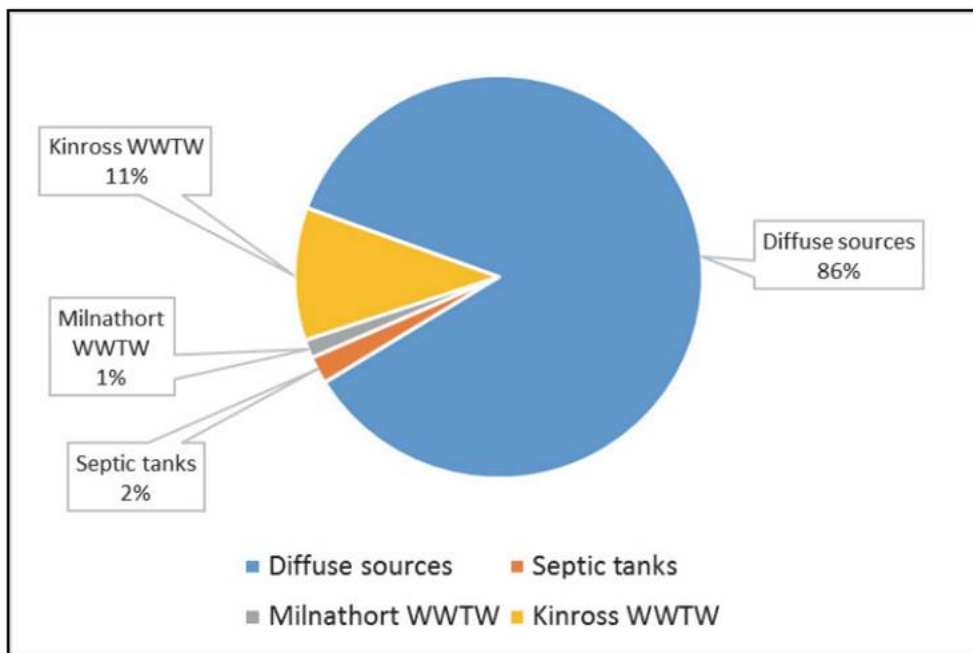
Hi **Redacted 11(2)**

These are the draft minutes.

I also attach for your Loch Leven interest a copy of the minute from the last Catchment group meeting.

Some other Leven info – which you may already have:

Whilst we are aware of the discharges from the Scottish Water sites to the Loch these are not the major contributor of pollutants to the loch. The most recent source apportionment study SNH Commissioned Report 962: Loch Leven nutrient load and source apportionment study (nature.scot) highlighted that 86% of nutrient inputs to the loch come from diffuse sources. SEPA is allocating resource to tackling these sources as our immediate priority given their impact. Priority Catchment work is commencing in the very near future (if not already, it was planned for the autumn of this year).



18. Proportion of TP load to Loch Leven from point and diffuse sources

Redacted 11(2)

Redacted 11(2)

Public Affairs

Scottish Environment Protection Agency

Redacted 11(2) @sepa.org.uk

DOCUMENT 8

Note of Loch Leven catchment virtual meeting – January 2022, 9:30 to 12:30pm
Agenda items

- Loch Leven fishing season report **Redacted 11(2)**

Redacted 11(2)

reported 2021 had been an average season. There had been a slow start due to Covid

but some good clarity early season, with fish behaviour and angler techniques adapting as

the season goes on and water clarity decreases. Pike angling has become more significant

and was about 40% of business. Pike angling season currently stretching from March to

December. Good numbers are being caught and many of the anglers are regulars. Numbers

of boats are relatively small (5) over winter and conscious of the need to avoid disturbance.

Trout brood stock seen running in the streams around the loch as early as August through to

November for spawning. **Redacted 11(2)** started with Kinross Estate Company in October

2021 and will be taking over from Willie Wilson in due course as he retires. A vote of thanks

for Willie's contributions over many decades was recorded.

- Loch Leven water quality monitoring and CREW climate change (**Redacted 11(2)**) – see

attached presentation slides

In recent years phosphorous concentrations in the loch have been increasing again and

since 2018 we've seen the return of summer algal blooms. Large new housing developments in the catchment are often thought to be the main cause via sewage discharges from the waste water treatment works. Noted there may be a correlation but that

does not necessarily imply causation. CEHUK monitoring data shows phosphorus levels are

highest in the summer, whereas sewage is discharged all year round. So it's more likely that

the recycling of phosphorous in loch sediments as rising summer loch temperature is the

cause. When the loch reaches 15-17°C this appears to trigger the release of phosphorous.

Climate change effects are being considered under a research project looking at loch data

and blooms across Scotland. Possible mitigation includes flushing the loch through planned

release of water at the sluice gate, ahead of algal blooms forming. Timing of any flushing is likely to be critical. Climate change also brings new threats from the expansion in range of some invasive species such as roach which are zooplankton feeders and could lead to less zooplankton in spring and therefore more algal blooms.

□ **Bloomin' Algae data app (Redacted 11(2))** – see attached presentation slides
163 records of algal blooms in Scotland in 2021 reported via the app. Larger lochs appear to be more susceptible. Very low levels of cyanobacteria (blue/green algae) can cause health effects in humans and pets if ingested. Some concern that the public do not treat the issue seriously enough with anecdotal reports of children on the beach at Kirkgate paddling in thick green scum and parents seemingly oblivious to the very obvious warning signage.

□ **Enhancing eel access (Redacted 11(2))**
Previously there was an eel fishery at Loch Leven (late 1500s is earliest record), currently numbers are thought to be low but we know eels are present. Forth Rivers Trust wish to carry out work to enhance the eel population at Loch Leven. There has been a massive (90%) decline in eel stocks across Europe and the causes are unknown. Enhancement would be via the introduction of eel passes along the many weirs in the River Leven downstream and would allow juvenile eels more opportunity to migrate upstream. Would likely result in a gradual increase in eel access rather than a sudden increase. The 'eel passes' would be constructed in such a way that they are impassable to other species such as roach.

□ **Invasive Species (Redacted 11(2))**
Rust trial fungus on Himalayan Balsam which involves releasing a fungus that will attack the balsam. A contract has been let to CABI to undertake lab work, evaluating the susceptibility of Loch Leven NNR Himalayan Balsam seedlings to the two strains of rust. If one or both strains are effective, the next step will be field trials at the NNR to evaluate effectiveness in the field.
Potential for expansion of SISI project to include eastern areas of Scotland if funding bid successful following expiry of current funding in October 2022. At the moment SISI only

covers limited parts of Scotland and all north of the Tay so this is speculative. This could

allow co-ordinated action that would potentially be more sustainable than a local effort that

only focused on the tributaries upstream of the loch.

NatureScot farmer advice contract (**Redacted 11(2)**)

This work is limited to around 3 days so barely scratches the surface of what could be

deployed in an ideal world. Continued work in Pow Burn area on north eastern side of the

catchment to reduce sediment run off from fields. Still evidence of some potato fields not

being 'grubbed up' once harvested, resulting in gulying in fields and run off. Work at Carsehall on Loch Leven National Nature Reserve (NNR) being explored to

encourage

settling out of sediments so they don't reach the loch. South Queich river bank erosion near

motorway adding vast quantity of topsoil to South Queich. Richard estimated 100 m³ from

one site alone. Morphology report already commissioned by **Redacted 11(2)** has shown

improvements could be made to reduce erosion.

SEPA Priority Catchment Work (**Redacted 11(2)**)

SEPA priority catchment work is due to commence in spring 2022 after being postponed due

to COVID and the SEPA cyber attack. It could take 3 or 4 months to complete and will cover

both upstream and downstream of the loch. A new app is being trialled to record information.

PKC Local Development Plan 3 consultation – Loch Leven Supplementary Planning

Guidance (**Redacted 11(2)**)

Preparations have begun for Perth and Kinross Local Development Plan 3 . As part of this

the policy on development in the Loch Leven catchment will be reviewed. The SPG currently requires 125% phosphorous mitigation for new private foul drainage arrangements

but no additional mitigation if discharging to the Waste Water Treatment Works (WWTWs) at

Kinross and Milnathort. The Planning Guidance will not, as suggested at the August 2020

meeting, be able to require developers to provide a P calculation when connecting to the

public system as any calculation would be changed by the mitigation carried out by Scottish

Water under licence.

There are still on-going concerns over the contribution from Combined Sewer Overflows in

particular that enter the WWTWs due to the increase in storm events and whether this is

measureable. Local observations from **Redacted 11(2)** and others suggested that these over-flows can occur quite frequently and after only moderate rain. SEPA re-iterated that both Kinross and Milnathort WWTWs are operating well below their discharge consent limits of 3mg/l for Kinross and 2mg/l for Milnathort. Their average discharge was ~ 0.5mg/l. Noted that the amount of P entering the loch is a function not only of the concentration but also the population equivalent entering the system. Renewed call for re-visiting the original loading limits for the loch set in 1999 at the time of the Loch Leven catchment plan (see attached meeting note of August 2020). Disappointment was expressed by some attendees that a representative from the Scottish Water waste water team was not present at the meeting. A Scottish Water drinking water representative was present and relayed from the waste water team that 'no significant upgrades to either of the WWTW at Kinross or Milnathort are planned at this time. The only work we will be doing will be capital maintenance where we are replacing older items of plant on a like for like basis'. AP1: SEPA to investigate any available telemetry data available within the sewer network when available from Scottish Water AP2: Propose revised loading limits of phosphorous to the loch – Linda AP3: Convene a meeting in autumn 2022 to discuss any changes required to the SPG.

- Kinross South Flood scheme (**Redacted 11(2)**) – see attached presentation slides

New flood scheme being developed for South Kinross, focused on the South Queich – proposals include hard defences between the former rail line (near the motorway) and where the South Queich enters the loch, culvert upgrades and diversions, and 2 x storage areas. Consultants also carrying out a natural flood management study. Public consultation and detailed design still to be carried out. AOB – no further issues were raised

- Frequency of meetings

Full catchment meetings to be convened every year to 18 months as before. With more focused topic meetings as required such as the need for an autumn 2022 meeting ahead of the review of the Local Development Plan policy for the Loch Leven Catchment Area. .

Attendees

- 1 **Redacted 11(2)** – NatureScot (Chair)
- 2 **Redacted 11(2)** - NatureScot
- 3 **Redacted 11(2)**NatureScot
- 4 **Redacted 11(2)**Kinross Estate Company
- 5 **Redacted 11(2)** Kinross Estate Company
- 6 **Redacted 11(2)** Kinross Estate Company
- 7 **Redacted 11(2)**Environmental Health, Perth and Kinross Council
- 8 **Redacted 11(2)** Development Planning, Perth and Kinross Council
- 9 **Redacted 11(2)** Flood team, Perth and Kinross Council
- 8 **Redacted 11(2)**- SEPA
- 10 **Redacted 11(2)**- SEPA
- 11 **Redacted 11(2)**- SEPA
- 12 **Redacted 11(2)**- SEPA
- 13 Councillor Willie Robertson, Perth and Kinross Council
- 14 Councillor Richard Watters, Perth and Kinross Council
- 15– **Redacted 11(2)**UKCEH
- 16 - **Redacted 11(2)** UKCEH
- 17 - **Redacted 11(2)** Scottish Water
- 18 - **Redacted 11(2)** SGRPID
- 19– **Redacted 11(2)** Lockett Agri-Environmental
- 20– **Redacted 11(2)** Forth Rivers Trust

Apologies

- Redacted 11(2)**- Scottish Water
- Redacted 11(2)** – RSPB
- Redacted 11(2)**– Forth Rivers Trust
- Redacted 11(2)** – Independent
- Redacted 11(2)** – Open University Student (Honours thesis on Loch Leven)

KM 1.01. 2022